TARRAWONGA COAL MINE - TEMPORARY WATER HAULAGE MODIFICATION REPORT



JANUARY 2020 WHC-20-69 ID: 01017557



## **TABLE OF CONTENTS**

| 1 | INTRODUCTION             |                                      |                          | 1 |
|---|--------------------------|--------------------------------------|--------------------------|---|
|   | 1.1                      | OVERVIEW OF THE TARRAWONGA COAL MINE |                          | 1 |
|   | 1.2                      | OVERVIEW OF THE MODIFICATION         |                          | 1 |
|   |                          | 1.2.1                                | Background               | 1 |
|   |                          | 1.2.2                                | Modification Description | 3 |
|   | 1.3                      | ASSESSMENT PATHWAY                   |                          | 5 |
|   | 1.4 CONSULTATION FOR THE |                                      |                          |   |
|   |                          | MODIF                                | ICATION                  | 6 |
|   | 1.5                      | MODIF                                | ICATION REPORT CONTENT   | 7 |
| 2 | ENVIRONMENTAL REVIEW     |                                      |                          | 7 |
|   | 2.1                      | ROAD TRANSPORT                       |                          | 7 |
|   | 2.2                      | 2.2 OTHER ENVIRONMENTAL              |                          |   |
|   |                          | CONSI                                | DERATIONS                | 7 |
| 3 | CONCLUSION               |                                      | 8                        |   |
| 4 | REFERENCES               |                                      | 9                        |   |

## LIST OF TABLES

Table 1 Summary Evaluation for "Substantially the Same" Test

#### **LIST OF FIGURES**

Figure 1 Regional Location and Approved Road
Transport Route

Figure 2 Vickery Coal Mine Groundwater
Extraction and Water Storage
Infrastructure

#### LIST OF ATTACHMENTS

Attachment 1 Statutory Context



#### 1 INTRODUCTION

# 1.1 OVERVIEW OF THE TARRAWONGA COAL MINE

The Tarrawonga Coal Mine is located approximately 42 kilometres (km) north-northwest of Gunnedah in New South Wales (NSW) (Figure 1). The Tarrawonga Coal Mine is owned and operated by Tarrawonga Coal Pty Ltd (TCPL), a wholly owned subsidiary of Whitehaven Coal Limited (Whitehaven).

The Tarrawonga Coal Mine is an open cut coal mine which has been in operation since 2006.

Run-of-mine (ROM) coal is crushed and screened on-site, and the sized ROM coal is loaded onto on-highway trucks for transport via the Approved Road Transport Route to the Whitehaven Coal Handling and Preparation Plant (CHPP).

The Tarrawonga Coal Project was approved (Project Approval [PA] 11\_0047) by the NSW Planning Assessment Commission under delegation of the NSW Minister for Planning and Infrastructure pursuant to section 75J of the *Environmental Planning and Assessment Act 1979* (EP&A Act) on 22 January 2013.

PA 11\_0047 has been modified on six separate occasions, with the most recent Whitehaven Temporary Road Haulage Modification being approved in November 2018. This modification allowed for a temporary increase in ROM coal haulage on the southern section of the Approved Road Transport Route.

## 1.2 OVERVIEW OF THE MODIFICATION

## 1.2.1 Background

## Tarrawonga Coal Mine Water Supply and Inventory

Due to the ongoing drought, the Tarrawonga Coal Mine requires an alternative contingency water supply for dust suppression, coal crushing and other minor uses.

TCPL currently sources water from surface water and groundwater inflows to the open cut, sediment basins and storage dams, and licensed groundwater extraction.

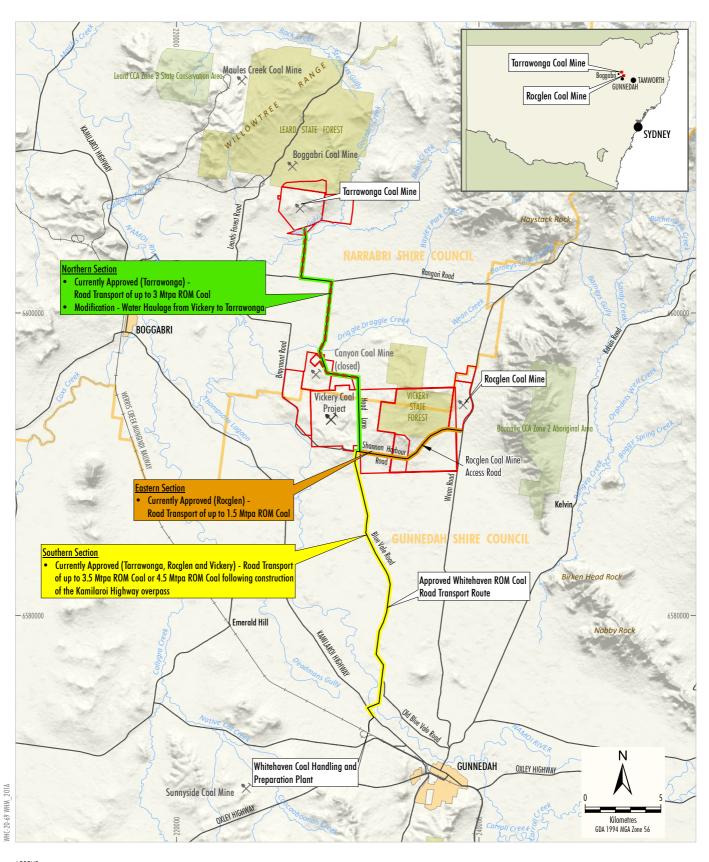
An ongoing, reliable supplementary supply of water is critical to enable continuity of production and employment at the Tarrawonga Coal Mine.

TCPL has already implemented a number of water reduction initiatives at the Tarrawonga Coal Mine, including, but not limited to:

- Implemented the usage of dust suppressant binders to reduce water consumption and investigating additional dust suppressant products;
- Improvements to water storage management, including enlarging on-site storage capacity and desilting existing dams; and
- Improvements to water cart application by improving sprays and application methodology.

Ongoing supply of water enables continuity of production and employment of the 211 strong workforce, in particular, during the ongoing drought. In this context, it is worth noting that:

- Whitehaven is the single largest private sector employer in North West NSW.
- The Tarrawonga Coal Mine is a major source of regional employment and investment.
- Salaries and wages of Tarrawonga Coal Mine employees totalled \$32M in FY19 (traditional multipliers apply to this expenditure).
- Tarrawonga Coal Mine spending on locally-based business was \$7M in FY19.
- Tarrawonga Coal Mine contributed royalties to the NSW Government to the value of \$25M in FY19.







