



# SPRINGVALE WATER TREATMENT PROJECT (SSD 7592 MODIFICATION 8)

S4.55(1A) MODIFICATION REPORT  
PROPOSED EXTENSION OF TIMEFRAME TO  
INTERIM WATER STRATEGY &  
ADMINISTRATIVE AMENDMENT

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MAY 2022



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## Document Control Sheet

Issue No.	Amendment	Date	Prepared By	Reviewed By
A	Draft	01/04/2022	LD/ZS	ZS (EW Centennial & WG Energy Australia)
B	Revised Draft	02/05/2022	LD/ZS	ZS (Centennial & Energy Australia)
C	Final	20/05/2022	ZS	ZS (EW & NG Centennial)
D	Revised Final	23/05/2022	ZS	ZS

### Limitations Statement

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Unless otherwise specified in this report, information and advice received from external parties during the course of this project was not independently verified. However, any such information was, in our opinion, deemed to be current and relevant prior to its use. Whilst all reasonable skill, diligence and care have been taken to provide accurate information and appropriate recommendations, it is not warranted or guaranteed and no responsibility or liability for any information, opinion or commentary contained herein or for any consequences of its use will be accepted by ADW Johnson or by any person involved in the preparation of this assessment and report.

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# 1.0 Introduction

## 1.1 PROJECT DETAILS

Springvale Coal Pty Ltd (the Applicant) is seeking to modify the State Significant Development (SSD) approval for the Springvale Water Treatment Project (WTP) (SSD 7592) under the provisions of Section 4.55(1A) of the *Environmental Planning and Assessment Act 1979*.

The proposed modification (Modification 8) seeks to amend Schedule 1 and Schedule 2, Condition 6A of the SSD 7592 consent in order to extend the interim water management strategy to allow partially treated mine water to be stored in Thompsons Creek Reservoir through to 31 October 2023 to avoid flooding of underground workings at Springvale and Angus Place coal mines. The proposal does not seek to increase the volume of filtered water permitted to be transferred to Thompsons Creek Reservoir above the 5,760ML volume previously assessed and approved.

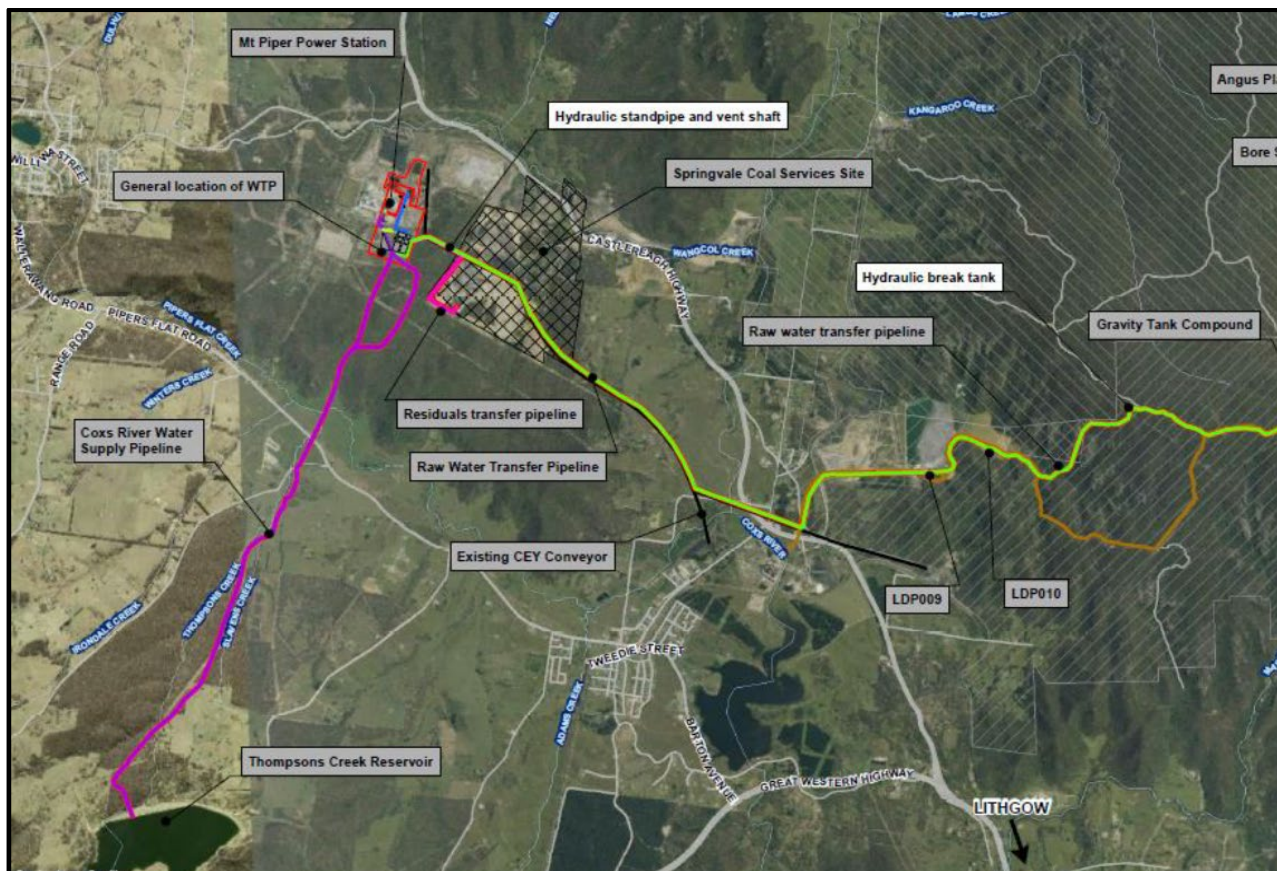
The modification also seeks to correct a minor administrative error to the Schedule of Land included within Appendix 1 of SSD 7592. No other element of the consent or operation is proposed to be modified as part of this application.

The application seeks to modify the project approval under Section 4.55(1A) of the *Environmental Planning and Assessment Act 1979* (EP&A Act). The application has been prepared in accordance with the State Significant Development Guidelines – preparing a Modification Report.

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PROJECT DETAILS:	
<b>Proposed Modification:</b>	Modification under Section 4.55(1A) of the EP&A Act to SSD 7592 (as Modified) to Schedule 1 and Schedule 2, Condition 6A of the SSD 7592 consent in order to extend the interim water management strategy to allow partially treated mine water to be stored in Thompsons Creek Reservoir through to 31 October 2023 to avoid flooding of underground workings at Springvale and Angus Place Coal Mines.  The proposed modification also seeks to amend Appendix 1 to correct a minor administrative error to the Schedule of Land
<b>Applicant Name:</b>	Springvale Coal Pty Ltd
<b>Applicant Address:</b>	Springvale Coal Pty Ltd Level 20 Market Street, Sydney NSW 2000
<b>Property Description:</b>	Various Lots as described within the Schedule of Land detailed in Appendix 1 of SSD 7592 and provided within <b>Appendix D</b> .

## 1.2 THE SITE AND LOCALITY

The Springvale WTP is located in the western coalfields of NSW approximately 15 km northwest of Lithgow, adjacent to the Mount Piper Power Station (MPPS) as shown in **Figure 1** below.



**Figure 1: Project Layout (Source SSD7592 – Appendix 2).**

## 1.3 PROJECT BACKGROUND

The Springvale WTP (the project) was granted State Significant Development (SSD) consent under SSD 7592 (the consent) on 19 June 2017 by the former Planning Assessment Commission (PAC), under delegation from the then Minister for Planning.

The project was developed jointly by Springvale Coal Pty Limited (a subsidiary of Centennial Coal Company Pty Limited [Centennial]) and Energy Australia NSW Pty Limited (Energy Australia). Springvale Coal remains the applicant for the Springvale WTP.

The project is an industrial water reuse scheme to use mine water transferred from the nearby Angus Place Colliery and the Springvale Coal Mine as cooling water at the MPPS. The project allows Springvale to achieve strict water quality performance measures under the Springvale Mine Extension Project development consent (SSD 5594), which required all mine water discharges to the Cox's River to cease after 30 June 2019.

The project has the capacity to transfer and treat up to 42 million litres per day (ML/day) of mine water from Centennial's Angus Place Colliery and the Springvale Coal Mine. Under the consent, excess treated water is transferred from the Springvale WTP to the Thompsons Creek Reservoir (TCR) using the existing Cox's River Water Supply Pipeline, which forms part of the Cox's River Water Supply System (established to provide water for local power stations). This allows the treated water to be stored in TCR during periods of low water demand.

The consent has been modified seven (7) times, with Mod 1 and Mod 2 dealing with pipeline alignment works, Mod 3, Mod 4, Mod 5 and Mod 7 involving an interim water management strategy and Mod 6 involving an alternative mine water management strategy for water that falls outside specification for treatment at the Springvale WTP.

The temporary interim water management strategy approved under Mod 3, Mod 4, Mod 5 and Mod 7 allowed for up to 5,760ML of partially treated (filtered) mine water to be stored in TCR until 31 October 2021. To date only 2,611.96ML (45%) of the approved volume of filtered mine water has been transferred and stored in TCR.

The Springvale WTP has recently experienced periods of non-operation that have resulted in mine water not being treated and mine water accumulating in the underground workings of Springvale and Angus Place. Accumulated water is threatening to reach levels where it could impact infrastructure and operations and could result in unauthorised discharge of untreated water from the mine. As such, a minor extension to the timeframe for the previously approved interim water management strategy is sought to allow partially treated (filtered) mine water to continue to be transferred to TCR.

