

New South Wales Government Independent Planning Commission

# Springvale Water Treatment Facility – Modification 11

# SSD-7592-Mod-11

# **Statement of Reasons for Decision**

Neal Menzies (Chair) Sarah Dinning

28 March 2025

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## 1. Introduction

- 1. On 6 March 2025, the NSW Department of Planning, Housing and Infrastructure (**Department**) referred the State significant development (**SSD**) modification application SSD-7592-Mod-11 (the **Application**) from Springvale Coal Pty Ltd (**Applicant**) to the NSW Independent Planning Commission (**Commission**) for determination.
- 2. The Application seeks to modify the development consent for the Springvale Water Treatment Facility (SSD-7592) (**Existing Approval**) pursuant to section 4.55(2) of the *Environmental Planning and Assessment Act 1979* (**EP&A Act**).
- 3. In accordance with section 4.5(a) of the EP&A Act and section 2.7(1)(c) of the *State Environmental Planning Policy (Planning Systems) 2021* (**SEPP Planning Systems**), the Commission is the consent authority as the Applicant disclosed a reportable political donation.
- 4. Andrew Mills, Chair of the Commission, determined that Professor Neal Menzies (Chair) and Sarah Dinning would constitute the Commission for the purpose of exercising its functions with respect to the Application.
- 5. The Department concluded in its Assessment Report (**AR**) that the Application is in the public interest and is approvable, subject to the recommended conditions.

# 2. The Modification Application

- The Application seeks approval to transfer a blend of treated and partially treated mine water from Springvale Water Treatment Facility (SWTF) to Thompsons Creek Reservoir (TCR) during a planned outage at Mount Piper Power Station (MPPS) commencing in April 2025.
- 7. The Department in AR paragraph (**para**) 10 states water transfers would occur under the following conditions:
  - up to 24 ML/day of partially treated (filtered) wate r, with an indicative electrical conductivity (EC) range of up to 1,200 μs/cm; or
  - up to 42 ML/day of blended water with indicative EC range of between 600 and 900 µs/cm, consisting of a mix of fully treated water and partially treated (filtered) water.
- 8. Water transfers are proposed to occur for the duration of the upcoming 54-day outage as well as a buffer period of up to 14 days prior to, and seven days following the outage period (AR para 11). Water transfers would be undertaken via the existing Coxs River Supply Pipeline (AR para 13).

# 3. The Commission's Consideration

- 9. In determining this Application, the Commission has given consideration to the:
  - material set out in Appendix B;
  - strategic and statutory context set out in Appendix C;
  - mandatory considerations required by section 4.15(1) of the EP&A Act set out in Appendix C; and
  - public submissions made to the Commission summarised in Appendix D.

## 4. Reasons for the Decision

- 10. The Commission recognises that the total shutdown and maintenance of the MPPS (which supplies ~10% of the State's peak electricity demand) is:
  - a critical activity for the ongoing energy security of NSW
  - in the public interest, and
  - unable to be delayed.
- 11. The Commission acknowledges that the continuous transfer of mine water from the Springvale Mine (the main supplier of coal to the MPPS), treatment of that mine water via the SWTF, and reuse of the treated water in cooling the MPPS avoids the sterilisation of coal reserves and cessation of coal production. The MPPS does not have ready access to a replacement coal supply.
- 12. The Commission notes that the increased salinity levels in the TCR as a result of the Application are predicted to remain within the range of historical variability and are below the Australian drinking water guidance value considered to constitute good quality drinking water (below ~940  $\mu$ S/cm EC). While water quality in the TCR and daily environmental releases from TCR would have a lower EC than the downstream catchment at Lake Wallace, the Application would still result in an increase in the baseline salt load to the Sydney Drinking Water Catchment.
- 13. As the MPPS shut down period is of short duration, the Commission is satisfied that the Application would not have any substantive long-term adverse impacts on downstream water quality or on Sydney's drinking water supplies if limited to the planned 54-day MPPS outage period in April and May 2025 and buffer period. Additionally, a continuously operating destratification system will minimise water stratification (including sections of higher salinity) within the TCR.
- 14. The Commission notes no practical or feasible alternatives were offered by the Applicant. Accordingly, the impacts set out in paragraph 12 above are essentially unavoidable, unless the Application were to be refused, which the Commission has decided against given the consequences of refusal set out in paragraphs 10 and 11. In granting consent, the Commission has therefore imposed conditions requiring the Applicant to proactively address foreseeable variations in water inflows to the SWTF, or outages of either the SWTF or MPPS.
- 15. The Commission also recognises that the transfer of water (whether treated, filtered or untreated) to the MPPS via the TCR does not constitute a closed system. This is because the TCR discharges directly to the Sydney Drinking Water Catchment, whether for environmental flows or other reasons in accordance with other regulatory controls. Some (unspecified) proportion of that water will ultimately be released to the environment and Sydney's drinking water supply.
- 16. Therefore, the Commission finds that water transfers to TCR during the MPPS shutdown period must be closely monitored, and that the Applicant should be required to make weekly water discharge reports (including volume, quality and cumulative salt loadings) available to the public in a prominent place on the Applicant's website during the planned MPPS outage period, and monthly thereafter.
- 17. The Commission finds that approval of the Application is consistent with the statutory framework, is in accordance with the Objects of the EP&A Act and is in the public interest.

- 18. For the reasons set out above, the Commission has imposed conditions of consent requiring the Applicant to:
  - limit the transfer of water via the Coxs River Water Supply Pipeline to TCR to the planned MPPS outage period in April and May 2025, and for a period of 14 days prior and 7 days following the planned outage;
  - limit the transfer of water to 42 ML per day of blended water (consisting of not more than 24 ML of partially treated mine water) or up to 24 ML per day of partially treated mine water;
  - install a water quality monitoring system capable of continuously and representatively recording water quality in the TCR. The Applicant must operate and maintain the water quality monitoring system for the duration of the development;
  - notify the EPA and WaterNSW prior to commencing the transfer of blended water or partially treated mine water; and as soon as practicable after the Applicant becomes aware that water quality in TCR exceeds 550 µS/cm EC;
  - operate the TCR's destratification system for the term of the planned outage period;
  - immediately cease the transfer of blended water or partially treated mine water if monitoring indicates that there is a risk of exceeding 600 µS/cm EC within TCR, or if the destratification system is not fully operational;
  - prepare and implement an updated Water Management Plan which includes the requirement to prepare a Trigger Action Response Plan to respond to any foreseeable or actual exceedances of the water management performance measures; and
  - make weekly water discharge report updates publicly available on its website for the duration of the MPPS shut down period and monthly thereafter.
- 19. The reasons for the decision are given in the Statement of Reasons for Decision dated 28 March 2025.

Neal May-

Professor Neal Menzies (Chair) Member of the Commission

Sarah Dim

Sarah Dinning Member of the Commission

# **Appendix A – Instrument of Modification**

# **Modification of Development Consent**

Section 4.55(2) of the Environmental Planning and Assessment Act 1979

As delegate of the Minister for Planning and Public Spaces, the Independent Planning Commission **approves** the modification of the development consent referred to in Schedule 1, subject to the conditions in Schedule 2.