Regional Location and Approved Road Transport Routes



#### Approved ROM Coal Transport

PA 11\_0047 allows for up to 3 million tonnes per annum (Mtpa) of ROM coal to be transported from the Tarrawonga Coal Mine along the Northern Section of the Approved Road Transport Route. The Approved Road Transport Route includes a combination of public and private roads and provides the shortest and least trafficked route from the Tarrawonga Coal Mine to the Whitehaven CHPP (Figure 1).

Whitehaven continues to implement road maintenance agreements with the Gunnedah Shire Council (GSC) and Narrabri Shire Council (NSC) in accordance with Condition 55, Schedule 3 of PA 11\_0047.

The closest privately-owned receivers to the Northern Section of the Approved Road Transport Route are located over 5.3 km to the west and over 6.8 km to the east.

## Existing Vickery Coal Mine Groundwater Bore and Associated Infrastructure

Mining operations at the former Vickery Coal Mine within Coal Lease 316 ceased in May 1998 and the Mine was rehabilitated following closure.

A water supply groundwater bore, pipeline and associated infrastructure and works were established under the former Vickery Coal Mine Development Consent. The existing, approved groundwater bore (Works Approval 90CA807002) is located to the south of the former Vickery Coal Mine and is depicted in Figure 2.

Figure 2 also depicts an existing water pipeline and associated infrastructure/works capable of conveying groundwater from the existing bore to existing water tanks and a truck fill point standpipe located within the Vickery Coal Project (State Significant Development [SSD] 5000) development consent area.

#### 1.2.2 Modification Description

#### Water Supply and Transportation

In order to secure an essential temporary contingency water supply for the Tarrawonga Coal Mine, this modification (the Modification) seeks approval under the EP&A Act for:

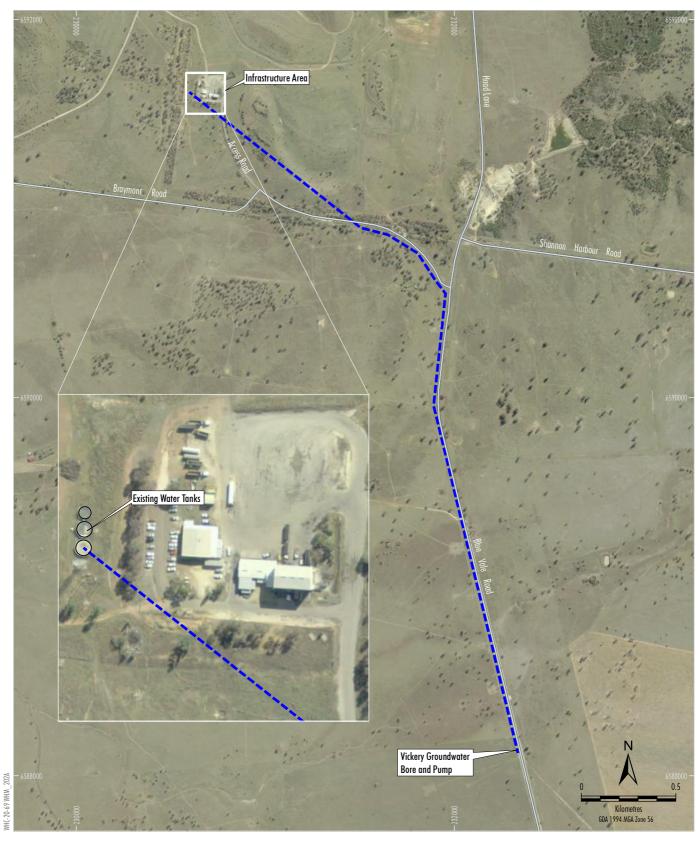
- the non-exclusive, contingency use of the existing Vickery Coal Mine groundwater bore (Works Approval 90CA807002) depicted in Figure 2;
- the non-exclusive use of the existing Vickery Coal Mine pipeline, tanks and associated infrastructure/works depicted in Figure 2; and
- trucking of water sourced from the existing Vickery Coal Mine groundwater bore to the Tarrawonga Coal Mine and use of this water at the Tarrawonga Coal Mine.

As a temporary contingency measure, up to approximately 1.6 megalitres per day of groundwater extracted from the existing Vickery Coal Mine groundwater bore would be transported to the Tarrawonga Coal Mine by truck. This would require up to 39 truck movements to and from the Tarrawonga Coal Mine per day. It is anticipated that these movements would be made up by three trucks (40 kilolitre capacity each) completing approximately 13 deliveries of water per truck per day.

Water would be transported to the Tarrawonga Coal Mine by trucks along the Northern Section of the Approved Road Transport Route. The trucks would access the site of the relevant water tanks (which will store water pumped from the existing Vickery Coal Mine groundwater bore) via an access road off Braymont Road (see Figure 2).

Haulage of water would occur during the approved ROM coal dispatch hours under PA 11 0047:

- 6.00 am to 9.15 pm Monday to Friday; and
- 7.00 am to 5.15 pm Saturday.



Approximate Location of Existing Pipeline to the Vickery Coal Mine

Source: NSW Spatial Services (2019)



Vickery Coal Mine Groundwater Extraction and Water Storage Infrastructure



#### **Timing and Duration**

It is anticipated that the supply of water to the Tarrawonga Coal Mine by road haulage would commence in February 2020 and continue for approximately 18 months, subject to TCPL's ability to meet water supply requirements from its existing sources. As a contingency measure, TCPL may periodically need to transport water sourced from the existing Vickery Coal Mine groundwater bore beyond the initial 18 month period to meet its water supply requirements.

#### 1.3 ASSESSMENT PATHWAY

#### **Environmental Planning and Assessment Act, 1979**

The Tarrawonga Coal Project was gazetted as a SSD for the purposes of future modifications on 17 August 2018. Following a review of the potential environmental impacts of the Modification, approval for the Modification is sought under section 4.55(1A) of the EP&A Act.

The consent authority is, therefore, required to satisfy itself that any consent as modified would result in the approved Tarrawonga Coal Mine remaining substantially the same development as was last modified under section 75W (i.e. including Modification 5), inclusive of consideration of the changes arising from the previously approved modifications.

A comparative analysis is provided in Table 1 that outlines the key elements of the approved Tarrawonga Coal Mine (including Modifications 1 to 5) as a basis for comparison against this Modification and the approved Modification 6, including the key environmental assessment outcomes.

Consideration of the key comparatives detailed in the draft guideline *Modifying an Approved Project* (NSW Government, 2017) when considering whether the proposed Modification could be considered to be "substantially the same" is provided in Table 1.

The Tarrawonga Coal Mine has demonstrably remained an open cut coal mining operation with only minor changes approved under PA 11\_0047 (as modified).

This would also clearly continue to be the case if the Modification was approved (Table 1) and, therefore, the consent authority can be satisfied that the Tarrawonga Coal Mine incorporating the Modification would remain "substantially the same".