## 1.4 OVERVIEW OF CURRENT PROJECT APPROVAL

The approved project (SSD 7592) as most recently amended comprises the following major elements:

- A system to transfer up to 42 ML/day of dewatered mine water from the existing gravity tank forming part of the approved Springvale Delta Water Transfer Scheme (SDWTS) on the Newnes Plateau to the MPPS site;
- A new water treatment plant at MPPS incorporating desalination processes to reduce the salinity in the mine water;
- Transfer of treated water from the water treatment plant to the MPPS cooling water system to contribute to the demand for make-up water;
- Use of the existing Coxs River Water Supply pipeline to transfer excess treated water to Thompsons Creek Reservoir for storage and subsequent reuse in the cooling water system;
- Disposal of residuals from the pre-treatment process in the reject emplacement area (REA) at the neighbouring Springvale Coal Services site (part of Western Coal Services Project, SSD 5579);
- Implementation of an Optimised Pre-treatment and Unique Separation (OPUS) process including the addition of an additional reverse osmosis system and brine crystalliser to replace the use of the brine concentrators and manage salt load from the new water treatment plant (WTP) Disposal of brine will continue in accordance with existing approvals and practices at MPPS;
- The management of up to 5,760ML of mine water at inflows through filtration and storage in TCR to 30 June 2021; and
- The receipt of Angus Place Water into the MPPS Pond D for treatment and reuse through the MPPS brine concentrators.

## 2.0 Strategic Context

### Local Context

Land uses in the locality include the adjacent MPPS, coal mining and handling infrastructure, commercial forestry, and the residential areas of Lidsdale, Portland, Blackmans Flat and Wallerawang, located approximately two to five kilometres from the Springvale WTP.

The locality has been subject to extensive mining and power generation activities over the past 100 years.

### Catchment Context

The Springvale WTP and nearby mines (including Springvale and Angus Place collieries) are within the Cox's River catchment, which forms part of Sydney's drinking water catchment. The Cox's River flows south toward Lake Wallace, Lake Lyell and ultimately Lake Burragorang. Given the history of land use, the water catchment has been exposed to impacts from mining and other industries for an extended period, including historical mine water discharges.

In recent years, the NSW Government has been working to improve water quality across the region through stronger regulation of mining and other land uses. A key step in this process was the imposition of strict conditions of consent on Springvale mine, which included a staged program of water quality improvements. A key improvement was the development of the Springvale WTP.

### Water Management Context

#### Mount Piper Power Station

MPPS sources its water from the Coxs River, Fish River supply or the Springvale WTP, which is primarily used in the cooling towers. The power station is licensed to extract fresh water from the Cox's River. On average, the power station uses 40 ML/d of water, and up to 54 ML/d when operating at full capacity. The Springvale WTP is approved to transfer up to 42ML/d of treated mine water to supplement and replace the use of water from the Cox's River catchment.

#### Dewatering of Underground Mines

The removal of groundwater is an essential aspect of underground mining and is critical for safety. Inflows to mine workings must be managed to avoid flooding of underground workings. This is managed at Springvale and Angus Place by transferring groundwater inflows from dewatering facilities on the Newnes Plateau to the Springvale WTP via a transfer pipeline at a rate of up to 42 ML/day.

#### Springvale Water Treatment Facility

The Springvale WTP is integrated with the MPPS operations by sharing water management infrastructure and supplying treated water to meet cooling water demand requirements at the power station.

### Strategic Planning Context

The proposal is consistent with the relevant strategic planning documentation applying to the site, including the *Central West and Orana Regional Plan 2036* (and *Draft Central West and Orana Regional Plan 2041*) and *Lithgow 2040 Local Strategic Planning Statement*, which seek to promote economic growth, increase productivity of resource lands, and improve natural waterways and water resources.

## 3.0 Description of Modification

### 3.1 PROPOSED MODIFICATION

The proposed modification seeks to modify Schedule 1 and Schedule 2, Condition 6A for a minor extension to the interim water management strategy, to allow the transfer of partially treated (filtered) mine water to TCR through to 31 October 2023. This extension is required to manage the threat of flooding the underground infrastructure associated with the Angus Place Colliery and the Springvale Coal Mine. A summary of the proposed change to Condition 6A is provided below:

Schedule 2 Condition 6A	
Current Condition	Proposed Amendment
<ul style="list-style-type: none"> <li>Transfer of up to 5,760ML of filtered mine water to Thompsons Creek Reservoir until 31 October 2021</li> </ul>	<ul style="list-style-type: none"> <li>Transfer of up to 5,760ML of filtered mine water to Thompsons Creek Reservoir until <b>31 October 2023</b></li> </ul>

The proposal does not seek to increase the volume of filtered mine water permitted to be transferred to TCR above the 5,760ML volume previously assessed and approved. The Springvale WTP remains unchanged from that approved with Modification 8 remaining substantially the same development as that originally approved under SSD 7592.

The temporary transfer of filtered mine water to TCR would utilise the 3,149ML (55%) of available capacity within the previously assessed and approved limit of 5,760ML. No increase to the approved volume of filtered mine water transferred to TCR is sought. Flows would be transferred at up to 42ML/day in accordance with the consent.

Water levels within the TCR will be managed to ensure there is sufficient capacity beneath the full storage level to accommodate the filtered mine water transfers. Water transferred to TCR would be subsequently reused within the MPPS cooling water system.

No additional infrastructure would be required to facilitate the proposed transfer of filtered mine water to the TCR.

There are no other feasible or safe alternatives to storing the 3,149ML of filtered mine water in the TCR. There is not enough underground storage at the Springvale and Angus Place mines nor is there sufficient capacity in the other storages at MPPS. The potential consequences of the proposed modification not going ahead would be:

- Flooding of active mine workings at Springvale and Angus Place, and potential impacts to the integrity of underground infrastructure;
- Potential unauthorised discharges into the Cox's River Catchment or Newnes Plateau; and
- Springvale having to reduce or stop its production and ability to supply coal to MPPS, with potential impacts to energy generation in NSW.

The modification seeks to correct a minor administrative error to the Schedule of Land included within Appendix 1 of SSD 7592. Lot 1 DP 829065 has been inadvertently listed twice and Lot 1 DP 702619 needs to be included in the schedule. Lot 1 DP 702619 forms part of the Mount Piper Power Station land holding as shown in **Figure 2** below and is owned by *Energy Australia NSW Pty Ltd*. A copy of the Certificate of Title is provided within **Appendix F**.



**Figure 2: Lot 1 DP 702619 (Source Six Maps).**

The correct schedule has been provided within **Appendix D** with the relevant amendment provided in **Section 3.2** of this Modification Report.

### 3.2 MODIFICATIONS TO SSD 7592

To facilitate the proposed modification, it is requested that SSD 7592 be amended as follows (suggested changes in blue):

Schedule 1	
Definitions	Proposed Amendment
Springvale Water Treatment Project Environmental Impact Statement dated September 2016 and the associated Response to Submissions dated December 2016, as amended by:	<ul style="list-style-type: none"> <li>MOD 8 – ‘Modification Report – Springvale Water Treatment Project – SSD-7592 Modification 8</li> </ul>
Schedule 2 Condition 6A	
Current Condition	Proposed Amendment
<ul style="list-style-type: none"> <li>Transfer of up to 5,760ML of filtered mine water to Thompsons Creek Reservoir until 31 October 2021</li> </ul>	<ul style="list-style-type: none"> <li>6A. The Applicant may transfer up to a maximum of 5,760 megalitres of partially treated mine water to Thompsons Creek Reservoir, until <del>31 October 2021</del> <b>31 October 2023</b>.</li> </ul>
Appendix 1: Schedule of Lands	
Landowner	Lot and DP
Energy Australia NSW Pty Ltd	Lot 191 DP 629212 Lot 101 DP 829410 Lot 2 DP 702619 Lot 15 DP 804929 Lots 3 and 5 DP 829137

	<p> <i>Lots 101 and 103 DP 1164619</i>  <i>Lot 1 and 5 DP 1087684</i>  <i>Lot 1 DP 829065</i>  <i>Lot 9 DP 804929</i>  <del><i>Lot 1 DP 829065</i></del>  <i>Lot 1 DP 702619</i>  <i>Lot 2 DP 702619</i>  <i>Lot 1 DP 800003</i>  <i>Lot 241 DP 8019151/1183453</i>  <i>Lot 191 DP 629212</i>  <i>Lot 254 DP 806025</i>  <i>Lot 103 DP 1164619</i> </p>
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## 4.0 Statutory Context

### 4.1 APPROVAL PATHWAY AND PERMISSIBILITY

The proposed modification to the Springvale WTP consent is proposed in accordance with Section 4.55(1A) of the EP&A Act.

In accordance with Section 4.55(1A), a consent authority may modify the consent if it is satisfied that the development to which the consent as modified relates involves minimal environmental impact and is substantially the same development as the development for which consent was originally granted. The applicant has formed the position that the proposed modification is consistent with the criteria under Section 4.55(1A) as demonstrated throughout the relevant sections of this Modification Report.

The Department's Response to the Scoping Report issued on the 9<sup>th</sup> March 2022 has confirmed that the appropriate approval pathway for the modification application would be under section 4.55(1A) of the EP&A Act.

### 4.2 RELEVANT ISSUES UNDER SECTION 4.55 OF THE EP&A ACT 1979

Under Section 4.55(1A) of the EP&A Act, the consent authority needs to be satisfied that the modified development is of minor environmental impact and is substantially the same as the development approved under SSD-7592 as follows.