Neal May-

Neal Menzies Member of Commission (Chair)

aral

Sarah Dinning Member of Commission

Sydney

28 March 2025

#### **SCHEDULE 1**

Development consent:SSD 7592 granted by the Planning Assessment Commission on 19<br/>June 2017For the following:Springvale Water Treatment ProjectApplicant:Springvale Coal PTY LimitedConsent Authority:The Independent Planning Commission of NSWThe Land:The land defined in Appendix 1 of the development consentModification:Water management during Mount Piper Power Station outages

#### SCHEDULE 2

1. In the list of definitions, delete the term 'BCD' and its definition, and insert the following definitions in alphabetical order:

Blended water A blend of treated water and partially treated mine water with an indicative electrical conductivity range of 600 to 900 µS/cm

CPHR Conservation Programs, Heritage and Regulation Group of the NSW Department of Climate Change, Energy, the Environment and Water

- 2. In Schedule 3, delete all references to 'BCD' and replace with 'CPHR'
- 3. In the list of definitions, in the definition of "Coxs River Water Supply Pipeline", after the words "treated water", insert "and partially treated mine water".
- 4. In the list of definitions, delete the definition for 'Department' and replace with 'Department of Planning, Housing and Infrastructure'.
- 5. In the definition for "EIS";
  - a. after the definition of "MOD 7" delete "and"; and
  - b. at the end of the definition of "MOD 8', delete the full stop and insert;

"; and

- MOD 11 'Springvale Water Treatment Plant Modification Report for Modification 11 to SSD-7592 (Mod 11)' dated December 2024, associated 'Springvale Water Treatment Facility Modification 11 Response to Submissions Report' dated 28 February 2025, 'SWTP SSD – 7592 – Mod 11 Amendment Report' dated 4 March 2025 and the Applicant's response to the Commission dated 24 March 2025."
- 6. In the list of definitions, in the definition of 'Heritage NSW', following the word 'Department', insert "of Climate Change, Energy, the Environment and Water'.
- 7. In the list of definitions, in the definition of "Partially treated mine water", following the word "solids" insert "(also referred to as filtered water in MOD 11)".
- 8. In the definition for "Residuals Transfer Pipeline", delete "12\_".
- 9. In the list of definitions, in the definition of "Treated water", following the word "Plant", insert "using filtering to remove solids and reverse osmosis to remove salts".
- 10. In Schedule 2, after Condition 6A, insert the following new conditions:
  - 6B. During the planned outage period scheduled to occur at Mount Piper Power Station in April and May 2025, and for a period of 14 days prior and 7 days following the planned outage, the Applicant may transfer up to:
    - (a) 42 megalitres per day of blended water, consisting of no more than 24 megalitres of partially treated mine water; or
    - (b) up to 24 megalitres per day of partially treated mine water;

via the Coxs River Water Supply Pipeline to the Thompsons Creek Reservoir.

- 6C. Prior to commencing transfer of blended water or partially treated mine water under condition 6B, the Applicant must install a water quality monitoring system capable of continuously and representatively recording water quality in the Thompsons Creek Reservoir. The Applicant must operate and maintain the water quality monitoring system for the duration of the development.
- 6D. The Applicant must undertake the transfer of blended water or partially treated mine water under condition 6B in accordance with the following conditions:
  - (a) the Applicant must notify the EPA and WaterNSW prior to commencing the transfer of blended water or partially treated mine water under condition 6B;
  - (b) the Applicant must notify the EPA and WaterNSW, as soon as practicable after the Applicant becomes aware, that water quality in Thompsons Creek Reservoir exceeds 550µS/cm electrical conductivity (EC);

- (c) the Applicant must operate the Thompsons Creek Reservoir's destratification system for the term of the planned outage period;
- (d) the Applicant must immediately cease the transfer of blended water or partially treated mine water if:
  - monitoring indicates that there is a risk that water will exceed  $600 \mu \text{S/cm}$  electrical conductivity (EC); or
  - the Thompsons Creek Reservoir's destratification system is not fully operational; and
- (e) during the period of any transfer of blended water or partially treated mine water under condition 6B, daily environmental releases from Thompsons Creek Reservoir must be limited to the minimum volume required under the water access licence of 0.8 megalitres per day between 1 September and 30 April and 0.3 megalitres per day between 1 May and 31 August.
- 6E. The Applicant must publish in a prominent place on its website weekly updates during the planned outage period and monthly updates thereafter, comprising the following information:
  - (a) the discharge points of any water discharges from the development;
  - (b) the volumes of any water discharged from those points (including cumulative volumes from the commencement of this condition);
  - (c) quality of those discharges (including maximum, median and minimum values);
  - (d) salt loadings resulting from those discharges (including cumulative loadings from the commencement of this condition);
  - (e) for any week in which water is discharged to the Thompsons Creek Reservoir under Schedule 2, Condition 6B:
    - water quality within the Thompsons Creek Reservoir; and
    - operational status of the Thompsons Creek Reservoir's destratification system.
- 11. In Schedule 3, Condition 4 replace (b) with:

include:

- detailed baseline data on surface water flows and quality in the watercourses that could potentially be affected by the proposal;
- a program to augment the baseline data over the life of the development;
- a detailed description of measures to ensure that the Applicant complies with the water management performance measures (Table 1);
- a program to monitor and report on the performance measures;
- reporting procedures for the results of the monitoring program;
- a Trigger Action Response Plan to respond to any foreseeable or actual exceedances of the water management performance measures and mitigate any adverse surface water impacts of the development; and
- details of contingency measures to effectively manage foreseeable variations in water inflows (volume and quality) to the Water Treatment Plant, outages of the Water Treatment Plant and outages at Mount Piper Power Station.

End of modification (SSD 7592 MOD 11)

# Appendix B – Material considered by the Commission

Document	Date
The Planning Assessment Commission's reasons for the original grant of	19 June 2017
consent to SSD 7592	
Applicant's Modification Report and its accompanying appendices	20 December 2024
Applicant's Submissions Report and its accompanying appendix	28 February 2025
Government Agency advice to the Department	
Public submissions made to the Department during exhibition	
Applicant's Amendment Report	4 March 2025
Department's AR and recommended conditions of consent	6 March 2025
Observations made at the Site Inspection	14 March 2025
Comments and presentation material from meetings with:	
Council	17 March 2025
Department	18 March 2025
Applicant	18 March 2025
Material presented at the Public Meeting	21 March 2025
All written comments received by the Commission	24 March 2025
Department's response to the Commission	24 March 2025
Applicant's response to the Commission	24 March 2025
Department's advice to the Commission regarding the imposition of conditions	27 March 2025

# Appendix C – Planning Framework

Strategic context	Commission's comments
Energy security	The Commission agrees with the Department assessment in Section 3.1 of the AR. The Commission recognises that Springvale mine is the main supplier of coal to MPPS which is capable of supplying around 10% of the State's peak electricity demand. The Commission notes the operation of the Springvale Mine relies on effective water management infrastructure, including SWTP to manage mine inflows, create a safe mining environment for workers and support ongoing coal supply to MPPS.
Environmental Context	The Commission agrees with the Department's assessment in Section 3.2, 3.3 and 3.4 of the AR. The Commission acknowledges the sensitive nature of the Sydney drinking water catchment environmentally as well as a critical public good. The Commission agrees with the Department's assessment in Section 6.2 regarding the long term benefit the Springvale Water Treatment Facility has provided to the catchment and that the proposed temporary, limited water quality impacts do not, on balance, negate this benefit.
Statutory context	Commission's comments
Scope of modification and assessment pathway	The modification has been lodged under section 4.55(2) of the EP&A Act. The Commission is satisfied that the modified development would remain substantially the same development for which consent was originally granted in 2017
Consent authority	Centennial, the parent company to the Applicant, disclosed a reportable political donation under section 10.4 of the EP&A Act. In accordance with section 4.5(a) of the EP&A Act and clause 2.7(1) of the <i>State Environmental Planning Policy (Planning Systems) 2021</i> , the Commission is the consent authority for the Application.
Objects of the EP&A Act and Ecologically Sustainable Development	The Commission has considered the Objects of the EP&A Act and is satisfied that the Application is consistent with those Objects. The Commission finds that the Project is consistent with ESD principles and would achieve an acceptable balance between environment, economic and social considerations.
State Significant Development	The application seeks to modify development for the purpose of mining related works, declared as State significant development under section 5, subsection (3) of Schedule 1 to the Planning Systems SEPP.
Permissibility	The development includes land zoned as the following under the <i>Lithgow Local Environment Plan 2014</i> :
	<ul> <li>RU1 – Primary Production;</li> <li>RU2 – Rural Landscape;</li> <li>RU3 – Forestry; and</li> <li>SP2 – Infrastructure.</li> </ul>
	Water supply systems are permissible with consent in RU1 and RU2 zones and permitted in accordance with the <i>Forestry Act 2012</i> and subsequently permissible without consent in the RU3 zone. As development ancillary to the MPPS, the development is permissible with consent in the SP2 zone.
Amended Application	<ul> <li>A modification application can be amended under section 113 of the <i>Environmental Planning and Assessment Regulation 2021</i>. The Applicant sought to amend its Application in March 2025 to:</li> <li>Iimit the timeframe for proposed water transfers to the upcoming MPPS outage scheduled for April/May 2025;</li> <li>reduce the water quality discharge limit in Thompsons Creek Reservoir from 650 µs/cm to 600 µs/cm; and</li> </ul>