Furthermore, this Modification Report includes a Statement of Environmental Effects in accordance with clause 115(1)(e) of the NSW Environmental Planning and Assessment Regulation 2000. The assessment contained herein concludes that the Modification is of "minimal environmental impact", given: that there would be no change to the approved maximum daily off-site truck movements resulting from the proposed haulage of water to the Tarrawonga Coal Mine and the regulation of the groundwater taken via the existing groundwater bore under water access licences (WALs) held under the Water Management Act 2000 (WM Act).

#### Water Management Act 2000

Groundwater would continue to be extracted at the existing Vickery Coal Mine groundwater bore in accordance with the rules of the WM Act, the *Water Sharing Plan for the Upper and Lower Namoi Groundwater Sources 2019* and WALs held under the WM Act.

Whitehaven entities hold WALs 12651 and 12653 in the Upper Namoi Zone 4, Namoi Valley (Keepit Dam to Gin's Leap) Water Source under the Water Sharing Plan for the Upper and Lower Namoi Groundwater Sources 2019 associated with the existing Vickery Coal Mine groundwater bore (90CA807002).

Groundwater extracted via the existing Vickery Coal Mine groundwater bore will be accounted for under WALs held or obtained under the WM Act (including WALs 12651 and 12653). As such, the take of groundwater via the existing Vickery Coal Mine groundwater bore will be regulated under the WM Act and Water Sharing Plan for the Upper and Lower Namoi Groundwater Sources 2019.



Table 1
Summary Evaluation for "Substantially the Same" Test

| Key Comparatives                         | Tarrawonga Coal Mine<br>(including section 75W Modifications 1-5)  | This Modification including Modification 6  |
|--|--|---|
| Development size, scale and footprint    | Conventional open cut coal mining operation including coal and gravel crushing, screening and loadout infrastructure.  | No additional surface disturbance.  |
| Intensity including rates of production  | 3 Mtpa ROM coal.   | No change.  |
| Primary, secondary<br>and ancillary use  | On-site water management system comprises water management storages and collection drains, runoff diversions, sediment control and open cut dewatering.  Existing Mine Facilities Area (comprising a crib hut, offices, hardstand, first aid building, maintenance workshop, toilets, wash bay and light vehicle parking area).  Haulage of ROM coal and coal rejects along the Approved Road Transport Route. | No change to water management system.  No change to Mine Facilities Area.  Temporary use of the Approved Road Transport Route to haul groundwater to the Tarrawonga Coal Mine.  No change to the approved maximum daily heavy vehicle movements along the Approved Road Transport Route.  Use of the Vickery Coal Mine groundwater bore and associated infrastructure and works.  Use of the transported water at the Tarrawonga Coal Mine. |
| Project life<br>and hours of operation   | A 17 year mine life with operations until December 2030.  Operating hours are 24 hours per day, seven days per week.  ROM coal dispatch hours:  6.00 am to 9.15 pm Monday to Friday; and 7.00 am to 5.15 pm Saturday.  | No change to mine life.  No change to operational hours.  Water haulage to occur in accordance with ROM coal dispatch hours.  |
| Extent, duration and severity of impacts | As described in previous environmental assessments and as authorised by PA 11_0047.  | No material change.   |

## **Other Legislation**

Consideration has been given to other legislation relevant to the Modification in Attachment 1, including:

- State Environmental Planning Policy (Mining, Petroleum Production and Extractive Industries) 2007;
- Narrabri Local Environmental Plan 2012;
- Gunnedah Local Environmental Plan 2012;
- State Environmental Planning Policy No 33— Hazardous and Offensive Development;
- State Environmental Planning Policy No 44—Koala Habitat Protection;
- State Environmental Planning Policy No 55— Remediation of Land;

- State Environmental Planning Policy (Infrastructure) 2007; and
- State Environmental Planning Policy (State and Regional Development) 2011.

# 1.4 CONSULTATION FOR THE MODIFICATION

Whitehaven has consulted with the NSW Department of Planning, Industry and Environment (DPIE) regarding the activities associated with the Modification during January 2020.

TCPL has consulted with the NSC, GSC, the Natural Resources Access Regulator and Tarrawonga Coal Mine Community Consultative Committee regarding the Modification.



#### 1.5 MODIFICATION REPORT CONTENT

The DPIE has recently launched a new SSD website<sup>1</sup>, which contains requirements for modification reports. Accordingly, this Modification Report includes:

- a short description of the approved SSD project and the reasons why the Modification is required (Sections 1.1 and 1.2);
- a description of the proposed Modification (Section 1.2);
- an explanation of the relevant strategic and statutory context (Sections 1.1 and 1.3);
- a description of the findings of any community engagement (Section 1.4);
- an assessment of the relevant impacts of the Modification (Section 2); and
- an evaluation of the merits of the Modification (Section 3).

## 2 ENVIRONMENTAL REVIEW

#### 2.1 ROAD TRANSPORT

Whitehaven is approved to transport a maximum of 3 Mtpa of ROM coal along the Northern Section of the Approved Road Transport Route. The Tarrawonga Coal Project Environmental Assessment assessed a maximum of 524 daily heavy vehicle trips associated with the transport of ROM coal (or 262 trucks travelling to and from the CHPP) on the Northern Section of the Approved Road Transport Route to meet the 3 Mtpa production rate.

A new fleet of prime movers for ROM coal haulage has been introduced at the Tarrawonga Coal Mine which allows for increased payloads. The new fleet allows payloads of 67 tonnes (t) compared to the 42 t trucks previously used. This has reduced the maximum daily ROM coal truck trips required to meet the 3 Mtpa ROM coal production rate from 524 to approximately 440 trips.

There would be no increase in the maximum number of daily Whitehaven truck movements along the Northern Section of the Approved Road Transport Route under the Modification. As such, the Modification would not impact on the Level of Service along the Northern Section of the Approved Road Transport Route during peak times.

Whitehaven's *Traffic Management Plan for the Tarrawonga Coal Mine* (Whitehaven, 2017) contains requirements and procedures including:

- requirements for the operation of haul trucks during school bus hours;
- road dust minimisation on unsealed roads;
- compliance with cumulative haulage limits;
- management of complaints; and
- vehicle movement audits.

TCPL would update the *Traffic Management Plan for the Tarrawonga Coal Mine* to incorporate the Modification.

# 2.2 OTHER ENVIRONMENTAL CONSIDERATIONS

There would be no additional surface disturbance associated with the Modification. The Modification is therefore not expected to have any material impacts to biodiversity, land resources or Aboriginal cultural heritage items.

The Modification proposes up to 39 truck movements to and from the Tarrawonga Coal Mine per day (i.e. 78 truck trips per day). With the increased payload of the ROM coal fleet, the total daily truck trips incorporating the Modification (i.e. 518 trips) remains below the maximum number assessed in the Tarrawonga Coal Project Environmental Assessment (i.e. 524 trips). The trucks would use the Approved Road Transport Route and access the existing site of the relevant water supply tanks via an existing access road off Braymont Road. This existing intersection is considered suitable for use by the water haulage trucks as it is currently used by a trucking contractor.