#### “(1A) Modifications involving minimal environmental impact

*A consent authority may, on application being made by the applicant or any other person entitled to act on a consent granted by the consent authority and subject to and in accordance with the regulations, modify the consent if:*

*(a) it is satisfied that the proposed modification is of minimal environmental impact, and*

**Comment:** There are no additional impacts resulting from the proposed amendment over and above those anticipated and assessed with the development as originally approved or subsequent modifications. The proposed modification will result in a change to the date currently contained within condition 6A from 31 October 2021 to 31 October 2023 and also seeks to correct a minor administrative error to the Schedule of Land included within Appendix 1 of SSD 7592.

As Springvale Coal does not propose any change to the previously assessed and approved volume of partially treated (filtered) mine water to be stored in the TCR, there will be no change in the previously assessed and approved impacts authorised by Springvale WTP Modification 4, as such the proposed amendment will not result in a change to the approved physical activities. The proposed modification will have a negligible environmental impact and remains entirely suitable for the proposed extension to the interim water management strategy.

*(b) it is satisfied that the development to which the consent as modified relates is substantially the same development as the development for which the consent was originally granted and before that consent as originally granted was modified (if at all), and*

**Comment:** The proposed modification does not change the approved development that will be carried out on the land and will therefore result in substantially the same development as approved under SSD 7592.

The proposed modification does not seek to significantly alter the nature or scale of the proposed development and will continue to facilitate the improved environmental outcomes for the Upper Coxs River catchment.

The project will continue to transfer mine water from dewatering facilities on the Newnes Plateau to MPPS for treatment and reuse with the power stations cooling water system as currently approved.

The modification involves an extension to the previously approved interim water management strategy in order to utilise approved, but not utilised storage capacity of partially treated (filtered) mine water in TCR for later reuse at MPPS. The interim water management strategy is sought for the period up until 31 October 2023. The interim water management strategy will utilise the existing infrastructure and storage capacity approved for use as part of the existing consent.

The proposed modification of SSD 7592 will have minimal environmental impacts and will remain substantially the same development for which consent was originally granted.

*“(c) it has notified the application in accordance with:*

- (i) the regulations, if the regulations so require, or*
- (ii) a development control plan, if the consent authority is a council that has made a development control plan that requires the notification or advertising of applications for modification of a development consent, and*

*(d) it has considered any submissions made concerning the proposed modification within any period prescribed by the regulations or provided by the development control plan, as the case may be.*

*Subsections (1), (2) and (5) do not apply to such a modification.”*

**Comment:** The Department will review the modification and determine whether notification is required. Considering the modification relates to a minor extension to the previously approved interim water management strategy and a minor administrative amendment, the development remains unchanged from that approved and the modified development will be substantially the same as the development originally approved under SSD 7592, the Applicant submits that notification is not considered to be necessary in this instance.

### 4.3 RELEVANT ISSUES UNDER THE EP&A REGULATION 2021

Part 5, Division 1 of the *Environmental Planning and Assessment Regulation 2021* sets out additional requirements that all applications for modifications of consent must comply with. The relevant requirements and how they have been addressed are set out in the below table.

**Table 1: Division 1, Section 99 and 100 Requirements**

Section 99 REQUIREMENTS	COMMENT
<i>(1) A modification application must—</i>	
<i>(a) be in the approved form, and</i>	The application has been prepared in the approved form in accordance with the State Significant Development Guidelines – preparing a modification report.
<i>(b) contain all the information and documents required by—</i>	
<i>(i) the approved form, and</i>	The application has been prepared in the approved form.
<i>(ii) the Act or this Regulation, and</i>	The application contains all the relevant information and documents required by the Act and Regulation.
<i>(c) be submitted on the NSW planning portal</i>	The Modification Application will be submitted via the NSW Planning Portal.
<i>(2) If the modification application is for State significant development—</i>	
<i>(a) the application must also include particulars of the nature of the modification, and</i>	Provided within <b>Section 3.0</b> of this Section 4.55(1A) Report.
<i>(b) the applicant must consider the State Significant Development Guidelines in preparing the application.</i>	The applicant has considered the State Significant Development Guidelines in preparing this application as demonstrated throughout the report.
Section 100 REQUIREMENTS	COMMENT
<i>(1) A modification application must contain the following information—</i>	
<i>(a) the name and address of the applicant,</i>	Provided within <b>Section 1.0</b> of this Section 4.55(1A) Report and as part of the application on the NSW Planning Portal.
<i>(b) a description of the development that will be carried out under the development consent,</i>	Discussed within relevant <b>Sections 1.0</b> and <b>2.0</b> of this Section 4.55(1A) Report.
<i>(c) the address and folio identifier of the land on which the development will be carried out,</i>	Provided within <b>Section 1.0</b> and <b>Appendix D</b> of this Section 4.55(1A) Report and as part of the application on the NSW Planning Portal.
<i>(d) a description of the modification to the development consent, including the name, number and date of plans that have changed, to enable the consent authority to compare the development with the development originally approved,</i>	Discussed within <b>Sections 3.0</b> and <b>4.0</b> of this Section 4.55(1A) Report.
<i>(e) whether the modification is intended to— (i) merely correct a minor error, misdescription or miscalculation, or (ii) have another effect specified in the modification application,</i>	Discussed within <b>Section 4.0</b> of this Section 4.55(1A) Report.
<i>(f) a description of the expected impacts of the modification,</i>	Discussed within <b>Section 6.0</b> of this Section 4.55(1A) Report.
<i>(g) an undertaking that the modified development will remain substantially the same as the development originally approved,</i>	Discussed within <b>Sections 4.0</b> and <b>7.0</b> of this Section 4.55(1A) Report.

<i>(h) for a modification application that is accompanied by a biodiversity development assessment report—the biodiversity credits information,</i>	N/A
<i>(i) if the applicant is not the owner of the land—a statement that the owner consents to the making of the modification application,</i>	Owners consent for all parcels of land subject to the proposed modification application are able to be provided as part of this application.
<i>(j) whether the modification application is being made to—     (i) the Court under the Act, section 4.55, or     (ii) the consent authority under the Act, section 4.56.</i>	N/A

#### 4.4 RELEVANT ISSUES UNDER SECTION 4.15 OF THE EP&A ACT 1979

Under Section 4.15 of the EP&A Act, the following matters are required to be considered as part of the assessment of the application:

##### **(a)(i) The Provisions of any Environmental Planning Instrument**

Consideration has been given to the provisions of all relevant environmental planning instruments (EPIs). The EP&A Act is addressed in earlier sections of this report. Other EPIs applicable to the proposed amendments are discussed below:

##### **SEPP (Biodiversity and Conservation) 2021**

Chapter 8 Sydney Drinking Water Catchment of SEPP (Biodiversity and Conservation) 2021, applies to land within Sydney's Drinking Water Catchment including the Upper Coxs River system. The aims of the policy are:

- (a) to provide for healthy water catchments that will deliver high quality water while permitting development that is compatible with that goal, and*
- (b) to provide that a consent authority must not grant consent to a proposed development unless it is satisfied that the proposed development will have a neutral or beneficial effect on water quality, and*
- (c) to support the maintenance or achievement of the water quality objectives for the Sydney drinking water catchment.*

Under Part 8.2, Section 8.8, 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 (the NorBe test).

Development consent for the Springvale WTP was granted through the Planning Assessment Commission on 19 June 2017, as the project demonstrated a considerable beneficial effect to the catchment through the elimination of mine water discharges to the environment.

While the consent authority must apply the NorBe test in "grant(ing) consent to the carrying out of development", Section 4.55 (4) of the EP&A Act provides that the modification of a development consent is "taken not to be the granting of development consent". Chapter 8 Sydney Drinking Water Catchment of SEPP (Biodiversity and Conservation) 2021, must be considered as part of the broader considerations under Section 4.15 of the EP&A Act. However, the NorBe test does not apply to a modification in the same way as it does to the granting of consent. In particular, the requirement for a consent authority to be satisfied of NorBe prior to

determining a development application does not extend to the determination of a modification application.

However, it is recognised that the intent of the NorBe test is for the protection of water within the catchment and this was considered as part of the development of the interim water management strategy forming the basis of the proposed modification. Detailed water quality modelling was undertaken as part of previous assessments, specifically Mod 3 and Mod 4), which highlighted:

- that the interim water management strategy will have negligible impact upon water quality; and
- will continue to result in net beneficial effects upon the catchment during the limited period in which the interim water management strategy operates.

Modification 8 does not seek to increase the volume of filtered water permitted to be transferred to Thompsons Creek Reservoir above the 5,760ML volume previously assessed and approved.

The environmental impact of filtered water transfers associated with the modification are considered to fall within the conservative modelling assumptions contained in previous assessments for the Interim Water Management Strategy and will have a neutral impact upon water quality in the catchment.

### **Other Environmental Planning Instruments**

Several environmental planning instruments apply to the modifications, including:

- State Environmental Planning Policy (Resources and Energy) 2021, Chapter 2 (Mining, Petroleum Production and Extractive Industries);
- State Environmental Planning Policy (Resilience and Hazards) 2021, Chapter 3 (Hazardous and Offensive Development) and Chapter 4 (Remediation of Land);
- State Environmental Planning Policy (Planning Systems) 2021, Chapter 2 (State and Regional Development); and
- Lithgow Local Environment Plan 2014.

The proposed modification for an extension to the temporary interim water management strategy, to be used as a contingency measure to allow partially treated mine water to be transferred to TCR through to 31 October 2023, remains consistent with the relevant aims, objectives and provisions of these instruments.

#### **(a)(ii) The Provisions of any Draft Environmental Planning Instruments**

There are no draft environmental planning instruments relevant to the modification application.

#### **(a)(iii) Any Development Control Plans**

Not applicable.

#### **(a)(iiia) Any Planning Agreement that has been entered into Under Section 7.4, or any Draft Planning Agreement that a Developer has Offered to enter into Under Section 7.4, and**

Not applicable.