	<ul> <li>limit environmental releases from Thompsons Creek Reservoir to the minimum daily volume of between 0.3 and 0.8 ML/day for the duration of any blended or partially treated water transfers.</li> <li>As the Commission's delegate, the Department agreed to the amendment of the modification on 4 March 2025 on the basis that the proposed amendments directly responded to issues raised in agency advice and submissions and did not increase the impacts of the development as a whole.</li> </ul>
Mandatory considerations	Commission's comments
Relevant environmental planning instruments ( <b>EPIs</b> )	Appendix C of the AR identifies relevant EPIs for consideration. The key EPIs (in their present, consolidated form) comprise:
	<ul> <li>Lithgow Local Environmental Plan 2014;</li> <li>State Environmental Planning Policy (Planning Systems) 2021 (Planning Systems SEPP); and</li> <li>State Environmental Planning Policy (Resilience and Hazards) 2021.</li> <li>The Commission has considered these EPIs as part of its determination</li> </ul>
Relevant development control plans ( <b>DCPs</b> )	Pursuant to section 2.10 of the Planning Systems SEPP, DCPs do not apply to SSD.
Any planning agreement or draft planning agreement	The Applicant has not entered into a planning agreement with Council.
Likely impacts of the development	The likely impacts of the Application have been considered in section 4 of this Statement of Reasons.
Suitability of the site for development	The Commission finds that the site is suitable for the development as the it represents a modification to existing operations, the site is inherently suitable for the proposed changes to the development given the established water treatment infrastructure located within proximity to Springvale Mine and the TCR.
The public interest	The Commission has considered whether the grant of conditional consent to the Application is in the public interest. In doing so, the Commission has evaluated the likely impacts of the Application and considered the relevant ESD principles. The Commission has concluded that approval of the Project is in the public interest and merits the grant of consent, subject to conditions.

# **Appendix D – Community Engagement Report**

#### Public engagement overview

A summary of the Project timeline and key engagement milestones is provided at Table 1 below.

Table 1: Project and engagement timeline

Project stage	Date	Number of submissions
Application submitted	20 December 2024	-
Application exhibited by Department	16 January 2025 to 6 February 2025	146
Application amended	4 March 2025	-
Application referred to the Commission	6 March 2025	-
Commission's Public Meeting	21 March 2025	3
Written submissions to the Commission	6 March 2025 to 24 March 2025	2

#### **Public meeting**

The Commission conducted a public meeting on 21 March 2025. The public meeting was held online and was streamed live on the Commission's website. The Commission heard from the two community group representatives and the. In total, three speakers presented to the Commission during the public meeting.

#### **Public submissions**

As part of the Commission's consideration of the Project, all persons were offered the opportunity to make written submissions to the Commission until 5pm on Monday 24 March 2025. The Commission received a total of two written submissions objecting to the Application.

Key matter	Summary of submissions	Commission's consideration
Water	<ul> <li>Pollution including increased salinity in the Thompsons Creek Reservoir</li> <li>Contamination of Sydney's drinking water supply with coal mine waste water</li> <li>The waste water proposed to be discharged should be cleaned</li> <li>Impact of contaminants on aquatic ecosystems</li> </ul>	The Commission acknowledges the concerns raised regarding the water quality impacts to the TCR and the downstream aquatic ecosystems and Sydney drinking water supply. As addressed in Section 4, the Commission finds Application to be in the public interest, strictly temporary and able to closely monitored and managed. Increased salinity levels in the TCR would remain below the drinking water guidance value for good quality drinking water and would not have any material or long-term adverse
		impacts on the downstream catchment.
		Paragraph 15 lists the monitoring, trigger, action and response regime for maintaining the quality of the transfer of water to TCR below 600 $\mu$ S/cm EC. This is within the Australian drinking water guideline range of below ~940 $\mu$ S/cm EC.

Table 2: Commission's consideration of key matters raised in submissions

Period of water transfer	• Support for the amendment made to the application to limit the time period of discharge to April and May 2025.	The Department as delegate of the Commission agreed to amend the Application on 4 March 2025. This amendment limited the timeframe for proposed water transfers to April/May 2025. The Commission has therefore imposed condition 6B placing limits water transfers to the planned outage period scheduled to occur at Mount Piper Power Station in April and May 2025, and for a period of 14 days prior and 7 days following the planned outage.	
Other	Unsupportive of the process of management of mine water transfer by way of consent modification	The Commission has considered the scope of the modification Application and is satisfied that the development would remain substantially the same as the development for which the consent was originally granted.	

# Appendix E – Department's Assessment Report

## Department of Planning, Housing and Infrastructure

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# Springvale Water Treatment Project Modification 11

State Significant Development Modification Assessment Report (SSD-7592-Mod-11)

March 2025





# Acknowledgement of Country

The Department of Planning, Housing and Infrastructure acknowledges that it stands on Aboriginal land. We acknowledge the Traditional Custodians of the land and show our respect for Elders past, present and emerging through thoughtful and collaborative approaches to our work, seeking to demonstrate our ongoing commitment to providing places in which Aboriginal people are included socially, culturally and economically.

Published by NSW Department of Planning, Housing and Infrastructure

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Springvale Water Treatment Project Modification 11 (SSD-7592-Mod-11) Assessment Report

Published: March 2025

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# Preface

This assessment report provides a record of the Department of Planning, Housing and Infrastructure's (the Department) assessment and evaluation of Modification 11 (Mod 11) of the State significant development (SSD) application for the Springvale Water Treatment Project (SSD-7592), lodged by Springvale Coal Pty Ltd (Springvale Coal). The report includes:

- an assessment of the modification against government policy and statutory requirements, including mandatory considerations;
- a demonstration of how matters raised by the community and other stakeholders have been considered;
- an assessment of the likely environmental, social and economic impacts of the project;
- an evaluation which weighs up the likely impacts and benefits of the project, having regard to the proposed mitigations, offsets, community views and expert advice; and provides a view on whether the impacts are on balance, acceptable; and
- an opinion on whether the project is approvable or not, along with the reasons, to assist the Independent Planning Commission in making an informed decision about whether development consent for the project can be modified and any conditions that should be imposed.

# **Executive Summary**

Springvale Water Treatment Project (SWTP) is a mine water processing facility located northwest of Lithgow, adjacent to the Mount Piper Power Station (MPPS). The facility processes mine water from the nearby Springvale Mine and Angus Place Colliery, for beneficial reuse by the power station.

SWTP operates under State significant development consent SSD-7592 granted by the then Planning Assessment Commission in 2017. The consent, as modified, provides for the transfer and treatment of up to 42 mega litres per day of mine water and transfer of excess treated water to Thompsons Creek Reservoir via the Coxs River Water Supply Pipeline.

SWTP relies on operations at MPPS to consume water for its cooling needs and to dispose of the brine generated by the plant by using it to dampen ash produced by the power station. Under normal operating conditions at MPPS, water consumption and brine production can be balanced with ash production.