URL: <a href="https://www.planningportal.nsw.gov.au/major-projects/assessment/state-significant-development/modifications">https://www.planningportal.nsw.gov.au/major-projects/assessment/state-significant-development/modifications</a>. Accessed January 2020.



Groundwater extracted via the existing Vickery Coal Mine groundwater bore will be accounted for under WALs held or obtained under the WM Act (including WALs 12651 and 12653). As such, the take of groundwater via the existing Vickery Coal Mine groundwater bore will be regulated under the WM Act and Water Sharing Plan for the Upper and Lower Namoi Groundwater Sources 2019.

The nearest privately-owned receivers are located more than 3 km from the existing Vickery Coal Mine groundwater bore and infrastructure area at the Vickery Coal Mine. The continued operation of the groundwater bore and associated infrastructure/works is not expected to result in any discernible noise or air quality impacts at privately-owned receivers.

## 3 CONCLUSION

As detailed in Section 1.2 above, this Modification application seeks approval for the use of an existing Vickery Coal Mine groundwater bore and associated infrastructure/works and the temporary trucking of extracted groundwater to the Tarrawonga Coal Mine via the Approved Road Transport Route. This temporary contingency water supply activity is considered to be of minimal environmental impact.

The Modification does not propose to change the mining operation or any components of the Tarrawonga Coal Mine itself, nor would it materially alter the operational workforce.

The Tarrawonga Coal Mine would remain substantially the same as approved by the last modification under section 75W (Modification 5), inclusive of the proposed Modification and the approved Modification 6.



# 4 REFERENCES

NSW Government (2017) *Modifying an Approved Project.* 

Whitehaven Coal Limited (2017) *Traffic Management Plan for the Tarrawonga Coal Mine.* 

**ATTACHMENT 1 – STATUTORY CONTEXT** 



# TARRAWONGA COAL MINE – TEMPORARY WATER HAULAGE MODIFICATION

## STATUTORY CONTEXT

Under section 4.55(3) of the *Environmental Planning and Assessment Act 1979* (EP&A Act), the consent authority is required to take into consideration:

- 1. such of the matters referred to in s 4.15(1) as are of relevance to the development the subject of a modification application under s 4.55(1A); and
- 2. the reasons given by the consent authority for the grant of the consent that is sought to be modified.

#### Section 4.15(1) states:

#### (1) Matters for consideration—general

In determining a development application, a consent authority is to take into consideration such of the following matters as are of relevance to the development the subject of the development application—

- (a) the provisions of—
  - (i) any environmental planning instrument, and
  - (ii) any proposed instrument that is or has been the subject of public consultation under this Act and that has been notified to the consent authority (unless the Planning Secretary has notified the consent authority that the making of the proposed instrument has been deferred indefinitely or has not been approved), and
  - (iii) any development control plan, and
  - (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
  - (iv) the regulations (to the extent that they prescribe matters for the purposes of this paragraph),
  - (v) (Repealed)
  - that apply to the land to which the development application relates,
- (b) the likely impacts of that development, including environmental impacts on both the natural and built environments, and social and economic impacts in the locality.
- (c) the suitability of the site for the development,  $% \left( \frac{\partial f}{\partial x}\right) =\frac{1}{2}\left( \frac{\partial f}{\partial x}\right)$
- (d) any submissions made in accordance with this Act or the regulations,
- (e) the public interest.

The key environmental planning instruments which are relevant to the Tarrawonga Coal Mine Water Haulage Modification (the Modification) are considered to be:

- 1. State Environmental Planning Policy (Mining, Petroleum Production and Extractive Industries) 2007 (Mining SEPP);
- 2. Narrabri Local Environmental Plan 2012 (NLEP);
- 3. Gunnedah Local Environmental Plan 2012 (GLEP);
- 4. State Environmental Planning Policy No 33—Hazardous and Offensive Development (Hazardous Development SEPP);
- 5. State Environmental Planning Policy No 44—Koala Habitat Protection (Koala Protection SEPP);
- 6. State Environmental Planning Policy No 55—Remediation of Land (Remediation SEPP);
- 7. State Environmental Planning Policy (Infrastructure) 2007 (Infrastructure SEPP); and
- 8. State Environmental Planning Policy (State and Regional Development) 2011 (S&R SEPP).



The purpose of this attachment is to consider the abovementioned environmental planning instruments insofar as they are relevant to the Modification.

#### CONSIDERATION OF KEY ENVIRONMENTAL PLANNING INSTRUMENTS RELEVANT TO THE MODIFICATION

## 1. Mining SEPP

#### Aims of the Mining SEPP

## Clause 2 of the Mining SEPP states:

The aims of this Policy are, in recognition of the importance to New South Wales of mining, petroleum production and extractive industries—

- (a) to provide for the proper management and development of mineral, petroleum and extractive material resources for the purpose of promoting the social and economic welfare of the State, and
- (b) to facilitate the orderly and economic use and development of land containing mineral, petroleum and extractive material resources, and
- (b1) to promote the development of significant mineral resources, and
- (c) to establish appropriate planning controls to encourage ecologically sustainable development through the environmental assessment, and sustainable management, of development of mineral, petroleum and extractive material resources, and
- (d) to establish a gateway assessment process for certain mining and petroleum (oil and gas) development—
  - (i) to recognise the importance of agricultural resources, and
  - (ii) to ensure protection of strategic agricultural land and water resources, and
  - (iii) to ensure a balanced use of land by potentially competing industries, and
  - (iv) to provide for the sustainable growth of mining, petroleum and agricultural industries.

The ongoing supply of water to the Tarrawonga Coal Mine enables the continuity of production at the Tarrawonga Coal Mine and the employment of the 211 strong workforce during the ongoing drought.

The Modification would contribute towards ensuring that the Tarrawonga Coal Mine is able to meet its essential operational water demand and properly develop the valuable coal resource at the Tarrawonga Coal Mine.

As such, the Modification would facilitate or be consistent with the aims contained within cl 2(a), (b), (b1) and (c) of the Mining SEPP. With respect to promoting the social and economic welfare of the State, it is emphasised that:

- Whitehaven is the single largest private sector employer in North West NSW.
- The Tarrawonga Coal Mine is a major source of regional employment and investment.
- Salaries and wages of Tarrawonga Coal Mine employees totalled \$32M in FY19 (traditional multipliers apply to this
  expenditure).
- Tarrawonga Coal Mine spending on locally-based business was \$7M in FY19.
- Tarrawonga Coal Mine contributed royalties to the NSW Government to the value of \$25M in FY19.



