



**SIMEC**

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# EROSION AND SEDIMENT CONTROL PLAN

Tahmoor Coal Pty Ltd

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## Document History

Version	Date Reviewed	Review team (Consultation)	Change Summary
V1	07/12/2021	Natalie Brumby, Thomas O'Brien, Zina Ainsworth	Review of original document.
V2	19/01/2022	Zina Ainsworth	Implementation of changes following consultation
V3	14/03/2022	Zina Ainsworth, Charlie Wheatley	Revision following DPIE comments

# 1 Introduction

## 1.1 Purpose

The purpose of this **Erosion and Sediment Control Plan (ESCP)** is to provide a framework for Tahmoor Coal (TC) personnel to ensure that compliance is achieved with relevant internal and external regulatory requirements related to **Erosion and Sediment Control** at Tahmoor Coal. This plan is to ensure compliance with Development Consent (SSD 8445) (the Consent) Condition B34 (e) (iii), outlined within **Table 1**.

**Table 1 Development Consent Condition**

Condition	Requirement	Where addressed
B34 (e) (iii)	The Water Management Plan must include an Erosion and Sediment Control Plan that:	This Plan
	is consistent with the requirements of Managing Urban Stormwater: Soils and Construction - Volume 1: Blue Book (Landcom, 2004) and Volume 2E: Mines and Quarries (DECC, 2008);	Table 2
	identifies activities that could cause soil erosion or generate sediment;	Section 2.1
	describes measures to minimise soil erosion and the potential for the transport of sediment to downstream waters;	Section 3
	describes the location, function and capacity of erosion and sediment control structures; and	Appendix A and Appendix B, and Section 3.3
	describes what measures would be implemented to maintain (and if necessary, decommission) the structures over time.	Section 5

The main objectives of erosion and sediment control at Tahmoor Coal include:

- Meeting the requirements of development consent relevant to the operation of the Tahmoor Coal;
- Minimizing the amount of land utilized for mining and undertaking rehabilitation activities which commensurate with operational requirements;
- Preventing contamination of clean water by mining activities, particularly with respect to Tea Tree Hollow and the Bargo River;
- Establishing and maintaining controlled diversion of clean water around mining activities into existing watercourses so as to reduce the volume of sediment laden material;
- Detaining all dirty water by the use of appropriate run-off controls and storage;
- Conducting the Erosion & Sediment Control Program in a manner which meets or exceeds the requirements of all regulatory agencies;
- Establishing responsibilities for the management of Erosion and Sediment Control issues at Tahmoor Coal.

## 1.2 Preparation

This Erosion and Sediment Control Plan has been prepared by Michelle Grierson, Senior Environmental Scientist with Umwelt (Australia) Pty Ltd. Michelle has been endorsed by the Department of Planning, Industry and Environment (DPIE) as suitability qualified to prepare this ESCP as part of the Water Management Plan (see Appendix C).

## 2 Potential Impacts

### 2.1 Sources and Impacts of Erosion and Sediment

As part of the Environmental Management Strategy (EMS), Tahmoor Coal has completed a detailed Environment & Community Broad Brush Risk Assessment (ECBBRA) in order to identify all “aspects and impacts” associated with all underground and surface operations at the site. During this process all activities that were identified as having the potential to impact on water pollution including erosion and sediment movement were considered. Each activity was then ranked in order of priority (highest risk first) using the Risk Assessment Matrix, in accordance with *TAH-HSEC—00229 Risk Management*.

The aspects of the operation which had potential impact on erosion & sedimentation have been considered include:

- a) Vegetation removal / disturbance
- b) Topsoil stripping and stockpiling
- c) Coal handling activities
- d) Construction of access roads, exploration pads and other surface infrastructure
- e) Construction of water management structures
- f) Construction of operational sediment control measures
- g) Miscellaneous earthworks
- h) Height/disturbance of the Reject Emplacement Area (REA)

Erosion and sedimentation impacts which may result from Tahmoor Mine include:

- potential for increased scouring during the construction of surface facilities adjacent to watercourses
- increased runoff volumes and velocities from the removal of vegetation, land disturbance and the introduction of impervious surfaces on hardstand areas
- increased potential for sedimentation to occur from increased erosion and runoff associated with stockpiling of material and the construction of surface facilities, access roads/tracks and exploration drilling
- potential decline in water quality and degradation of local amenities through sediment transport to nearby watercourses.

## 3 Erosion and Sediment Controls

### 3.1 General Controls

Tahmoor Coal implement erosion and sediment controls to mitigate the potential impacts of their operations on the surrounding environment. Standard erosion and sediment control techniques are utilised in accordance with the requirements of *Managing Urban Stormwater: Soils and Construction Volume 1 (Landcom 2004) and Volumes 2A, 2C, 2D and 2E (DECC 2008)* (the Blue Book).

The required performance measures from Consent Condition B33 and the general controls implemented by Tahmoor Coal for the management of erosion and sediment are outlined within **Table 2**.