During MPPS outages, water usage and ash production is significantly reduced, resulting in an excess of brine and limiting the ability of SWTP to operate at full capacity. Springvale Mine, however, requires ongoing dewatering to ensure continued extraction of coal for supply to the power station. Recent increases in water make at Springvale Mine have reduced the capacity of underground storages available within the mine water management system.

A major outage is scheduled at MPPS commencing 1 April 2025 and lasting for 54 days, during which time the ability of SWTP to process mine water will be limited. To avoid flooding of mine workings, Springvale Coal has submitted a modification application seeking approval to transfer a blend of treated and partially treated mine water to the Thompsons Creek Reservoir during the upcoming April/May outage.

The Department considers the key matter for consideration for the modification is the potential impact on water quality in Thompsons Creek Reservoir and the downstream catchment.

The Department's assessment has found that the modification would not have any material or longterm adverse impact on water quality in Thompsons Creek Reservoir, the downstream catchment or on drinking water quality in the Sydney drinking water catchment.

Water quality in Thompsons Creek Reservoir would remain similar to or better than the downstream environment, even with the modification, and the predicted changes in water quality resulting from the modification are within the range of historical variability in the reservoir and downstream catchment.

Importantly, the modification would not negate the significant improvements that have been made to water quality within the catchment since the commissioning of SWTP.

The Department considers that the limited duration of proposed water transfers and management measures proposed by Springvale Coal would be effective in minimising the potential impacts of the modification on catchment water quality.

Consequently, the Department considers that the proposed modification is in the public interest and is approvable, subject to the recommended conditions.

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# 1 Introduction

## 1.1 Background

- 1. Springvale Water Treatment Project (SWTP) is a water processing facility located approximately 15 kilometres (km) northwest of Lithgow, adjacent to the Mount Piper Power Station (MPPS) (see Figure 1 and Figure 2).
- 2. SWTP processes mine water from the nearby Angus Place Colliery (currently under care and maintenance) and Springvale Mine, for beneficial reuse in MPPS cooling system. Springvale Mine requires dewatering to ensure continued extraction of coal for supply to MPPS. The project provides for:
  - the transfer and treatment of up to 42 mega litres (ML) per day of mine water from Angus Place and Springvale mines;
  - transfer of processed water to MPPS for beneficial reuse in the cooling towers;
  - the transfer of excess treated water to Thompsons Creek Reservoir via the Coxs River Water Supply Pipeline; and
  - transfer of residual waste from SWTP to the Western Coal Services site via the Residuals Transfer Pipeline.
- 3. The facility is a joint venture between Springvale Coal Pty Limited (Springvale Coal), a subsidiary of Centennial Coal Company Limited (Centennial), and Energy Australia Pty Limited (Energy Australia), and is operated by Veolia Water Australia Pty Limited.
- 4. Thompsons Creek Reservoir is a licenced water storage managed by Energy Australia in accordance with the relevant Water Access Licence, water supply and works approval.



#### Figure 1 | Regional context map



#### Figure 2 | Local context map

## 1.2 Approval history

- 5. SWTP operates under State Significant Development (SSD) consent SSD-7592 granted by the then Planning Assessment Commission on 19 June 2017.
- As detailed in Table 1, the consent has been modified on eight occasions, with Modifications 1 and 2 dealing with pipeline alignment works, and Modifications 3 8 involving changes to the project's water management (see Table 1). Modifications 9 and 10 were withdrawn prior to determination.

Modification	Description	Decision-maker	Туре	Approval Date
MOD 1	Changes to pipeline alignment, brine management and workforce	Minister	96(1A)	12 January 2018
MOD 2	Change to pipeline alignment	Minister	4.55(1A)	29 October 2018
MOD 3	Interim water management strategy	Minister	4.55(1A)	31 March 2019
MOD 4	Increased volume for interim water management strategy	Minister	4.55(1A)	5 November 2019
MOD 5	Extend timeframe for interim water management strategy	Minister	4.55(1A)	30 January 2020
MOD 6	Receipt of water from Angus Place	Minister	4.55(1A)	19 March 2021
MOD 7	Extend timeframe for interim water management strategy	Minister	4.55(1A)	8 June 2021
MOD 8	Extension of timeframe for interim water management strategy	Minister	4.55(1A)	21 October 2022
MOD 9	Extension of timeframe for interim water management strategy	N/A	N/A	Withdrawn
MOD 10	Temporary increase of residual waste transfer rates	N/A	N/A	Withdrawn

# 2 Proposed modification

- 7. SWTP relies on operations at MPPS to consume water for its cooling needs and to dispose of the liquid and solid brine waste stream generated by SWTP. Liquid brine is used to dampen ash produced by the power station, which is then co-disposed with crystalised brine in the MPPS ash emplacement. Under normal operating conditions at MPPS, water consumption and brine production can be balanced with ash production.
- 8. During MPPS outages, water usage and ash production is significantly reduced. The reduction in ash means that brine cannot be combined and co-disposed at the same rate, resulting in an excess of brine and limiting the ability of SWTP to operate.
- 9. To avoid flooding of mine workings at Springvale Mine, Springvale Coal has submitted a modification application seeking approval to transfer a blend of treated and partially treated mine water to Thompsons Creek Reservoir during a planned outage at MPPS commencing in April 2025.
- 10. Water transfers would occur under the following conditions:
  - up to 24 ML/day of partially treated (filtered) water, with an indicative electric conductivity (EC) range of up to 1,200 µs/cm; or
  - up to 42 ML/day of blended water with indicative EC range of between 600 and 900 µs/cm, consisting of a mix of fully treated water and partially treated (filtered) water.
- 11. Water transfers are proposed to occur for the duration of the upcoming 54-day outage, as well as a buffer period of up to 14 days prior to, and seven days following, the outage period.
- 12. The following controls are proposed to minimise the impacts of proposed water transfers:
  - water quality in Thompsons Creek Reservoir does not exceed 600 µs/cm;
  - water level in Thompsons Creek Reservoir does not exceed High Operating Level; and
  - environmental releases from the reservoir would be limited to the minimum daily volume required under Energy Australia's Water Access License (0.3ML/day between May and August and 0.8 ML/day between September and April) for the duration of any transfers.
- 13. Transfers would be undertaken via the existing Coxs River Water Supply Pipeline (**Figure 2**).

## 2.1 Justification and alternatives

- 14. Centennial operates a complex mine water management system that involves balancing water storage capacity at Springvale and Angus Place coal mines with water treatment capacity at SWTP. Recent increases in mine water make at Springvale Mine have reduced the capacity of underground storages available within the mine water management system to such an extent that interruptions to water treatment capacity can result in groundwater inflows threatening to flood the mine workings.
- 15. Given the limited available storage capacity, a temporary water management solution is required during the upcoming MPPS outage to ensure continued supply of coal to MPPS.
- 16. A number of alternative water management strategies have been considered by Centennial as are outlined in Springvale Coal's Submissions Report (refer to **Appendix B**). These strategies were found not to be feasible due to the timeframe required to implement them, lack of relevant approvals, greater environmental risk, and/or risk of inundation of mine workings.

# 3 Strategic context

### 3.1 Energy security

- 17. The Lithgow region is a strategically important coal mining centre that is important for cost effective generation of electricity for NSW. MPPS is capable of supplying around 10% of the State's peak electricity demand and is important in managing energy reliability risks as the State transitions to renewable energy. MPPS is the newest coal-fired power station in the State and is also expected to be the last operating, with an expected closure date of 2040.
- 18. Springvale Mine is the main local supplier of coal to MPPS, providing around 70% of its coal.
- 19. Alternative coal supply to MPPS is limited by a lack of rail access from the Hunter Valley coal supply chain. MPPS has alternative coal supply but not at an adequate volume without impacts on regional communities or additional Government intervention (such as for coal trucking). In the future it may be feasible to supply coal via rail from other existing mines located further afield in the Mudgee area, however this is not currently a commercially viable or approved option.
- 20. Operation of the Springvale Mine relies on effective water management infrastructure, including SWTP to manage mine inflows, create a safe mining environment for workers and support ongoing coal supply to MPPS.