## Part 2 of the Mining SEPP

Part 2 of the Mining SEPP concerns permissible development.

#### Clause 7 relevantly states:

(1) Mining

Development for any of the following purposes may be carried out only with development consent—

(b) mining carried out—

(i) on land where development for the purposes of agriculture or industry may be carried out (with or without development consent)

#### Clause 8 states:

- (1) If a local environmental plan provides that development for the purposes of mining, petroleum production or extractive industry may be carried out on land with development consent if provisions of the plan are satisfied—
  - (a) development for that purpose may be carried out on that land with development consent without those provisions having to be satisfied, and
  - (b) those provisions have no effect in determining whether or not development for that purpose may be carried out on that land or on the determination of a development application for consent to carry out development for that purpose on that land.
- (2) Without limiting subclause (1), if a local environmental plan provides that development for the purposes of mining, petroleum production or extractive industry may be carried out on land with development consent if the consent authority is satisfied as to certain matters specified in the plan, development for that purpose may be carried out on that land with development consent without the consent authority having to be satisfied as to those specified matters.

#### Part 3 of the Mining SEPP

Part 3 of the Mining SEPP contains numerous matters for consideration with respect to development applications for mining development. Some of these matters are also relevant to modification applications.

For the purpose of the Modification, clauses 12, 13, 14 and 16 within Part 3 are most relevant.

#### Clause 12 states:

Before determining an application for consent for development for the purposes of mining, petroleum production or extractive industry, the consent authority must—

- (a) consider—
  - (i) the existing uses and approved uses of land in the vicinity of the development, and
  - (ii) whether or not the development is likely to have a significant impact on the uses that, in the opinion of the consent authority having regard to land use trends, are likely to be the preferred uses of land in the vicinity of the development, and
  - (iii) any ways in which the development may be incompatible with any of those existing, approved or likely preferred uses, and
- (b) evaluate and compare the respective public benefits of the development and the land uses referred to in paragraph (a) (i) and (ii), and
- (c) evaluate any measures proposed by the applicant to avoid or minimise any incompatibility, as referred to in paragraph (a) (iii).

The existing and approved land uses in the vicinity of the Modification area are predominately the use of land for the purposes of road infrastructure (i.e. the Approved Road Transport Route) and for agriculture. It is not expected that the likely preferred uses of land in this area will materially change in the foreseeable future.

The proposed Modification involves the use of an existing Vickery Coal Mine groundwater bore and associated infrastructure/works and the temporary trucking of extracted groundwater to the Tarrawonga Coal Mine via the Approved Road Transport Route.

The continued use of the existing Vickery Coal Mine groundwater bore and associated infrastructure/works and haulage of water on the Northern Section of the Approved Road Transport Route is not considered to have any significant impact on, or be incompatible with, these existing land uses.

In terms of the public benefits of the Modification, this modification will provide the Tarrawonga Coal Mine with necessary alternative water supply to allow operations to continue during the ongoing drought. Continuity of water supply underpins mining operations and, at Tarrawonga Coal Mine, directly supports 211 jobs in the local community. The Tarrawonga Coal



Mine spent \$7M locally in FY19 and continues to make a major contribution to the local economy, including by offsetting the economic impacts of drought.

#### Clause 13 states:

- (1) This clause applies to an application for consent for development on land that is, immediately before the application is determined—
  - (a) in the vicinity of an existing mine, petroleum production facility or extractive industry, or
  - (b) identified on a map (being a map that is approved and signed by the Minister and copies of which are deposited in the head office of the Department and publicly available on the Department's website) as being the location of State or regionally significant resources of minerals, petroleum or extractive materials, or

Note. At the commencement of this Policy, no land was identified as referred to in paragraph (b).

(c) identified by an environmental planning instrument as being the location of significant resources of minerals, petroleum or extractive materials.

Note. Sydney Regional Environmental Plan No 9—Extractive Industry (No 2—1995) is an example of an environmental planning instrument that identifies land as containing significant deposits of extractive materials.

- (2) Before determining an application to which this clause applies, the consent authority must—
  - (a) consider—
    - (i) the existing uses and approved uses of land in the vicinity of the development, and
    - (ii) whether or not the development is likely to have a significant impact on current or future extraction or recovery of minerals, petroleum or extractive materials (including by limiting access to, or impeding assessment of, those resources), and
    - (iii) any ways in which the development may be incompatible with any of those existing or approved uses or that current or future extraction or recovery, and
  - (b) evaluate and compare the respective public benefits of the development and the uses, extraction and recovery referred to in paragraph (a) (i) and (ii), and
  - (c) evaluate any measures proposed by the applicant to avoid or minimise any incompatibility, as referred to in paragraph (a) (iii).

The Modification is not considered to be incompatible with any current or future extraction or recovery of minerals, including the extraction of coal associated with the Vickery Extension Project.

The Modification will facilitate the continued current and future extraction of the valuable coal resource within the Tarrawonga Coal Mine and thereby contribute to the considerable public benefits delivered by the Tarrawonga Coal Mine.

#### Clause 14 states:

- (1) Before granting consent for development for the purposes of mining, petroleum production or extractive industry, the consent authority must consider whether or not the consent should be issued subject to conditions aimed at ensuring that the development is undertaken in an environmentally responsible manner, including conditions to ensure the following—
  - (a) that impacts on significant water resources, including surface and groundwater resources, are avoided, or are minimised to the greatest extent practicable,
  - (b) that impacts on threatened species and biodiversity, are avoided, or are minimised to the greatest extent practicable,
  - (c) that greenhouse gas emissions are minimised to the greatest extent practicable.
- (2) Without limiting subclause (1), in determining a development application for development for the purposes of mining, petroleum production or extractive industry, the consent authority must consider an assessment of the greenhouse gas emissions (including downstream emissions) of the development, and must do so having regard to any applicable State or national policies, programs or guidelines concerning greenhouse gas emissions.
- (3) Without limiting subclause (1), in determining a development application for development for the purposes of mining, the consent authority must consider any certification by the Chief Executive of the Office of Environment and Heritage or the Director-General of the Department of Primary Industries that measures to mitigate or offset the biodiversity impact of the proposed development will be adequate.

With respect to clause 14(1), it is noted that the Project Approval 11\_0047 for the Tarrawonga Coal Mine already contains a suite of conditions aimed at ensuring that the Tarrawonga Coal Mine is undertaken in an environmentally responsible manner, including conditions to ensure that impacts on significant water resources are avoided or are minimised to the greatest extent practicable. In particular, the Modification is consistent with condition 31 of Schedule 3 of the Project Approval, which requires Tarrawonga Coal Pty Limited to ensure that it has sufficient water for all stages of the Tarrawonga Coal Mine.