#### **(a)(iv) Any Matters Prescribed by the Regulations**

Division 1 of the EP&A Regulation 2021 is addressed in the earlier sections of this report. There are no other matters prescribed by the regulations relevant to the application.

**(b) The Likely Impacts of The Development, Including Environmental Impacts on both the Natural and Built Environments, and Social and Economic Impacts in the Locality,**

An environmental assessment of the proposal is provided within **Section 6** of this modification report that addresses all potential impacts of the proposal.

**(c) The Suitability of the Site for the Development**

The subject site remains entirely suitable for the proposed development.

**(d) Any Submissions made in Accordance with the Act or Regulations**

Any public submissions will be considered by the NSW Department of Planning and Environment (DPE) and the applicant.

**(e) The Public Interest**

The proposal is considered to be in the public interest.

## 4.5 OTHER LEGISLATIVE MATTERS

### 4.5.1 Protection of the Environment Operations Act 1997

All aspects relating to environmental management will continue in accordance with SSD-7592, relevant requirements of the Protection of the Environment Operation Act 1997 (POEO Act) and approved monitoring plans.

The proposed modification will not result in the need to vary the existing Environmental Protection Licenses (EPL).

### 4.5.2 National Parks and Wildlife Act 1974

The *National Parks and Wildlife Act 1974* is the primary state legislation relating to Aboriginal cultural heritage in NSW.

The proposed modification will have no impact on Aboriginal heritage.

### 4.5.3 Biodiversity Conservation Act 2016

The *Biodiversity Conservation Act 2016* (BC Act) commenced on 25<sup>th</sup> August 2017 and replaced the *Threatened Species Conservation Act 1995* as well as the animal and plant provisions of the *National Parks & Wildlife Act 1974*.

The purpose of the BC Act is to maintain a healthy, productive and resilient environment for the greatest well-being of the community, now and into the future, consistent with the principles of ecologically sustainable development.

The proposed modification will have no impact on flora and fauna.

### 4.5.4 National Greenhouse and Energy Reporting Act

The Commonwealth *National Greenhouse and Energy Reporting Act 2007* established a mandatory reporting system for company greenhouse gas emissions and energy production and consumption.

The proposed modification will not result in any additional greenhouse gas emissions generated.

#### 4.5.5 Water Management Act 2000

The *Water Management Act 2000* (WM Act) contains provisions for the licensing of water capture and use.

The proposed modification does not generate the requirement for any separate approvals under the provisions of the WM Act.

### 4.6 STRATEGIC CONTEXT

#### 4.6.1 Lithgow 2040 Local Strategic Planning Statement

The Lithgow 2040 Local Strategic Planning Statement (LSPS) sets out a 20-year plan for land use planning across Lithgow. The LSPS is used to guide future planning, to achieve the community's vision and values.

The LSPS identifies planning priorities to achieve its vision, along with short, medium, long term, and ongoing actions to monitor and report on the progress of implementation.

The proposed modification seeks to extend the interim water management strategy to allow partially treated (filtered) mine water to be transferred to TCR through to 31 October 2023 to avoid flooding of underground workings at Springvale and Angus Place coal mines. The proposal does not seek to increase the volume of filtered water permitted to be transferred to TCR above the 5,760ML volume previously assessed and approved. No additional infrastructure would be required to facilitate the proposed transfer of filtered mine water to TCR and no other changes are proposed.

The proposed modification is consistent with the relevant sections of the Lithgow LSPS. In particular, the proposed modification will see the continued utilisation of existing infrastructure for the interim water management strategy, which is consistent with Planning Priority 5.

## 5.0 Engagement

### 5.1 NSW DEPARTMENT OF PLANNING, INDUSTRY AND ENVIRONMENT

The applicant has consulted with staff from the NSW DPE regarding the proposed modification application.

An initial Scoping Report was submitted to then NSW Department of Planning, Industry & Environment (now known as DPE) on the 25<sup>th</sup> February 2022 in accordance with the State Significant Development Guidelines to introduce the proposed modification to seek confirmation on the proposed approval pathway and level of assessment.

A response to the Scoping Report from DPIE was received on 9<sup>th</sup> March 2022 confirming that the appropriate approval pathway for the modification application would be under Section 4.55(1A) of the EP&A Act. DPE was generally satisfied with the issues identified to be addressed in the Modification Report and also requested additional requirements be included.

The DPIE requirements and where they have been addressed within this Modification Report are detailed in **Table 2**. A copy of the correspondence from DPIE is provided as **Appendix A** to this Modification Report.

**Table 2: DPIE Scoping Report Response**

Requirement	Where Addressed
A detailed justification for the proposed modification	<b>Section 3.0 and 7.1</b>
A summary of the environmental, social and economic benefits and impacts associated with the proposed modification.	<b>Section 6.0</b>
A summary of the water quality and water transfer/storage impacts that were assessed and approved as part of previous modification, and any changes in these impacts resulting from the extended timeframe proposed. Particular consideration should be given to storage implications based on current capacity.	<b>Sections 6.1, 6.2 and 6.3</b>
A summary of the monitoring and management framework relevant to the proposed modification.	<b>Section 6.6 and Appendix B</b>
A description of any contingencies being pursued to address the ongoing need for diversion of water to Thompsons Creek Reservoir.	<b>Section 7.1</b>
Evidence of consultation with EPA, WaterNSW and Council.	<b>Section 5.2 and Appendix E</b>

### 5.2 AUTHORITY CONSULTATION

The applicant has commenced consultation with the following authorities regarding Modification 8:

- Environmental Protection Authority;
- WaterNSW; and
- Lithgow Council.

**Table 3: Authority Consultation**

Organisation	Summary
NSW Environmental Protection Authority (EPA)	<p>Initial Phone Consultation by Springvale Coal made on 11 March 2022.</p> <p>Email summary issued on the 17 March 2022, providing an overview of the proposal along with a copy of the Scoping Report to invite comment on the proposed Mod 8 amendment to Springvale Water Treatment Project (WTP) (SSD 7592).</p>
WaterNSW	<p>Initial Phone Consultation by Springvale Coal made on 15 March 2022.</p> <p>Email summary issued on the 17 March 2022, providing an overview of the proposal along with a copy of the Scoping Report to invite comment on the proposed Mod 8 amendment to Springvale Water Treatment Project (WTP) (SSD 7592).</p> <p>WaterNSW have provided their initial comments via email on the 28 March 2022 and are provided within <b>Appendix E</b>. WaterNSW comments have been addressed in <b>Section 6.0</b> of this report.</p>
Lithgow City Council	<p>Initial Phone Consultation by Springvale Coal made on 11 March 2022.</p> <p>Email summary issued on the 18 March 2022, providing an overview of the proposal along with a copy of the Scoping Report to invite comment on the proposed Mod 8 amendment to Springvale Water Treatment Project (WTP) (SSD 7592).</p>

## 6.0 Assessment of Impacts

This section provides an assessment of the key environmental issues associated with the proposed modification.

Given the significant amount of work undertaken across the site to date by the applicant as part of the original approval and subsequent modification approvals, there is an excellent understanding of the site and surrounding environment as well as the environmental issues pertaining to the interim water management strategy for the Springvale WTP.

The interim water management strategy utilises existing infrastructure approved for use as part of the Springvale WTP. A detailed water resources assessment was undertaken to assess the likely impacts of the interim water management strategy as part of Modification 3 and 4 to SSD 7592. The assessment utilised two modelling approaches including geochemical modelling to assess the potential change in water quality within TCR and a water and salt balance model to assess flow volumes and electrical conductivities within the broader Coxs River catchment.

The proposed modification does not seek to increase the volume for 5,760ML of filtered water permitted to be transferred to TCR during the extended operation of the interim water management strategy. This assessment is therefore based upon a review of the previous water modelling results submitted to the DPE as part of previously approved modification applications.

Consideration of NorBe has also been undertaken as part of the assessment.

### 6.1 WATER QUALITY

Geochemical modelling was used to assess the impact of the filtered mine water transfers on water quality in the immediate catchment of TCR using the PHREEQc geochemical modelling program. The modelling was used to indicate the concentration of dissolved solids that would be likely to occur by the mixing of the filtered mine water with existing water within TCR.

The results of the geochemical modelling were assessed against the relevant default guideline values (DGVs) from the Australia and New Zealand Water Quality Guidelines (ANZG 2018) for 95% species protection of aquatic ecosystems.

The results of the modelling of water quality are presented in **Table 4** along with the 95<sup>th</sup> percentile water quality data for Thompsons Creek Reservoir. This shows that the EC and the phosphate concentration predicted by the model exceeded the relevant DGVs. However, neither of these exceedances was as a result of the mine water transfer, as the Thompsons Creek Reservoir 95<sup>th</sup> percentile water quality exceeded the DGVs for the same parameters.