## 3.2 Environmental context

- 21. SWTP is located within the Coxs River catchment, which forms part of Sydney's drinking water catchment. The Coxs River flows south toward Lake Wallace, Lake Lyell and ultimately Lake Burragorang, which is the primary reservoir for drinking water supply to Sydney.
- 22. Flow in the Coxs River is regulated by three reservoirs, Thompsons Creek Reservoir, Lake Wallace and Lake Lyell, which form part of the Coxs River Water Supply Scheme that supplies water for the operation of MPPS.
- 23. The Upper Coxs River catchment has been exposed to impacts from mining and other industries for an extended period. Historical mining activities have included the direct discharge of mine water into the surface water environment. Given this, water quality within the catchment has been historically poor with elevated salinity recorded across the catchment.
- 24. The commissioning of SWTP in 2019 has resulted in a material improvement in catchment water quality by removing a significant discharge of untreated mine water from Springvale Mine and enabling MPPS to reuse up to 42 ML per day of treated mine water in place of fresh water from the Coxs River catchment.
- 25. WaterNSW monitoring of salinity levels in the Upper Coxs River catchment has shown a declining trend in electrical conductivity (EC) since the commissioning of the SWTP in 2019.
- 26. The Department notes that this declining trend in EC has continued despite periods of partially treated mine water being transferred to Thompson Creek Reservoir under the approved interim water management strategy that occurred between May 2019 and October 2023.
- 27. Importantly, water quality within Thompsons Creek Reservoir is generally better and less saline than downstream catchment water quality. In the 12 months to October 2024, the 95<sup>th</sup> percentile EC concentration in Thompsons Creek Reservoir was 525 µs/cm, while 95<sup>th</sup> percentile EC concentrations at the nearest Coxs River downstream monitoring point (WX9) was 879 µs/cm over the same period.
- 28. Water quality improves further downstream at Lake Lyell, where 95<sup>th</sup> percentile EC concentrations over the 12 months to October 2024 were 354 μs/cm.
- 29. Water quality in the Thompsons Creek Reservoir and local downstream catchment is above the Australian and New Zealand Guidelines for Fresh and Marine Water Quality (2018) (ANZECC Guideline) default trigger level for upland rivers of 350 µs/cm.

30. The Department notes however that Thompsons Creek Reservoir water quality is well below the Australian Drinking Water Guideline value considered to constitute good quality drinking water, that being water up to ~940 µs/cm<sup>1</sup>.

### 3.3 Thompsons Creek Reservoir

- 31. Thompsons Creek Reservoir forms part of the Cox River Water Supply Scheme that supplies water to MPPS. The reservoir is considered an off-stream storage and has a small catchment area of less than 10km<sup>2</sup>. Thompsons Creek Reservoir is a declared dam regulated under the *Dams Safety Act 2015*.
- 32. Energy Australia manages water levels in the dam between a low and high operating level. Water levels are managed through a combination of controlling the volume of inflows from SWTP, transfers from Lake Lyell, daily environmental releases to Thompsons Creek and, where required, emergency discharges.
- 33. Daily environmental releases are a condition of Energy Australia's Water Supply Work and Water Use Approval. This approval requires a minimum daily environmental release into Thompsons Creek of 0.3ML/day (between May and August) and 0.8 ML/day (between September and April). The maximum daily environmental release possible is 18.5 ML/day.
- 34. For clarity, Springvale Coal has committed to limit environmental releases to the minimum daily volumes during any water transfers associated with the modification.
- 35. Emergency discharge provisions exist under the *Dams Safety Act 2015* that require water levels to be lowered where there is a risk of exceeding the dam's full supply level. Energy Australia manage water levels in Thompsons Creek Reservoir to reduce the risk of an emergency discharge. For context, emergency discharges have only been required on two occasions since the commissioning of SWTP in response to heavy rainfall periods in 2022 and 2023.
- 36. To reduce the risk of an emergency discharge event, water inflows from SWTP are required to cease once water levels reach the high operating level.
- 37. Energy Australia has advised that there is sufficient capacity within Thompsons Creek Reservoir to receive water transfers for the duration of the proposed MPPS outage, and that

<sup>&</sup>lt;sup>1</sup> Based on Australian Drinking Water Guidelines (NHMRC and NRMMC, 2011) and approximate conversion from total dissolved solids (TDS) to electrical conductivity (EC) using conversion factor 0.64. TDS less than 600 mg/L (~940 μS/cm) is considered good quality drinking water.

water levels in the reservoir would be pre-emptively lowered to accommodate the required transfers.

### 3.4 Sydney drinking water catchment

- 38. SWTP is located in Sydney's drinking water catchment. Under Section 6.61(1) and 6.63 of the *State Environmental Planning Policy (Biodiversity and Conservation) 2021* (Biodiversity and Conservation SEPP), the consent authority must not grant consent to carrying out of development in the drinking water catchment unless it would have a neutral or beneficial effect on water quality (NorBE).
- 39. Although the NorBE test does not strictly apply to modification applications<sup>2</sup>, it is clear that the intent behind Section 6.61(1) and 6.63 of the Biodiversity and Conservation SEPP is to protect Sydney's drinking water quality, and the Department considers that this should be taken into account in assessing the modification application.
- 40. Consideration of NorBE is presented in **Section 6.2** of this report.

# 4 Statutory context

### 4.1 Scope of modification and assessment pathway

- 41. The modification application has been lodged under section 4.55(2) of the *Environmental Planning and Assessment Act 1979* (EP&A Act). Under section 4.55(2) of the EP&A Act, a development consent cannot be modified unless the consent authority is satisfied that the modified proposal is substantially the same as the development for which consent was originally granted.
- 42. The Department has considered the scope of the modification and is satisfied that the modified development would remain substantially the same as the development for which consent was originally granted, as it:
  - would not change the purpose or nature of the approved development;
  - does not propose the construction of any additional infrastructure and does not involve any changes to the development's disturbance footprint;
  - would not significantly increase the environmental impacts of the development; and

<sup>&</sup>lt;sup>2</sup> Sections 4.55(4) and 4.56(1C) of the EP&A Act each provide that a modification of a development consent is "not taken to be granting of development consent".

- would provide contingency to continue operating the development during circumstances not envisaged at the time of the original approval.
- 43. Therefore, the Department is satisfied the modification is within the scope of section 4.55(2) of the EP&A Act and can be assessed and determined under this section.

### 4.2 Consent authority

- 44. Centennial, the parent company to Springvale Coal (the applicant for the modification application), disclosed a reportable political donation under section 10.4 of the EP&A Act.
- 45. As such, in accordance with section 4.5(a) of the EP&A Act and clause 2.7(1) of the *State Environmental Planning Policy (Planning Systems) 2021*, the Independent Planning Commission of NSW (the commission) is the consent authority for the application.

### 4.3 Mandatory matters for consideration

- 46. In determining the modification, the consent authority must take into consideration the relevant matters referred to in section 4.55(1) and 4.55(3) of the EP&A Act, including the objects of the Act, applicable environmental planning instruments, the likely impacts of the modification application, site suitability and the public interest.
- 47. The Department has considered these matters carefully and has summarised its findings in **Section 6** and **Appendix C**.

### 4.4 Other approvals and authorisations

48. Energy Australia holds EPL 13007 under the *Protection of the Environment Operations Act* 1997, which includes surface water monitoring requirements at the Thompsons Creek Reservoir discharge point. Should the modification be approved, the EPL would not require a variation.