Further, the continued use of an existing Vickery Coal Mine groundwater bore and associated infrastructure/works and the temporary trucking of extracted groundwater to the Tarrawonga Coal Mine via the Approved Road Transport Route, will continue in an environmentally responsible manner. For example:

- Groundwater extracted via the existing Vickery Coal Mine groundwater bore will be accounted for under Water Access Licences (WALs) held or obtained under the Water Management Act 2000 (WM Act) (including WALs 12651 and 12653). As such, the take of groundwater via the existing Vickery Coal Mine groundwater bore will be regulated under the WM Act and Water Sharing Plan for the Upper and Lower Namoi Groundwater Sources 2019.
- 2. There would be no new disturbance required for the Modification.
- 3. The Modification is not expected to have any ongoing impacts to threatened species and biodiversity.
- 4. The continued use of the use of the Approved Road Transport Route, with no increase to previously assessed maximum truck movements, would not increase greenhouse gas emissions.

#### Clause 16 states:

- (1) Before granting consent for development for the purposes of mining or extractive industry that involves the transport of materials, the consent authority must consider whether or not the consent should be issued subject to conditions that do any one or more of the following—
  - (a) require that some or all of the transport of materials in connection with the development is not to be by public road,
  - (b) limit or preclude truck movements, in connection with the development, that occur on roads in residential areas or on roads near to schools,
  - (c) require the preparation and implementation, in relation to the development, of a code of conduct relating to the transport of materials on public roads
- (2) If the consent authority considers that the development involves the transport of materials on a public road, the consent authority must, within 7 days after receiving the development application, provide a copy of the application to—
  - (a) each roads authority for the road, and
  - (b) the Roads and Traffic Authority (if it is not a roads authority for the road).

Note. Section 7 of the Roads Act 1993 specifies who the roads authority is for different types of roads. Some roads have more than one roads authority.

- (3) The consent authority—
  - (a) must not determine the application until it has taken into consideration any submissions that it receives in response from any roads authority or the Roads and Traffic Authority within 21 days after they were provided with a copy of the application, and
  - (b) must provide them with a copy of the determination.
- (4) In circumstances where the consent authority is a roads authority for a public road to which subclause (2) applies, the references in subclauses (2) and (3) to a roads authority for that road do not include the consent authority.

It is considered that there is no need for additional conditions of consent to address the traffic impacts associated with the Modification. This is because:

- With the increased payload of the ROM coal fleet, the total daily truck trips incorporating the Modification (i.e. 518 trips) remains below the maximum number assessed in the Tarrawonga Coal Project Environmental Assessment (i.e. 524 trips).
- The trucks would use the Approved Road Transport Route and access the existing site of the relevant water supply tanks via an existing access road off Braymont Road.
- This existing intersection is considered suitable for use by the water haulage trucks as it is currently used by a trucking contractor.
- Tarrawonga Coal Pty Ltd would update the *Traffic Management Plan for the Tarrawonga Coal Mine* to incorporate the Modification.

#### 2. NLEP

Clause 1.9 of the NLEP states that the NLEP is subject to the provisions of any State environmental planning policy that prevails over the NLEP.



#### Aims of the NLEP

#### Clause 1.2 of the NLEP states:

- (1) This Plan aims to make local environmental planning provisions for land in Narrabri in accordance with the relevant standard environmental planning instrument under section 33A of the Act.
- (2) The particular aims of this Plan are as follows—
  - (a) to encourage the orderly management, development and conservation of resources by protecting, enhancing and conserving—
    - (i) land of significance for agricultural production, and
    - (ii) timber, minerals, soil, water and other natural resources, and
    - (iii) areas of high scenic or recreational value, and
    - (iv) native plants and animals including threatened species, populations and ecological communities, and their habitats, and
    - (v) places and buildings of heritage significance,
  - (b) to provide a choice of living opportunities and types of settlements,
  - (c) to facilitate development for a range of business enterprise and employment opportunities,
  - (d) to ensure that development is sensitive to both the economic and social needs of the community, including the provision of community facilities and land for public purposes.

The ongoing supply of water to the Tarrawonga Coal Mine encourages the orderly management and development of the valuable coal resource within the Tarrawonga Coal Mine (including by supporting necessary dust suppression activities) and supports employment in the local region by enabling the continued employment of the 211 strong Tarrawonga Coal Mine workforce during the ongoing drought.

With respect to the aim of facilitating development for a range of business enterprise and employment opportunities, the Tarrawonga Coal Mine is a major source of regional employment and investment, including within the Narrabri Local Government Area.

The Modification is not considered to have significant impacts on agricultural land, areas of high scenic and recreation value, native plants and animals or places of heritage significance.

As such, the Modification would facilitate or be consistent with many of the aims contained within cl 1.2 in contributing towards ensuring that the Tarrawonga Coal Mine is able to continue to meet its essential operational water demand.

## Part 2 of the NLEP

Part 2 of the NLEP provides for permitted or prohibited development in the various land use zones regulated by the NLEP.

However, as noted in the NLEP, a type of development referred to in a Land Use Table is a reference to development only to the extent that it is not regulated by an applicable State environmental planning policy such as the Mining SEPP.

The relevant land use zone under the NLEP for the Modification is  ${\rm RU1}-{\rm Primary}$  Production.

Under cl 2.3(2) of the NLEP, the consent authority is required to have regard to the objectives for development when determining a development application in respect of land within a land use zone. Nevertheless, these objectives are also relevant to a modification application.

The Land Use Table for RU1 – Primary Production states:

- 1 Objectives of zone
- To encourage sustainable primary industry production by maintaining and enhancing the natural resource base.
- To encourage diversity in primary industry enterprises and systems appropriate for the area.
- To minimise the fragmentation and alienation of resource lands.



- To minimise conflict between land uses within this zone and land uses within adjoining zones.
- To allow for non-agricultural land uses that will not restrict the use of other land for agricultural purposes.

#### 2 Permitted without consent

Building identification signs; Environmental protection works; Extensive agriculture; Farm buildings; Forestry; Home occupations; Intensive plant agriculture; Roads

#### 3 Permitted with consent

Air transport facilities; Airstrips; Animal boarding or training establishments; Aquaculture; Bed and breakfast accommodation; Boat launching ramps; Boat sheds; Camping grounds; Cellar door premises; Cemeteries; Community facilities; Depots; Dual occupancies; Dwelling houses; Environmental facilities; Extractive industries; Farm stay accommodation; Flood mitigation works; Freight transport facilities; Helipads; Home businesses; Home industries; Information and education facilities; Intensive livestock agriculture; Landscaping material supplies; Open cut mining; Plant nurseries; Recreation areas; Recreation facilities (major); Recreation facilities (outdoor); Research stations; Roadside stalls; Rural industries; Rural workers' dwellings; Signage; Turf farming; Water recreation structures; Water supply systems

#### 4 Prohibited

Any development not specified in item 2 or 3

It is noted that the Modification would not result in new disturbance.