**Table 4: Mod 3 & 4 Water Quality Modelling Results**

Parameter	Units	DGV	TCR 95 %ile	MOD3 modelling results	Mod 4 Modelled result
pH	pH units	6.5-8.0	<b>8.60</b>	<b>8.18</b>	7.97
Electrical conductivity	µS/cm	350	<b>641</b>	<b>681</b>	<b>741</b>
Bicarbonate alkalinity as CaCO <sub>3</sub>	mg/L	NA	153	207	261
Sulfate as SO <sub>4</sub>	mg/L	NA	124	113	102
Chloride	mg/L	NA	20	18	17
Calcium	mg/L	NA	18	16	14
Magnesium	mg/L	NA	10	9	8
Sodium	mg/L	NA	97	117	138
Potassium	mg/L	NA	9	9	8

Parameter	Units	DGV	TCR 95 %ile	MOD3 modelling results	Mod 4 Modelled result
Aluminium	mg/L	0.055	0.012	0.012	<0.001
Arsenic	mg/L	0.013	0.0008	0.002	0.003
Cadmium	mg/L	0.0002	0.00005	0.00005	0.0001
Copper	mg/L	0.0014	0.0009	0.0009	<0.001
Cobalt	mg/L	NA	0.0005	0.0009	0.0009
Nickel	mg/L	0.011	0.002	0.002	0.002
Zinc	mg/L	0.008	0.0025	0.004	0.005
Iron	mg/L	NA	0.011	0.017	<0.001
Boron	mg/L	0.370	0.11	0.11	0.10
Manganese	mg/L	1.900	0.003	0.004	<0.001
Lead	mg/L	0.0034	0.0009	0.0009	0.001
Mercury	mg/L	0.0006	0.00005	0.00009	0.0001
Hexavalent chromium	mg/L	0.001	0.001*	0.0009	0.0009
Selenium	mg/L	0.011	0.0001	0.001	0.001
Phosphate as P	mg/L	0.005	<b>0.01</b>	<b>0.009</b>	<b>0.008</b>
Ammonia as N	mg/L	0.900	0.02	<0.001	<0.001

Exceedances of the DGVs are indicated in **orange bold**.

\* Result is for total chromium (unspeciated).

The modelling is considered conservative as it assumed instantaneous mixing of the full volume of filtered water transfers for each modification (2,700ML for Modification 3 and 3,060ML for Modification 4) with the 95<sup>th</sup> percentile water quality monitoring results in TCR. In practice filtered water transfers occur progressively over a period of months and water quality within TCR is also influenced by other inputs such as transfers of treated water, catchment run-off and pumping from Lake Lyell.

The geochemical modelling indicated the potential for a minor increase in electrical conductivity (40  $\mu\text{S}/\text{cm}$ ) within Thompsons Creek Reservoir as a result of Modification 3 and further increase in electrical conductivity (60  $\mu\text{S}/\text{cm}$ ) associated with filtered water transfer volumes proposed as part of Modification 4. The increased electrical conductivity is largely due to higher bicarbonate and sodium concentrations in the filtered mine water.

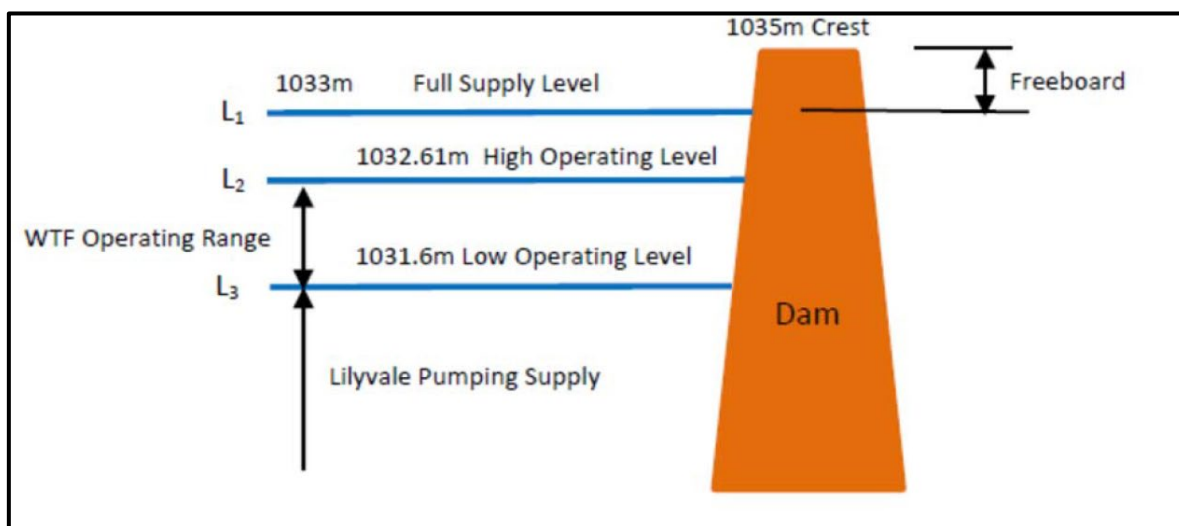
At time of Modification 4 and 5, the electrical conductivity in Thompsons Creek Reservoir was in the order of 720 – 770  $\mu\text{S}/\text{cm}$ . This was largely influenced by drought conditions at the time and water quality in the Coxs River and Lake Lyell being reflective of the influence of Springvale Mine water discharge.

Modification 4 was modelled to have a potential increase of ~60  $\mu\text{S}/\text{cm}$  in TCR at the time. Approximately 38% or 2,200ML of the approved transfer volume of filtered water was pumped to TCR during the implementation of the interim water management strategy period (up to 30 June 2020).

The electrical conductivity in TCR was predicted to decrease over time and water quality overall would improve. This has been the case with the current electrical conductivity at 564 – 574  $\mu\text{S}/\text{cm}$  in Thompsons Creek Reservoir. The water quality in TCR in regard to electrical conductivity has improved since the Modification 4 assessment in 2019 and the ~60  $\mu\text{S}/\text{cm}$  electrical conductivity increase will therefore still be less than the baseline electrical conductivity considered when Modification 4 was originally approved. As such the transfer of filtered water to TCR proposed by this modification will not cause the electrical conductivity to go above the baseline level assessed in Modification 4 and will therefore have negligible impact on water quality in TCR.

## 6.2 WATER OVERFLOWS

Thompsons Creek Reservoir can hold up to 27,500ML of water. Management of water levels at TCR has been refined to manage water levels during the implementation of the Springvale WTP. The water level is typically managed between the high and low operating levels as shown on **Figure 3**. The full supply level (FSL) at the reservoir is set at 1,033m AHD, which is 0.3m below the invert level of the spillway to allow the reservoir to hold any catchment run-off without spilling. The reservoir is typically operated at between 0.4m and 1.4m below the FSL (between 1,032.6m AHD and 1031.6m AHD). The operating levels are based upon catchment rainfall and management requirements, in addition to safety freeboard requirements between the FSL level and spillway crest.



**Figure 3: Thompsons Creek Reservoir operating levels.**

Thompsons Creek Reservoir is currently operating 576ML below high operating level and 1,063ML above low operating level. As such, there is considered to be sufficient capacity for partially treated filtered water to be transferred to TCR.

## 6.3 CONSIDERATION OF NORBE

A consent authority must not grant consent for a project in the drinking water catchment unless it would have a 'neutral or beneficial effect' on water quality (the NorBe test) in accordance with Chapter 8 Sydney Drinking Water Catchment of SEPP (Biodiversity and Conservation) 2021. Development consent was initially granted for the Springvale WTP, as a result of the beneficial effect to the catchment achieved through the elimination of mine water discharges from the Springvale Mine to the environment.

While the NorBe test is not considered to strictly apply to determination of a modification, detailed modelling was undertaken as part of the previous modifications (Modifications 3 and 4) to demonstrate the interim water management strategy will have a negligible effect on the catchment when compared to the approved development.

The water quality modelling undertaken demonstrated a negligible or neutral effect upon water quality in the catchment. Water will be transferred to TCR, which is managed predominantly as an offline storage to provide water security to MPPS.

The potential impacts associated with the minor extension of the interim water management strategy for the period up to 31 October 2023 is expected to fall with the conservative modelling assumptions used to assess previous modifications.

## 6.4 BIODIVERSITY

Under the relevant provisions of the *Biodiversity Conservation (Savings and Transitional) Regulation 2017*, a Biodiversity Development Assessment Report is not required to be submitted with the application as the modification will not result in any increase in impacts on biodiversity values.

### **Aquatic Ecology**

Three fish species have been previously identified within TCR during surveys undertaken as part of the Environmental Impact Statement associated with the original Springvale WTP SSD application. These are the native Flathead gudgeon (*Philypnodon grandiceps*) and two introduced species being Rainbow Trout (*Oncorhynchus mykiss*) and Brown Trout (*Salmo trutta*) (GHD 2016a).

Potential impacts from increased turbidity within TCR are considered likely to be temporary and localised around the 11.6m submerged inlet outlet structure that is located within the centre of TCR. The localised potential for impact from turbidity would allow any individual fish to relocate to other areas within the reservoir, which provide superior habitat, thereby preventing any significant impact upon any species within the reservoir. The minor increase in electrical conductivity was considered unlikely to impact upon the species identified within TCR.

Given the current water quality and the conservative predictions of impacts of MOD 4 being adopted, impacts of water quality on aquatic species that inhabit TCR are considered unlikely.

## 6.5 SOCIO-ECONOMIC IMPACTS

Springvale Mine represents a significant coal provider to the adjacent MPPS. MPPS provides approximately 15% of NSW's electricity and is extremely important to the state's energy security. The impacts of current water levels within the Springvale Mine are at critical levels and unless alternative water management options are implemented, the mine will flood. Flooding of the mine will have significant impacts on underground infrastructure and sterilise significant remaining coal reserves.

With approval to produce up to 5.5Mtpa of ROM coal and employ up to 450 full time equivalent personnel, Springvale Mine has significant flow-on economic benefits for the broader Lithgow community. With approximately 15.1Mt of coal reserves remaining at the Springvale Mine for extraction, the loss of this reserve would represent a significant impact on future coal supplies to MPPS and a significant loss of royalties to the State.

The proposed modification represents the best temporary solution to ensure coal reserves are not sterilised, unnecessary impacts from mine water discharges to the environment are avoided and Springvale mine can continue to supply critical coal supplies to MPPS.