### 4.5 Amended application

- 49. In accordance with section 113 of the Environmental Planning and Assessment Regulation 2021 (EP&A Regulation), a modification application can be amended at any time before the application is determined.
- 50. Springvale Coal sought to amend its application in March 2025 (see **Appendix A**) to:
  - limit the timeframe for proposed water transfers to the upcoming MPPS outage scheduled for April/May 2025;

- reduce the water quality discharge limit in Thompsons Creek Reservoir from 650  $\mu s/cm$  to 600  $\mu s/cm;$  and
- limit environmental releases from Thompsons Creek Reservoir to the minimum daily volume of between 0.3 and 0.8 ML/day for the duration of any blended or partially treated water transfers.
- 51. Under the commission's delegation of 14 June 2022, Director, Energy and Resource assessments, accepted the amendment to the modification on 4 March 2025. The amendment was accepted on the basis that the proposed amendments directly responded to issues raised in agency advice and submissions and would not increase the impacts of the development as a whole.

# 5 Engagement

### 5.1 Department's engagement

- 52. The Department publicly exhibited the modification for a period of 22 days from 16 January 2025 until 6 February 2025 on the NSW planning portal and notified each person who made a submission in relation to the original development application as well as relevant government agencies and Lithgow City Council (Council).
- 53. The Department also requested advice from the Independent Expert Advisory Panel for Mining in relation to the modelling of water quality impacts for the modification. This advice will be provided to the IPC once received.

#### 5.1.1 Summary of public submissions

- 54. 143 submissions were received, including 131 from individuals and 12 from special interest groups. Of these, 28 supported the modification and 114 objected to the modification.
- 55. The key concerns raised in the objecting submissions were in relation to:
  - water quality impacts on Thompson Creek Reservoir and the broader water catchment, including impacts on the Sydney drinking water catchment;
  - change from a zero-discharge water management system;
  - impacts on biodiversity and aquatic ecology;
  - alternatives considered and proposed management measures, including monitoring programs;
  - impacts on cultural heritage;

- cumulative impacts; and
- the selected assessment pathway for the modification.
- 56. Objecting submissions also raised concerns in relation to Centennial's compliance record and planning applications that are yet to be submitted. The Department notes that these matters do not form relevant considerations for the assessment of this modification under the EP&A Act.
- 57. Supporting submissions raised economic and social benefits associated with the continued operation of SWTP and MPPS.

#### 5.1.2 Summary of agency advice

58. A summary of advice received from government agencies is provided in **Table 2**. A link to the full copy of the advice is provided in **Appendix B**.

Agency	Advice summary
Environment Protection Authority (EPA)	<ul> <li>Raised a number of concerns including in relation to: <ul> <li>the water impact assessment for the modification and recommended an independent review of the assessment by a suitable expert;</li> <li>the alternatives considered as part of the assessment; and</li> <li>cumulative impacts from the future or ongoing MPPS outages.</li> </ul> </li> <li>Recommended a number of mitigation measures, including a request that EPA and WaterNSW are notified if the EC in Thompsons Creek Reservoir exceeds 550 µs/cm.</li> <li>Following review of the Submissions Report, EPA acknowledged the adoption of recommended mitigation measures and agreed with the recommended conditions for the modification.</li> </ul>
WaterNSW	<ul> <li>Requested further information in relation to:         <ul> <li>proposed water quality and transfer volume monitoring;</li> <li>cumulative impacts in relation to Centennial's broader water management system;</li> <li>contingencies and management responses for when Thompsons Creek Reservoir is unable to receive water transfers due to the exceedance of high operating level and EC trigger level;</li> </ul> </li> </ul>

#### Table 2 | Summary of agency advice

Agency	Advice summary
	<ul> <li>the reason for the proposed buffer period of 14 days prior and seven days following MPPS outage; and</li> <li>proposed brine management.</li> <li>Following review of the Submissions Report, WaterNSW supported the amendments made to the modification and confirmed its view that the amended modification would be unlikely to adversely impact water quality, provided the management measures proposed by Springvale Coal are implemented.</li> <li>WaterNSW reiterated the need for continued development of a long-term solution that addresses water/salt management and ongoing flooding issues to achieve a neutral or beneficial effect on water quality.</li> </ul>
NSW Department of Climate Change, Energy, the Environment and Water - NSW Jurisdictional System Security Coordinator	<ul> <li>Advised that MPPS is important to NSW electricity supply and receives the majority of its coal from Springvale Mine.</li> <li>Noted that without a modified water management solution, there is a risk that Springvale Mine could flood and permanently cease production.</li> <li>Confirmed that NSW would face increased electricity reliability risks were the water management at Springvale mine to fail and the mine to permanently cease production.</li> </ul>
NSW Department of Climate Change, Energy, the Environment and Water – Water Group	Raised no specific concerns.

#### 5.1.3 Summary of council submission and advice

59. Council raised no concerns (refer **Appendix B**).

## 5.2 Response to submissions

- 60. Following public exhibition, the Department requested that Springvale Coal respond to the issues raised in submissions and the advice received from government agencies.
- 61. Springvale Coal provided a submissions report to the Department on 28 February 2025 (see **Appendix B**), and the Department published the report on the NSW planning portal.

62. In responding to submissions, Springvale Coal made amendments to the originally proposed modification (see **Section 4.5**).

## 6 Assessment

- 63. As the modification does not include any additional disturbance or infrastructure, the Department considers that the key issue for the assessment is the effect that water transfers would have on the water quality in Thompsons Creek Reservoir and its downstream receiving environment.
- 64. The Department's assessment of this issue is provided in **Section 6.1**. The Department's assessment of other issues associated with the proposed modification is provided in **Section 6.2**.

### 6.1 Water quality

- 65. A detailed Water Impact Assessment was prepared by ERM to assess the impacts that blended and partially treated mine water would have on the quality of water stored in Thompsons Creek Reservoir over different outage periods.
- 66. Under all the modelled outage periods, EC in Thompsons Creek Reservoir was predicted to remain below 600 μs/cm. The maximum 95<sup>th</sup> percentile EC predicted from all outage scenarios modelled was 576 μs/cm at the end of a 111-day outage. This result is highly conservative in the context of the proposed April/May outage, noting that:
  - water transfers are proposed for a period of up to 75 days, not 111 days as modelled; and
  - actual EC levels in Thompsons Creek Reservoir in February 2025 were 481 µs/cm, which is materially lower than the modelled starting value of 506-526 µs/cm.
- 67. The Water Impact Assessment also considered impacts on downstream catchment water quality and salt loads in Coxs River associated with daily environmental releases from the reservoir during and following outage periods.
- 68. The assessment conservatively assumed that the maximum daily volume of environmental releases (18.5 ML/day) would be ongoing throughout any outage period. Springvale Coal has subsequently committed to limit environmental releases to the minimum daily volume of between 0.3 and 0.8 ML/day for the duration of any blended or partially treated water transfers.

- 69. The assessment found that environmental releases from Thompsons Creek Reservoir would have a lower EC value than the downstream catchment (upstream of Lake Wallace), even with the modification, and would therefore be unlikely to adversely influence local catchment water quality.
- 70. The Department agrees that the modification is even less likely to adversely influence EC further downstream in the catchment at and beyond Lake Lyell.
- 71. The additional salt load associated with maximum daily environmental releases represent an approximately 1.42% to 2.85% increase in baseline salt load in the downstream catchment (upstream of Lake Wallace). The Department agrees that this increase is minor and unlikely to adversely impact long term catchment water quality due to the short duration of the increase and the environmental variability experienced in this part of the catchment.
- 72. Based on these findings, the Department considers that the modification would not have any material or long-term adverse impact on catchment water quality or on drinking water quality in the Sydney drinking water catchment. In particular, the Department notes that:
  - water quality in Thompsons Creek Reservoir is better than downstream catchment water quality, even with the modification;
  - salinity in Thompsons Creek Reservoir is predicted to remain within the range of historical variability and would remain well below the Australian Drinking Water Guideline value considered to constitute good quality drinking water; and
  - restricting the volume of daily environmental releases to 0.3ML/day or 0.8ML/day significantly limits the potential for impacts on downstream water quality during blended or partially treated water transfers.
- 73. WaterNSW has confirmed, and the Department agrees, that the modification is unlikely to adversely impact water quality.