With respect to the objectives for RU1 – Primary Production, the Modification is consistent with various of the listed objectives, including the objective to allow for non-agricultural land uses that will not restrict the use of other land for agricultural purposes.

Consistent with both the objective to allow non-agricultural land uses and the broader objectives of the NLEP, development for the purpose of "open cut mining" is permissible with consent under the RU1 – Primary Production Land Use Table.

The Modification will not restrict the use of land for agricultural purpose or result in the fragmentation and alienation of resource lands as there is no new disturbance proposed.

#### 3. GLEP

Clause 1.9 of the GLEP states that the GLEP is subject to the provisions of any State environmental planning policy that prevails over the GLEP.

#### Aims of the GLEP

## Clause 1.2 of the GLEP states:

- (1) This Plan aims to make local environmental planning provisions for land in Gunnedah in accordance with the relevant standard environmental planning instrument under section 33A of the Act.
- (2) The particular aims of this Plan are as follows—
  - (a) to conserve and enhance, for current and future generations, the ecological integrity, environmental heritage and environmental significance of
  - (b) to promote the economic well being of the community in a socially and environmentally responsible way, focusing on new employment growth and a diversified economy.
  - $(c) \ \ to \ encourage \ the \ proper \ management \ of \ productive \ agricultural \ land \ and \ prevent \ the \ fragmentation \ of \ agricultural \ holdings,$
  - (d) to provide opportunities for a range of new housing and housing choice,
  - (e) to facilitate the provision and co-ordination of community services and facilities,
  - (f) to seek the provision of adequate and appropriate infrastructure to meet the needs of future development,
  - (g) to provide direction and guidance in the management of growth and development,
  - (h) to conserve the cultural and environmental heritage of Gunnedah,
  - (i) to allow development in a way that minimises risks due to environmental hazards.

The ongoing supply of water to the Tarrawonga Coal Mine encourages the orderly management and development of the valuable coal resource within the Tarrawonga Coal Mine (including by supporting necessary dust suppression activities) and



supports employment in the local region by enabling the continued employment of the 211 strong Tarrawonga Coal Mine workforce during the ongoing drought.

With respect to the aim of facilitating development for a range of business enterprise and employment opportunities, the Tarrawonga Coal Mine is a major source of regional employment and investment, including within the Gunnedah Local Government Area.

The Modification is not considered to have significant impacts on agricultural land, areas of high scenic and recreation value, native plants and animals or places of heritage significance.

As such, the Modification would facilitate or be consistent with many of the aims contained within cl 1.2 in contributing towards ensuring that the Tarrawonga Coal Mine is able to meet its essential operational water demand.

#### Part 2 of the GLEP

Part 2 of the GLEP provides for permitted or prohibited development in the various land use zones regulated by the GLEP.

However, as noted in the GLEP, a type of development referred to in a Land Use Table is a reference to development only to the extent that it is not regulated by an applicable State environmental planning policy such as the Mining SEPP.

The relevant land use zone under the GLEP for the Modification is RU1 – Primary Production.

Under cl 2.3(2) of the GLEP, the consent authority is required to have regard to the objectives for development when determining a development application in respect of land within a land use zone. Nevertheless, these objectives are also relevant to a modification application.

The Land Use Table for RU1 – Primary Production states:

#### 1 Objectives of zone

- To encourage sustainable primary industry production by maintaining and enhancing the natural resource base.
- To encourage diversity in primary industry enterprises and systems appropriate for the area.
- To minimise the fragmentation and alienation of resource lands.
- To minimise conflict between land uses within this zone and land uses within adjoining zones.
- To provide for a range of ecologically sustainable agricultural and rural land uses and development on broad acre rural lands.
- To protect significant agricultural resources (soil, water and vegetation) in recognition of their value to Gunnedah's longer term economic sustainability.
- To conserve and enhance the quality of valuable environmental assets, including waterways, riparian land, wetlands and other surface and groundwater resources, remnant native vegetation and fauna movement corridors as part of all new development and land use.

#### 2 Permitted without consent

Environmental protection works; Extensive agriculture; Forestry; Home-based child care; Home businesses; Home occupations; Intensive plant agriculture; Moorings; Roads

#### 3 Permitted with consent

Aquaculture; Bed and breakfast accommodation; Cellar door premises; Dwelling houses; Dual occupancies (attached); Extractive industries; Farm buildings; Farm stay accommodation; Home industries; Intensive livestock agriculture; Open cut mining; Roadside stalls; Rural workers' dwellings; Any other development not specified in item 2 or 4

## 4 Prohibited

Advertising structures; Amusement centres; Car parks; Caravan parks; Centre-based child care facilities; Commercial premises; Community facilities; Crematoria; Depots; Educational establishments; Entertainment facilities; Exhibition homes; Exhibition villages; Freight transport facilities; Health services facilities; Heavy industrial storage establishments; Highway service centres; Home occupations (sex services); Industrial retail outlets; Industrial training facilities; Industries; Mortuaries; Passenger transport facilities; Places of public worship; Public administration buildings; Registered clubs; Residential accommodation; Respite day care centres; Restricted premises; Service stations; Sex services premises; Storage premises; Tourist and visitor accommodation; Transport depots; Truck depots; Vehicle body repair workshops; Vehicle repair stations; Warehouse or distribution centres; Wharf or boating facilities; Wholesale supplies



It is noted that the Modification would not result in new disturbance.

With respect to the objectives for RU1 – Primary Production, the Modification is consistent with various of the listed objectives. Development for the purpose of "open cut mining" is permissible with consent under the RU1 – Primary Production Land Use Table.

The Modification will not restrict the use of land for agricultural purpose or result in the fragmentation and alienation of resource lands as there is no new disturbance proposed. As detailed in the Modification Report, it is also noted that the extraction of groundwater associated with the Modification will be regulated under the *Water Management Act 2000* (WM Act).

#### 4. Hazardous Development SEPP

The aims of the Hazardous Development SEPP (clause 2) include the aim:

to ensure that in considering any application to carry out potentially hazardous or offensive development, the consent authority has sufficient information to assess whether the development is hazardous or offensive and to impose conditions to reduce or minimise any adverse impact

#### Clause 13 states:

In determining an application to carry out development to which this Part applies, the consent authority must consider (in addition to any other matters specified in the Act or in an environmental planning instrument applying to the development):

- (a) current circulars or guidelines published by the Department of Planning relating to hazardous or offensive development, and
- (b) whether any public authority should be consulted concerning any environmental and land use safety requirements with which the development should comply, and
- (c) in the case of development for the purpose of a potentially hazardous industry—a preliminary hazard analysis prepared by or on behalf of the applicant, and
- (d) any feasible alternatives to the carrying out of the development and the reasons for choosing the development the subject of the application (including any feasible alternatives for the location of the development and the reasons for choosing the location the subject of the application), and
- (e) any likely future use of the land surrounding the development.