## 6.6 MONITORING & MANAGEMENT

Water quality and discharge volume monitoring at TCR will be undertaken as per the current Springvale Water Treatment Facility Water Management Plan (Veolia 2020). The program includes the requirements detailed in **Table 5** for Thompsons Creek monitoring.

**Table 5: Thompsons Creek Reservoir Monitoring**

Location	Monitoring Point Identification	Type	Frequency
Thompsons Creek Reservoir Storage	TC1	Water Quality	Weekly
Confluence Thompsons Creek and Pipers Flat Creek	Thompsons Creek	Water Quality	Quarterly
Pipers Flat Creek waterway	PFUp	Water Quality	Quarterly
Discharge from Springvale Water Treatment Plant to Thompsons Creek Reservoir	Treated Water at the Thompsons Creek Reservoir Delivery Point	Volume	Daily

The data gathered through the monitoring program will inform management objectives for the TCR which will be reported within the Annual Review for the Springvale WTP.

All aspects relating to environmental management will continue in accordance with SSD-7592, relevant requirements of the POEO Act and approved monitoring plans.

## 6.7 SUMMARY OF KEY MATTERS FOR CONSIDERATION

The following provides a summary of the key matters considered as part of this Section 4.55(1A) report.

**Table 6: Summary of Key Factors for Consideration**

ISSUE	CONSIDERATION
Water quality	<ul style="list-style-type: none"> <li>A review of the water resources assessments undertaken for previous modifications indicate that the potential environmental impacts fall within the already approved range of predicted impacts for the interim strategy.</li> <li>Mine water would be filtered to partially treat the water to remove solids before being directed to the Thompsons Creek Reservoir.</li> <li>Water quality within Thompsons Creek Reservoir is currently monitored weekly. Water quality in downstream creeks is currently monitored quarterly. This will be continued in line with current approvals and following determination of the proposed modification.</li> </ul>
Water transfer volume	<ul style="list-style-type: none"> <li>The proposed modification does not seek to increase the total volume of partially treated mine water approved to be transferred to the reservoir (5,760ML).</li> <li>2,611.96ML (45%) of the approved water transfer volume has been transferred to the reservoir, with approximately 3,148.04ML remaining that would be permitted to be transferred until 31 October 2023.</li> <li>Partially treated mine water would continue to be transferred to the reservoir via the existing Cox's River Water Supply Pipeline at up to 42 ML/day and no additional infrastructure would be required to support the proposal.</li> </ul>
Reservoir infrastructure	<ul style="list-style-type: none"> <li>Thompsons Creek Reservoir can hold up to 27,500 ML of water. Water in the reservoir is predominantly used as storage to supply the MPPS demand for makeup water.</li> <li>No additional dam infrastructure would be required to support the proposed time extension to the interim water strategy.</li> </ul>

ISSUE	CONSIDERATION
	<ul style="list-style-type: none"> <li>Water levels within the reservoir are actively managed between high and low operating levels based on catchment rainfall, management requirements and safety freeboard requirements.</li> <li>Thompsons Creek Reservoir will continue to be managed in accordance with the requirements under the Dam Safety Act, the proposed mine water flows will be managed so that the storage capacity of TCR will not be compromised or the risk of water overflows is increased.</li> </ul>
Neutral or beneficial effect (NorBe) test	<ul style="list-style-type: none"> <li>The neutral or beneficial effect test in <i>Chapter 8 Sydney Drinking Water Catchment of SEPP (Biodiversity and Conservation) 2021</i> does not strictly apply to modification applications. Nevertheless, assessments provided as part of previous modification applications have demonstrated that the interim strategy would have a negligible change when compared to the approved project.</li> </ul>
Economic	<ul style="list-style-type: none"> <li>If the underground workings were to flood into the developed mains headings/roadways it would significantly affect access to approved and potential future coal resources at Angus Place and Springvale collieries.</li> <li>Flooding of workings would increase costs due to additional dewatering infrastructure.</li> </ul>
Social	<ul style="list-style-type: none"> <li>Springvale provides significant flow on economic benefits to the Lithgow community. Any potential impacts to coal reserves at the mine would have significant flow on social impacts to the Lithgow community.</li> <li>Springvale is the main supplier of coal to MPPS, which provides approximately 15% of the electricity to NSW and is critical to maintaining energy security.</li> </ul>
Traffic	<ul style="list-style-type: none"> <li>No change as a result of the proposed modification.</li> </ul>
Heritage	<ul style="list-style-type: none"> <li>No change as a result of the proposed modification.</li> </ul>
Air Quality	<ul style="list-style-type: none"> <li>No change as a result of the proposed modification.</li> </ul>
Noise	<ul style="list-style-type: none"> <li>No change as a result of the proposed modification.</li> </ul>
Visual	<ul style="list-style-type: none"> <li>No change as a result of the proposed modification.</li> </ul>

## 7.0 Justification of Modified Project

### 7.1 PROJECT JUSTIFICATION

The operation of the Springvale WTP enables the nearby Angus Place and Springvale mines to be dewatered. The Springvale WTP has previously had periods of non-operation resulting in water needing to be stored underground instead of it being pumped to the Springvale WTP. This has resulted in the accumulation of water in underground workings at Springvale and Angus Place.

The accumulation of mine water is threatening to reach critical levels and could lead to unauthorised discharges of untreated mine water into the Cox's River catchment or Newnes Plateau, and significantly impact mine infrastructure and operations. If the underground water storage capacities are exceeded, water could flow into underground roadways that are used to access approved and future coal reserves. The condition of these roadways would deteriorate and render them unable to be safely accessed.

Springvale Coal is therefore seeking a minor extension to the timeframe for the previously approved interim water management strategy allowing partially treated (filtered) mine water to continue to be transferred to TCR. If approved, the proposed modification will result in a change to the date currently contained within condition 6A from 31 October 2021 to 31 October 2023. The transfer of the partially treated mine water would occur at times when the storage capacity of TCR would not be compromised nor the risk of water overflows from the TCR increased, noting that TCR will continue to be managed in accordance with the requirements under the Dam Safety Act.

The transfer of filtered mine water to TCR would utilise the 3,149ML (55%) of available capacity within the previously assessed and approved limit of 5,760ML. No increase to the approved volume of filtered mine water transferred to TCR is sought. Flows would be transferred at up to 42ML/day in accordance with the consent.

As the transfer capacity of filtered mine water is controlled by volume (both per day and total) in accordance with the current consent. The dates contained within condition 6A are considered to be largely irrelevant in practically managing the transfer of filtered mine water to TCR. While not sought as part of this modification application, it is suggested that the date restriction could in fact be removed from the condition.

#### **Possible Future Contingency Measures**

It should be noted that Springvale Coal are in the process of investigating the viability of possible alternative options to alleviate the use of the transfer to TCR. At present these investigations remain ongoing.

## 8.0 Conclusion

This modification application is made under Section 4.55(1A) of the EP&A Act and seeks to modify the Springvale Water Treatment Project (WTP) (SSD 7592).

The proposed modification seeks to modify Schedule 1 and Schedule 2, Condition 6A for a minor extension to the interim water management strategy, to allow the transfer of partially treated (filtered) mine water to TCR through to 31 October 2023. This extension is required to manage the threat of flooding the underground infrastructure associated with the Angus Place Colliery and the Springvale Coal Mine.

The modification also seeks to correct a minor administrative error to the Schedule of Land included within Appendix 1 of SSD 7592. Lot 1 DP 829065 has been inadvertently listed twice and Lot 1 DP702619 needs to be included in the schedule. Lot 1 DP702619 is a parcel within Mount Piper Power Station land holding and is owned by *Energy Australia NSW Pty Ltd*.

Specifically, the proposal seeks the following.

Schedule 1	
Definitions	Proposed Amendment
Springvale Water Treatment Project Environmental Impact Statement dated September 2016 and the associated Response to Submissions dated December 2016, as amended by:	<ul style="list-style-type: none"> <li>MOD 8 – 'Modification Report – Springvale Water Treatment Project – SSD-7592 Modification 8</li> </ul>
Schedule 2 Condition 6A	
Current Condition	Proposed Amendment
<ul style="list-style-type: none"> <li>Transfer of up to 5,760ML of filtered mine water to Thompsons Creek Reservoir until 31 October 2021</li> </ul>	<ul style="list-style-type: none"> <li>6A. The Applicant may transfer up to a maximum of 5,760 megalitres of partially treated mine water to Thompsons Creek Reservoir, until <del>31 October 2021</del> <b>31 October 2023</b>.</li> </ul>
Appendix 1: Schedule of Lands	
Landowner	Lot and DP
Energy Australia NSW Pty Ltd	Lot 191 DP 629212 Lot 101 DP 829410 Lot 2 DP 702619 Lot 15 DP 804929 Lots 3 and 5 DP 829137 Lots 101 and 103 DP 1164619 Lot 1 and 5 DP 1087684 Lot 1 DP 829065 Lot 9 DP 804929 <b>Lot 1 DP 829065</b> Lot 1 DP702619 Lot 2 DP 702619 Lot 1 DP 800003 Lot 241 DP 8019151/1183453 Lot 191 DP 629212 Lot 254 DP 806025 Lot 103 DP 1164619

The proposal does not seek to increase the volume of filtered water permitted to be transferred to Thompsons Creek Reservoir above the 5,760ML volume previously assessed and approved.

The transfer of filtered mine water to Thompsons Creek Reservoir would utilise the 3,149ML (55%) of available capacity within the previously assessed and approved limit of 5,760ML. No increase to the approved volume of filtered mine water transferred to Thompsons Creek Reservoir is sought. Flows would be transferred at up to 42ML/day in accordance with the consent.