#### 6.1.1 Monitoring and management measures

74. Centennial monitors trends in water quality and aquatic ecology in the Upper Coxs River catchment. The scope of the monitoring program is outlined in the SWTP Water Management Plan and the Upper Coxs River Action and Monitoring Program. Additionally, Energy Australia monitors water quality in Coxs River and in Thompsons Creek below the reservoir environmental release point, as well as monthly monitoring of Thompsons Creek Reservoir water quality.

- 75. As part of this modification, Springvale Coal has committed to install a new continuous water quality monitor in Thompson Creek Reservoir prior to commencing transfer of blended or partially treated water.
- 76. The key management measures adopted for the modification include:
  - lowering the water level in Thompsons Creek Reservoir as required prior to commencing water transfers associated with outages, to provide sufficient capacity;
  - ceasing transfers of blended or partially treated water to Thompsons Creek Reservoir if the High Operating Level of the reservoir is exceeded;
  - ceasing transfers of blended or partially treated water to Thompsons Creek Reservoir if EC levels are likely to exceed 600 µs/cm;
  - notifying EPA and WaterNSW if EC levels in Thompson Creek Reservoir exceed 550 µs/cm; and
  - limiting environmental releases to the minimum daily volume required by Energy Australia's water access licence.
- 77. The Department considers that with the implementation of the above monitoring and management measures, water quality impacts in Thompson Creek Reservoir and the downstream catchment can be managed within acceptable environmental limits.

### 6.2 Other issues

- 78. The modification does not propose changes to the development footprint or infrastructure and would therefore not result in any additional impact on terrestrial ecology, Aboriginal heritage, historic heritage, amenity or soil from those already approved.
- 79. The Department's consideration of other issues is summarised in **Table 3**.

Issue	Findings and conclusions
Reservoir capacity	• Thompsons Creek Reservoir has a total capacity of 27,500 ML. The full supply level at the reservoir is set 0.3 m below the invert level of the spillway to allow the reservoir to hold any catchment run-off without spilling.
	• Water levels in the reservoir are generally maintained by Energy Australia close to its Low Operating Level to maintain sufficient capacity to store periodic water transfers and any elevated rainfall events.

#### Table 3 | Assessment of other issues

Issue	Findings and conclusions
	<ul> <li>Water levels are also managed in accordance with the requirements of the Dam Safety Act 2015 and Dam Safety Regulations 2019, including provision for emergency discharges, if required, to avoid water levels exceeding the full supply level.</li> <li>Energy Australia has advised that storage levels in Thompsons Creek Reservoir would be proactively reduced prior to commencing transfer of any blended or partially treated water in order to maximise storage capacity and avoid the need for an emergency discharges. This may include lowering the water storage level below the low supply level to accommodate longer duration outages.</li> <li>The Department is satisfied that storage capacity can be managed to accommodate the proposed transfer volumes without compromising the storage capacity of Thompsons Creek Reservoir or increasing the risk of emergency discharges.</li> </ul>
Sydney drinking water catchment	<ul> <li>The NorBE test in the Biodiversity and Conservation SEPP does not apply to modification applications.</li> <li>As discussed in Section 3.4, commissioning of SWTP has resulted in a material improvement in water quality within the Coxs River catchment.</li> <li>The Department acknowledges that the proposed short-term transfers of blended or partially treated water would likely result in a temporary increase in salinity within Thompsons Creek Reservoir. However, the Department notes that even with the modification, salinity levels would remain below those of the downstream catchment and are therefore unlikely to adversely affect water quality immediately downstream in the Coxs River or result in any significant adverse impact on the broader catchment (see Section 6.1).</li> <li>Furthermore, the Department considers that the predicted temporary water quality impacts in Thompsons Creek Reservoir would not negate the significant improvements that has been made to water quality within the catchment since the commissioning of SWTP.</li> <li>The Department considers that the proposed modification would assist in ensuring continued operation of the SWTP, which would continue to deliver a significant benefit for the catchment.</li> <li>WaterNSW agree that the modification is unlikely to adversely impact water quality.</li> </ul>
Aquatic ecology	• A number of public submissions raised concerns in relation to potential impacts on aquatic ecology, including potential impacts on platypus.

Issue	Findings and conclusions
	• Biannual aquatic ecology monitoring has been ongoing in Coxs River and Pipers Flat Creek since 2017. Monitoring results to date indicated that the macroinvertebrate communities remain in good condition. Given the minor and temporary nature of the predicted water quality impacts (see <b>Section 6.1</b> ), the Department considers that the modification application would not result in adverse impacts on aquatic ecology within the catchment.
Cumulative impact	• The potential cumulative impacts of the modification on water quality in the Upper Coxs River catchment have been assessed as part of the Water Impact Assessment (refer to <b>Section 6.1</b> ).
Alternatives	• As discussed in <b>Section 2.1</b> , a number of alternative water management strategies have been considered by Centennial. The modification was considered the only feasible alternative that was achievable within the timeframe required by the upcoming MPPS outage.
	• The Department agrees that the strategies considered by Centennial were not feasible due to the timeframe required to implement them, lack of relevant approvals, greater environmental risk, and/or risk of inundation of mine workings. The Department does however consider that alternative strategies may potentially be feasible to address future MPPS outages and should be further pursued by Springvale Coal.
	• The Department agrees that the 'do nothing' option is not desirable and would increase the risk of flooding of mine workings at Springvale or Angus Place. The Department considers that flooding of these mine workings is not in the public interest due to the extent of recoverable resource that would potentially be sterilised, as well as the potential risk to NSW energy security should supply to MPPS be interrupted (see <b>Section 3.1</b> ).
	• Further, the Department acknowledges that flooding of the remaining mine workings at Springvale and/or Angus Place increases the risk of an uncontrolled discharge of untreated mine water from the mine into the catchment. The Department considers that an uncontrolled discharge of untreated mine water would result in a poorer environmental outcome than that proposed by the modification and is not in the public interest.
	• Limiting the timeframe for the modification to the upcoming outage period would provide Centennial the opportunity to further develop some of the longer-term alternative measures currently under consideration.

Issue	Findings and conclusions
	• Following review of the alternative water management strategies, the Departmen agrees that the modification is the preferred option to manage excess water during the upcoming MPPS outage period.

# 7 Evaluation

- 80. The Department has assessed the merits of the modification in accordance with the requirements of the EP&A Act, and with consideration to advice from government agencies and submissions from Council and the public.
- 81. The modification has been proposed to provide a temporary solution to water management challenges at Springvale Mine that threaten to flood Springvale and/or Angus Place mines. Flooding of mine workings has the potential to result in loss of equipment, sterilisation of coal reserves and a permanent cessation of production that would leave MPPS without its main source of coal.
- 82. Without a solution to these water management challenges, NSW faces increased electricity reliability risks, particularly at periods of peak demand.
- 83. The Department considers the key matter for consideration for the modification is the potential impact on water quality in Thompsons Creek Reservoir and the downstream catchment, which forms part of Sydney's drinking water catchment.
- 84. The Department's assessment has found that the modification would not have any material or long-term adverse impact on downstream catchment water quality or on drinking water quality in the Sydney drinking water catchment.
- 85. Thompsons Creek Reservoir water quality would remain similar to or better than the downstream environment, even with the modification, and the changes predicted to water quality are within the range of historical variability in the reservoir and downstream catchment.
- 86. Total additional salt load in the downstream catchment resulting from the modification would be minor and unlikely to adversely impact long-term catchment water quality due to the short duration of the increase and the environmental variability experienced in this part of the catchment.
- 87. Importantly, the modification would not negate the significant improvements that have been made to water quality within the catchment since the commissioning of SWTP.