The Modification is not considered to pose any significant hazards or adverse impacts to the surrounding environment.

Notwithstanding, the Modification would be undertaken in accordance with appropriate environmental and safety standards to ensure that this use of land is managed so as to prevent any potential hazardous or adverse impacts to the surrounding environment.

#### **5. Koala Protection SEPP**

As stated in cl 3, the Koala Protection SEPP aims to:

encourage the proper conservation and management of areas of natural vegetation that provide habitat for koalas to ensure a permanent free-living population over their present range and reverse the current trend of koala population decline:

- (a) by requiring the preparation of plans of management before development consent can be granted in relation to areas of core koala habitat, and
- (b) by encouraging the identification of areas of core koala habitat, and
- (c) by encouraging the inclusion of areas of core koala habitat in environment protection zones.

The Modification would not result in new disturbance and therefore would not pose any threat to koalas or koala habitat.

## Part 2 of the Koala Protection SEPP

Part 2 of the Koala Protection SEPP provides a three step process for development control of koala habitats. More specifically, Part 2 regulates certain development applications under the EP&A Act for which a council is the consent authority. Nevertheless, Part 2 is also relevant to modification applications.



Step 1 in the development control process involves the identification of "potential koala habitat". Clause 7 states:

#### 7 Step 1—Is the land potential koala habitat?

- (1) Before a council may grant consent to an application for consent to carry out development on land to which this Part applies, it must satisfy itself whether or not the land is a potential koala habitat.
- (2) A council may satisfy itself as to whether or not land is a potential koala habitat only on information obtained by it, or by the applicant, from a person who is qualified and experienced in tree identification.
- (3) If the council is satisfied:
  - (a) that the land is not a potential koala habitat, it is not prevented, because of this Policy, from granting consent to the development application, or
  - (b) that the land is a potential koala habitat, it must comply with clause 8.

Step 2 in the development control process involves the identification of "core koala habitat". Clause 8 states:

#### 8 Step 2—Is the land core koala habitat?

- (1) Before a council may grant consent to an application for consent to carry out development on land to which this Part applies that it is satisfied is a potential koala habitat, it must satisfy itself whether or not the land is a core koala habitat.
- (2) A council may satisfy itself as to whether or not land is a core koala habitat only on information obtained by it, or by the applicant, from a person with appropriate qualifications and experience in biological science and fauna survey and management.
- (3) If the council is satisfied:
  - (a) that the land is not a core koala habitat, it is not prevented, because of this Policy, from granting consent to the development application, or
  - (b) that the land is a core koala habitat, it must comply with clause 9.

Clause 10 of the Koala Protection SEPP requires a council to take particular guidelines into consideration in determination applications for consent to carry out development on land to which Part 2 applies: see also cl 17.

The Modification does not involve disturbance of "core koala habitat" or "potential koala habitat".

#### 6. Remediation SEPP

The object of the Remediation SEPP is contained within clause 2:

- (1) The object of this Policy is to provide for a Statewide planning approach to the remediation of contaminated land.
- (2) In particular, this Policy aims to promote the remediation of contaminated land for the purpose of reducing the risk of harm to human health or any other aspect of the environment—
  - (a) by specifying when consent is required, and when it is not required, for a remediation work, and
  - (b) by specifying certain considerations that are relevant in rezoning land and in determining development applications in general and development applications for consent to carry out a remediation work in particular, and
  - (c) by requiring that a remediation work meet certain standards and notification requirements.

Clause 7 of the Remediation SEPP provides for the contamination and remediation considerations applicable to the determination of a development application. This clause states:

- (1) A consent authority must not consent to the carrying out of any development on land unless—
  - (a) it has considered whether the land is contaminated, and
  - (b) if the land is contaminated, it is satisfied that the land is suitable in its contaminated state (or will be suitable, after remediation) for the purpose for which the development is proposed to be carried out, and
  - (c) if the land requires remediation to be made suitable for the purpose for which the development is proposed to be carried out, it is satisfied that the land will be remediated before the land is used for that purpose.
- (2) Before determining an application for consent to carry out development that would involve a change of use on any of the land specified in subclause (4), the consent authority must consider a report specifying the findings of a preliminary investigation of the land concerned carried out in accordance with the contaminated land planning guidelines.
- (3) The applicant for development consent must carry out the investigation required by subclause (2) and must provide a report on it to the consent authority. The consent authority may require the applicant to carry out, and provide a report on, a detailed investigation (as referred to in the contaminated land planning guidelines) if it considers that the findings of the preliminary investigation warrant such an investigation.



#### (4) The land concerned is-

- (a) land that is within an investigation area,
- (b) land on which development for a purpose referred to in Table 1 to the contaminated land planning guidelines is being, or is known to have been, carried out
- (c) to the extent to which it is proposed to carry out development on it for residential, educational, recreational or child care purposes, or for the purposes of a hospital—land—
  - (i) in relation to which there is no knowledge (or incomplete knowledge) as to whether development for a purpose referred to in Table 1 to the contaminated land planning guidelines has been carried out, and
  - (ii) on which it would have been lawful to carry out such development during any period in respect of which there is no knowledge (or incomplete knowledge).

No land within the Modification Area is listed in the EPA's Contaminated Land Register. The Modification would not involve the change of use on any of the land specified in cl 7(4).

Additionally, given the nature of the proposed development, the Modification is not expected to involve any remediation work regulated under the Remediation SEPP.

#### 7. Infrastructure SEPP

The aim of the Infrastructure SEPP is to facilitate the effective delivery of infrastructure across the State: cl 2.

Part 3 of the Infrastructure SEPP provides for development controls relating to infrastructure development. No new infrastructure that is relevant under Part 3 of the Infrastructure SEPP is required for the Modification.

#### 8. S&R SEPP

A key aim of the S&R SEPP is to identify development that is State significant development.

By way of a Ministerial order dated 17 August 2018, the approved Tarrawonga Coal Mine was declared to be State significant development.

As the Modification is a modification application made under s 4.55(1A) of the EP&A Act, the Minister will be the consent authority for the Modification pursuant to s 4.5(a) of the EP&A Act.

The Modification Report sets out why the approved Tarrawonga Coal Mine as modified by the Modification plus Modification 6 would remain "substantially the same development" in accordance with s 4.55(1A)(b) of the EP&A Act.

In this regard, it is emphasised that the currently approved Tarrawonga Coal Mine already involves the haulage of ROM coal along the Approved Road Transport Route.

Further, in the context of the overall approved Tarrawonga Coal Mine development, which is a major State significant development mining project, the Modification represents a minor change to the continued operations at the Tarrawonga Coal Mine