Water quality impacts are anticipated to be below those assessed and approved as part of Modifications 4 and 5 to the Springvale WTP development consent. Transfers of filtered mine water will be undertaken when there is sufficient storage capacity within Thompsons Creek Reservoir to accommodate the transferred volumes of filtered mine water. Any water transferred to Thompsons Creek Reservoir will be subsequently reused within the MPSS cooling water system as originally described within the Springvale WTP EIS. Springvale Coal considers that the proposed modification meets the relevant objects of the EP&A Act, is consistent with the principle of ecologically sustainable development, is critical to the ongoing safe operation (in terms of worker safety and infrastructure integrity) of the Springvale and Angus Place mines and is therefore justified on the basis of environmental performance and socio-economic benefits.

It is considered that all key considerations associated with the Modification 8 proposal have been identified and appropriately addressed by this report.

The proposed modification of SSD-7592 will have minimal environmental impacts and will remain substantially the same development for which consent was originally granted. As such it is considered the modification can be approved pursuant to Section 4.55(1A) of the EP&A Act.



# Appendix A

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DEPARTMENT OF PLANNING AND ENVIRONMENT RESPONSE TO SCOPING

## Department of Planning and Environment

Our ref: SSD 7592- Modification 8

Mick Nadalin  
Project Manager  
Centennial Coal Company Limited

Via email: [Mick.Nadalin@centennialcoal.com.au](mailto:Mick.Nadalin@centennialcoal.com.au)

9 March 2022

### **Springvale Water Treatment Project (SSD 7592) Modification 8** **Response to Scoping Report**

Dear Mr Nadalin

I refer to your letter dated 25 February 2022 regarding a proposed modification to the Springvale Water Treatment Project (SSD 7592 Modification 8).

The Department can confirm that the appropriate approval pathway for the modification application would be under section 4.55(1A) of the *Environmental Planning and Assessment Act 1979*.

The Department is generally satisfied with the issues identified in your letter to be addressed in the Modification Report. In addition to these matters, the Department requests that you provide the following:

- a detailed justification for the proposed modification;
- a summary of the environmental, social and economic benefits and impacts associated with the proposed modification;
- a summary of the water quality and water transfer/storage impacts that were assessed and approved as part of previous modification, and any changes in these impacts resulting from the extended timeframe proposed. Particular consideration should be given to storage implications based on current capacity;
- a summary of the monitoring and management framework relevant to the proposed modification;
- a description of any contingencies being pursued to address the ongoing need for diversion of water to Thompsons Creek Reservoir; and
- evidence of consultation with EPA, WaterNSW and Council.

If you wish to discuss this matter further, please contact Elle Clementine on 02 9274 6470 or at [elle.clementine@planning.nsw.gov.au](mailto:elle.clementine@planning.nsw.gov.au)

Yours sincerely,



Jessie Evans  
Director, Resource Assessments

## Appendix B

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### EXISTING MONITORING AND MITIGATION MEASURES

## Monitoring and Mitigation Measures

As detailed in **Section 6.6** of the Modification Application, the water quality and discharge volume monitoring at TCR will be undertaken as per the current Springvale Water Treatment Facility Water Management Plan (Veolia 2020). The program includes the requirements for Thompsons Creek monitoring as follows:

### Thompsons Creek Reservoir Monitoring

Location	Monitoring Point Identification	Type	Frequency
Thompsons Creek Reservoir Storage	TC1	Water Quality	Weekly
Confluence Thompsons Creek and Pipers Flat Creek	Thompsons Creek	Water Quality	Quarterly
Pipers Flat Creek waterway	PFUp	Water Quality	Quarterly
Discharge from Springvale Water Treatment Plant to Thompsons Creek Reservoir	Treated Water at the Thompsons Creek Reservoir Delivery Point	Volume	Daily

The data gathered through the monitoring program will inform management objectives for the TCR which will be reported within the Annual Review for the Springvale WTP.

All aspects relating to environmental management will continue in accordance with SSD-7592, relevant requirements of the POEO Act and approved monitoring plans.

# Appendix C

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## STATUTORY COMPLIANCE TABLE

<b>Statutory Compliance Table</b>		
<b>Relevant Legislation</b>		
<b>Act</b>	<b>Section of Modification Report</b>	<b>Further Approval Required</b>
<i>Environmental Planning and Assessment Act 1979</i>	Refer to <b>Section 4.0</b>	<b>No</b>
<i>Environmental Planning and Assessment Regulation 2021</i>	Refer to <b>Section 4.0</b>	<b>No</b>
<i>Protection of the Environment Operations Act 1997</i>	Refer to <b>Section 4.5</b>	<b>No</b>
<i>National Parks and Wildlife Act 1974</i>	Refer to <b>Section 4.5</b>	<b>No</b>
<i>Biodiversity Conservation Act 2016</i>	Refer to <b>Section 4.0</b>	<b>No</b>
<i>Water Management Act 2000</i>	Refer to <b>Section 4.5</b>	<b>No</b>
<i>National Greenhouse and Energy Reporting Act 2007 (Cth)</i>	Refer to <b>Section 4.5</b>	<b>No</b>
<i>Roads Act 1993</i>	Not applicable to the proposed modification.	<b>No</b>
<i>Heritage Act 1997</i>	Not applicable to the proposed modification.	<b>No</b>
<i>Local Government Act 1993</i>	Not applicable to the proposed modification.	<b>No</b>
<b>Consideration of Environmental Planning Instruments</b>		
<b>Environmental Planning Instrument</b>	<b>Section of Modification Report</b>	
<i>SEPP (Biodiversity and Conservation) 2021, Chapter 8 Sydney Drinking Water Catchment</i>	Refer to <b>Section 4.4</b>	
<i>State Environmental Planning Policy (Resources and Energy) 2021, Chapter 2 (Mining, Petroleum Production and Extractive Industries)</i>	Refer to <b>Section 4.0</b>	
<i>State Environmental Planning Policy (Resilience and Hazards) 2021, Chapter 3 (Hazardous and Offensive Development) and Chapter 4 (Remediation of Land)</i>	Refer to <b>Section 4.0</b>	
<i>State Environmental Planning Policy (Planning Systems) 2021, Chapter 2 (State and Regional Development)</i>	Refer to <b>Section 4.0</b>	
<i>Lithgow Local Environment Plan 2014</i>	Refer to <b>Section 4.0</b>	

# Appendix D

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## AMENDED SCHEDULE OF LAND

**APPENDIX 1:  
SCHEDULE OF LAND**

<b>Landowner</b>	<b>Lot and DP</b>
Energy Australia NSW Pty Ltd	Lot 191 DP 629212 Lot 101 DP 829410 Lot 2 DP 702619 Lot 15 DP 804929 Lots 3 and 5 DP 829137 Lots 101 and 103 DP 1164619 Lot 1 and 5 DP 1087684 Lot 1 DP 829065 Lot 9 DP 804929 <del>Lot 1 DP 829065</del> Lot 1 DP 702619 Lot 2 DP 702619 Lot 1 DP 800003 Lot 241 DP 8019151/1183453 Lot 191 DP 629212 Lot 254 DP 806025 Lot 103 DP 1164619
Centennial Springvale Pty Ltd and Springvale SK Kores Pty Ltd	Lot 1 DP 88503 Lot 501 DP 825541 Lot 2 DP 126483 Lot 13 and 357 DP 751651 Lot 2 DP 1151441
Lithgow City Council	Wolgan Road Skelly Road Brays Lane
Ivanhoe Coal Pty Ltd	Lot 2 DP 567915 Lot 101 DP 1137972 Lot 16 DP 751651 Lot 174 DP 751651 Lot 385 and Lot 375 DP 754651
Janette Winifred Hunt (private)	Lot 371 DP 751651
NSW State Forest	NSW State Forest Lot 502, DP 822541 Lot 3 DP 1151441
RMS	Castlereagh Highway
The Crown	Various paper roads
Wayne Alfred Hollands & Lorraine Elsie Hollands	Lot 1 DP 710709 Lot 101 DP 1053026 Lot 102 DP 1053026
Taranza Pty Ltd	Lot 2 DP 874368
The State of New South Wales	Lot 2 DP 1183453 Lot 47 and Lot 91 DP 751638 Lot 502 DP 825541
Alexander William Fraser and Marie Janice McCann	Lot 122 DP 751651
Edward Gerard Eustace & Glenys Joy Wilkinson Eustace	Lot 7 DP 828737
Ivanhoe Coal Pty Ltd	Lots 166, 160, 159, 165 and 164 DP 751638 Lot 1 DP 1151441
Marjon Holdings Ltd	Lot 242 DP 801915
Jackson Turnbull & Carmel June Turnbull	Lot 123 DP 751651 Lot 1 DP 1176813
Transport for NSW	Lot 2003 DP 1221830

# Appendix E

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WATERSW CONSULTATION

**From:**  
**To:** [Zac Smurthwaite](#)  
**Subject:** FW: ARK: Springvale Water Treatment Facility (SSD-7592-MOD-8) - Proposed Modification  
**Date:** Monday, 11 April 2022 12:43:29 PM  
**Attachments:** [image001.png](#)  
[image002.jpg](#)  
[ATT00001.ipe](#)

---

Regards

**Edwina White**

Group Manager Approvals



**Centennial | Sydney**

Level 20, 1 Market Street | Sydney | NSW | 2000

[centennialcoal.com.au](http://centennialcoal.com.au)

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**From:** Juri Jung <  
**Sent:** Monday, 28 March 2022 4:51 PM  
**To:** Edwina White <>  
**Subject:** RE: ARK: Springvale Water Treatment Facility (SSD-7592-MOD-8) - Proposed Modification

Hi Edwina,

Thanks for the scoping report and the summary below.