- 88. The Department considers that monitoring and management measures proposed by Springvale Coal would be effective in minimising the potential impacts of the modification on catchment water quality.
- 89. Consequently, the Department considers that the modification is in the public interest and is approvable, subject to the recommended conditions set out in the instrument of modification (see Appendix D). A consolidated development consent incorporating the recommended changes is provided in Appendix E.

# Appendices

## Appendix A – Summary of amendments to the modification application

Since lodgement, some key aspects of the modification application have been amended. A summary of the key amendments is provided in **Table A1** below.

Aspect	Modification Report	Final proposed project	Reason for change
Timeframe of the water transfers	During Mount Piper Power Station (MPPS) outages between 2025 and 2038	During the scheduled 54-day MPPS outage in April/May 2025	Following review of submissions on the modification application
Water quality transfer limit in Thompsons Creek Reservoir	650 µs/cm	600 µs/cm	Following review of submissions on the modification application
Environmental releases from Thompsons Creek Reservoir	Up to 18.5 ML/day	Limited to minimum daily volume of 0.3ML/day (between May and August) and 0.8 ML/day (between September and April) for the duration of any blended or partially treated water transfers	Following review of submissions on the modification application

#### Table A1 | Key project changes

## Appendix B – List of referenced documents

**B1 – Modification Report**: Refer to the 'Modification Application' folder under the 'Assessment' tab of the Department's website at: <u>https://www.planningportal.nsw.gov.au/major-</u>

projects/projects/mod-11-water-management-during-mpps-outages

**B2 – Submissions**: Refer to 'Submissions' tab of the Department's website at:

https://www.planningportal.nsw.gov.au/major-projects/projects/mod-11-water-management-duringmpps-outages

**B3 – Submissions Report**: Refer to the 'Response to Submissions' folder under the 'Assessment' tab of the Department's website at: <u>https://www.planningportal.nsw.gov.au/major-</u>

projects/projects/mod-11-water-management-during-mpps-outages

**B4 – Agency Advice**: Summarised in Table B1. Refer to the 'Agency Advice' folder under the 'Assessment' tab of the Department's website at: <u>https://www.planningportal.nsw.gov.au/major-projects/projects/mod-11-water-management-during-mpps-outages</u>

#### Table B1 | Agency advice

Agency	Advice
Environment Protection Authority (EPA)	EPA advice on MOD 11
WaterNSW	WaterNSW advice on MOD 11
NSW Department of Climate Change, Energy, the Environment and Water – Water Group (NSW Water Group)	NSW Water Group advice on MOD 11
NSW Department of Climate Change, Energy, the Environment and Water - NSW Jurisdictional System Security Coordinator	Energy Security Coordinator advice on MOD 11
Lithgow City Council	Lithgow City Council advice on MOD 11

## Appendix C – Statutory considerations

#### Objects of the EP&A Act

A summary of the Department's consideration of the relevant objects (found in section 1.3 of the EP&A Act) are provided in **Table C1** below.

#### Table C1 | Objects of the EP&A Act and how they have been considered

Object	Consideration
(a) to promote the social and economic welfare of the community and a better environment by the proper management, development and conservation of the State's natural and other	The modification meets this objective because it would provide ongoing dewatering of Springvale and Angus Place mines, enabling safe production and avoid sterilisation of these resources.
resources,	Overall, the Department considers that any minor impacts can be appropriately managed under existing and recommended conditions.

Object	Consideration
(b) to facilitate ecologically sustainable development by integrating relevant economic, environmental and social considerations in decision-making about environmental planning and assessment,	<ul> <li>The Department considers that the modification can be carried out in a manner that is consistent with the principles of ecologically sustainable development as it would:</li> <li>not require clearing of any native vegetation;</li> <li>have no impact on Aboriginal cultural heritage or historic heritage;</li> <li>be temporary in nature; and</li> <li>provide ongoing employment in the region and result in associated economic benefits.</li> </ul>
(c) to promote the orderly and economic use and development of land,	The modification represents a continuation of land use which is permissible on the subject land. The Department considers this represents an orderly and economic use of the land.
(d) to promote the delivery and maintenance of affordable housing,	This object is not applicable to the proposed modification.
(e) to protect the environment, including the conservation of threatened and other species of native animals and plants, ecological communities and their habitats,	The modification does not require any land clearing and avoids impacts to threatened species and communities and key habitats.
(f) to promote the sustainable management of built and cultural heritage (including Aboriginal cultural heritage),	The modification would not impact Aboriginal cultural heritage or historic heritage.
(g) to promote good design and amenity of the built environment,	The modification would not require any changes to the existing built environment.
(h) to promote the proper construction and maintenance of buildings, including the protection of the health and safety of their occupants,	The modification does not require the construction of any buildings.

Object	Consideration
(i) to promote the sharing of the responsibility for environmental planning and assessment between the different levels of government in the State,	The Department has assessed the modification application in consultation with Lithgow City Council and other relevant NSW government authorities and considered the issues raised by these agencies in its assessment.
(j) to provide increased opportunity for community participation in environmental planning and assessment.	The Department publicly exhibited the Modification Report and application and considered all submissions in its assessment.

#### **Environmental Planning Instruments (EPIs)**

To satisfy the requirements of section 4.15(1)(a)(i) of the *Environmental Planning and Assessment Act* 1979 (EP&A Act), the following considers the relevant provisions of the EPIs that govern the carrying out of this project and have been taken into consideration in the Department's environmental assessment.

#### Lithgow Local Environmental Plan 2014 (Lithgow LEP 2014)

SWTP is located within the Lithgow City local government area. Under the *Lithgow Local Environmental Plan 2014 (Lithgow LEP 2014)*, the proposed development area includes land zoned as:

- RU1 Primary Production;
- RU2 Rural Landscape;
- RU3 Forestry; and
- SP2 Infrastructure.

Water supply systems are permissible with consent in the RU1 and RU2 zones. Non-forestry land uses in State Forests are permitted in accordance with the *Forestry Act 2012* and are subsequently permissible without consent in the RU3 zone. Development that is ancillary to the operation of the Mount Piper Power Station is permissible with consent in the SP2 zone.

Consequently, the project is permissible with development consent.

#### State Environmental Planning Policy (Planning Systems) 2021 (Planning Systems SEPP)

The proposed modification is for the purposes of mining related works which is identified as State Significant Development through Clause 5 of Schedule 1 of the Planning Systems SEPP.

As Centennial has disclosed a reportable political donation, under Section 2.7(1)(c) of the Planning System SEPP and in accordance with Section 4.5(a) of the EP&A Act the Independent Planning Commission is the consent authority.

#### State Environmental Planning Policy (Resilience and Hazards) 2021

Hazardous and offensive development Chapter 3 of this SEPP requires persons proposing to carry out development for the purposes of potentially hazardous industry to prepare a Preliminary Hazard Analysis and to submit this with the development application.

The proposed modification is not considered a "potentially hazardous industry" or "potentially offensive industry" as described in this SEPP. Consequently, Springvale Coal did not prepare a preliminary hazard analysis, and the Department considers that Part 3.11 of the SEPP does not apply to determination of the modification application.

## Appendix D – Instrument of modification

https://www.planningportal.nsw.gov.au/major-projects/projects/mod-11-water-management-duringmpps-outages

## Appendix E – Consolidated development consent

https://www.planningportal.nsw.gov.au/major-projects/projects/mod-11-water-management-duringmpps-outages



New South Wales Government Independent Planning Commission

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