As mentioned in the scoping report and email below, the proposed interim water management plan (IWMP) has been assessed in the previous modifications.

Water NSW would like to see in the modification report as below:

- Water balance including reuse in Mount Piper Power Station and storage in Thompsons Creek Reservoir (TCR)
- Recent TCR's water level including recent rain bombs in 2022
- Alternative storage or operation options if the capacity of TCR becomes full before October 2023

Hope above points make sense to you.

If you have any questions, please do not hesitate.

Kind regards,

**Juri Jung**

Catchment Assessment Officer

**For noting:** I am currently working remotely. Please reach me via email or 0418 986 712.



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[www.waternsw.com.au](http://www.waternsw.com.au)

WaterNSW acknowledges the Traditional Custodians of the land and water on which we work and recognises the continuing cultural and spiritual connections that Aboriginal and Torres Strait Islander People have to Country. We pay our respects to Elders past, present and emerging.

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**From:** Edwina White <>

**Sent:** Friday, 18 March 2022 4:36 PM

**To:** Juri Jung <

**Subject:** ARK: Springvale Water Treatment Facility (SSD-7592-MOD-8) - Proposed Modification

**This Message Is From an External Sender**

This message came from outside your organization.

Be careful opening emails, attachments and links from unknown senders.

Good afternoon Juri,

As discussed over the phone on 15 March, Springvale Coal Pty Ltd (the Applicant) is seeking to modify the State Significant Development (SSD) approval for the Springvale Water Treatment Project (WTP) (SSD 7592) under the provisions of Section 4.55(1A) of the *Environmental Planning and Assessment Act 1979* (EP&A Act).

The proposed modification (Modification (MOD) 8) seeks to amend Schedule 2, Condition 6A of the SSD 7592 consent in order to extend the interim water management strategy to allow partially treated mine water to be stored in Thompsons Creek Reservoir through to 31 October 2023 to avoid flooding of underground workings at Springvale and Angus Place coal mines. The proposal does not seek to increase the volume of filtered water permitted to be transferred to Thompsons Creek Reservoir above the 5,760ML volume previously assessed and approved. No other element of the consent or operation is proposed to be modified.

The proposal seeks to modify Schedule 2, Condition 6A for an extension to the temporary interim water management strategy, to be used as a contingency measure to allow partially treated mine water to be stored in Thompsons Creek Reservoir through to 31 October 2023. This extension would allow for the transfer of partially treated mine water to Thompsons Creek Reservoir using the Cox's River Water Supply Pipeline. A summary of the proposed change to condition 6A is provided below:

<b>Schedule 2 Condition 6A</b>	
<b>Current Condition</b>	<b>Proposed amendment</b>
<ul style="list-style-type: none"> <li>■ Transfer of up to 5,760ML of filtered mine water to Thompsons Creek Reservoir until 31 October 2021</li> </ul>	<ul style="list-style-type: none"> <li>■ Transfer of up to 5,760ML of filtered mine water to Thompsons Creek Reservoir until <b>31 October 2023</b></li> </ul>

The temporary transfer of filtered mine water to Thompsons Creek Reservoir would utilise the 3,149ML (55%) of available capacity within the previously assessed and approved limit of 5,760ML. No increase to the approved volume of filtered mine water transferred to Thompsons Creek Reservoir is sought. Flows would be transferred at up to 42ML/day in accordance with the consent.

Springvale Coal Pty Ltd has consulted with staff from NSW Department of Planning, Industry and Environment (DPIE) regarding the MOD 8 proposal. The attached Scoping Report was submitted to the DPIE on the 25<sup>th</sup> February 2022 in accordance with the State Significant Development Guidelines.

A Response to the Scoping Report from DPIE was received on 9 March 2022 confirming that the appropriate approval pathway for the modification application would be under section 4.55(1A) of the EP&A Act. DPIE was generally satisfied with the issues identified to be addressed in the Modification Report and also requested consultation with the WaterNSW as part of the preparation of the Modification Application.

We would like to invite comment from WaterNSW on the proposed MOD 8 amendment to Springvale Water Treatment Project (WTP) (SSD 7592).

To assist with your review of the proposed MOD 8, please refer to the enclosed document titled "Springvale WTP Scoping Report Mod 8"

We are in the process of preparing the Modification Report. Any comments relating to the proposed MOD 8 would be greatly appreciated and we request that should you have any comments, that they be provided as soon as possible.

Should you have any questions or wish to discuss the proposal in further detail, please do not hesitate to contact me.

Thank you for your time.

Regards

**Edwina White**  
Group Manager Approvals



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## Appendix F

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CERTIFICATE OF TITLE – LOT 1 DP702619



FOLIO: 1/702619

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SEARCH DATE	TIME	EDITION NO	DATE
30/3/2022	11:07 AM	3	18/2/2014

LAND

-----

LOT 1 IN DEPOSITED PLAN 702619  
AT BLACKMAN'S FLAT  
LOCAL GOVERNMENT AREA LITHGOW CITY  
PARISH OF COX COUNTY OF COOK  
TITLE DIAGRAM DP702619

FIRST SCHEDULE

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ENERGYAUSTRALIA NSW PTY LTD (R AI214548)

SECOND SCHEDULE (3 NOTIFICATIONS)

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- 1 RESERVATIONS AND CONDITIONS IN THE CROWN GRANT(S)
- 2 QUALIFIED TITLE. CAUTION PURSUANT TO SECTION 28J(1) AND 28J(1A) OF THE REAL PROPERTY ACT, 1900. ENTERED 11.2.1997 BK 4154 NO 66
- \* 3 BK 3831 NO 874 EASEMENT FOR TRANSMISSION LINE AFFECTING THE PART DESIGNATED (A) IN DP641842

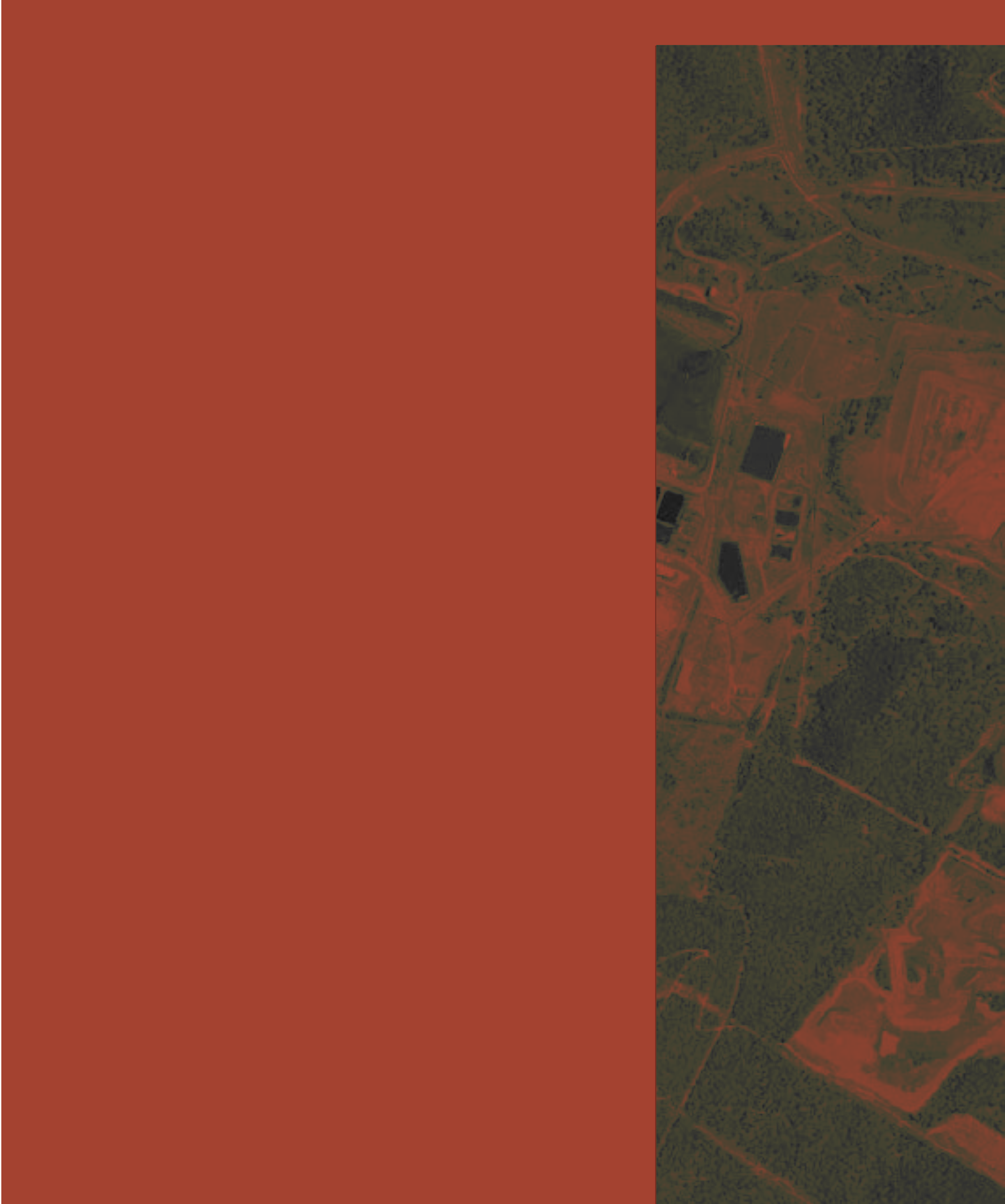
NOTATIONS

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DP804929 PLAN OF ACQUISITION  
DP806988 PLAN FOR LEASE PURPOSES

UNREGISTERED DEALINGS: NIL

\*\*\* END OF SEARCH \*\*\*



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