**Table 2 Performance Measures and General Controls**

Feature	Performance Measures	General Controls	Responsibility
Erosion and sediment control works	Design, install and maintain erosion and sediment controls in accordance with the guidance series <i>Managing Urban Stormwater: Soils and Construction</i> including	Prior to the commencement of any vegetation clearing or ground disturbance activities by Tahmoor Coal employees or external contractors, a Ground Disturbance Permit must be completed. This permit should be completed in accordance with the Work Authorisation process. The Ground Disturbance Permit requires	Project Supervisor

Clean water diversions and storage infrastructure	Volume 1: Blue Book (Landcom, 2004), Volume 2A: Installation of Services (DECC, 2008), Volume 2C: Unsealed Roads (DECC, 2008), Volume 2D: Main Road Construction (DECC, 2008) and Volume 2E: Mines and Quarries (DECC, 2008)	<p>detailed information to be provided in summary for all erosion and sediment controls. In the absence of a formal Erosion &amp; Sediment Control Plan for a particular project, the Ground Disturbance Permit is an acceptable process to formalise erosion and sediment controls.</p> <p>Any new water management structures including diversionary works such as drains and channels, sediment control dams, and any associated pump and pipeline infrastructure should be installed in accordance with the Blue Book. Such structures will only be installed with the appropriate development consent or other approvals in place prior to commencing construction.</p>	
	Design, install and maintain any new infrastructure within 40 metres of watercourses in accordance with the guidance series for Controlled Activities on Waterfront Land (DPI Water, 2012)	Any works within 40 metres of watercourses will be implemented in accordance with the guidance series for Controlled Activities on Waterfront Land (DPI Water, 2012).	Project Supervisor
	Design, install and maintain any new creek crossings generally in accordance with the Fisheries NSW Policy and Guidelines for Fish Habitat Conservation and Management (DPI, 2013) and Why Do Fish Need To Cross The Road? Fish Passage Requirements for Waterway Crossings (NSW Fisheries 2003).	Any new creek crossings will be implemented in accordance with the Fisheries NSW Policy and Guidelines for Fish Habitat Conservation and Management (DPI, 2013) and Why Do Fish Need To Cross The Road? Fish Passage Requirements for Waterway Crossings (NSW Fisheries 2003).	Project Supervisor
	Ensure all works on waterfront land are consistent with the guidance series for Controlled Activities on Waterfront Land (DPI Water, 2012)	When work is required within watercourses, work will be conducted in accordance with guidelines from the Blue Book and guidance series for Controlled Activities on Waterfront Land (DPI Water, 2012)	Project Supervisor
	Design, install and maintain any new components of the clean water system to capture and convey the 100 year ARI flood	Any new components of the clean water system will be designed to capture and convey a 100 year ARI flood.	Project Supervisor
	Maximise as far as reasonable and feasible the diversion of clean water around disturbed areas on the site, except where clean water is captured for use on the site	Clean water diversion banks will be constructed to separate clean run-on water from contaminated catchments, thus minimising the extent of dirty water catchments.	Project Supervisor
	Design, install and/or maintain sediment dams to prevent off-site discharges to surface waters, except as may be permitted under condition B31	<p>Runoff generated from ROM and product coal stockpiling areas will be diverted to sedimentation dams by a series of bunds, culverts, channels and drains. Sediment dams will be designed:</p> <ul style="list-style-type: none"> <li>• to capture runoff from infrastructure areas;</li> <li>• to meet requirements in regard to freeboard;</li> <li>• to intercept runoff from disturbed catchment areas.</li> </ul>	Environmental Specialist/ Project Supervisor
	Design, install and maintain sediment dams in accordance with the guidance series Managing Urban Stormwater: Soils and Construction – Volume 1 (Landcom, 2004) and 2E Mines and Quarries	All sediment dams will be implemented in accordance with the guidance series the Blue Book and the requirements under the POEO Act.	Environmental Specialist/ Project Supervisor



	(DECC, 2008) and the requirements under the POEO Act		
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All structures required for erosion and sediment control are shown in **Appendix A** and **Appendix B**, and further outlined in the Tahmoor Coal Pollution Incident Response Management Plan (PIRMP). The PIRMP is updated annually and available on the company website.

## 3.2 Specific Principles

### 3.2.1 Reject Emplacement Area

Reject Emplacement Area (REA) erosion and sediment control measures include the following:

- Minimise the area to be disturbed for reject deposition.
- Graded banks will be utilised throughout the reject emplacement area to minimise erosion, divert run-off water around the disturbed areas and re-direct runoff into sediment control dams.
- Graded banks will be constructed at intervals down the slope of the reject emplacement and rehabilitation areas to control surface flow and minimize erosion on the emplacement batters. The banks will be constructed away from the true contour, at a designed gradient (1% to 1.5%) so that they drain water from one part of the slope to another; for example, towards a constructed waterway or a sediment control dam.
- The use of engineered waterways will include the installation of rip rap to safely slow and divert runoff down slope.
- Surface runoff and leachate discharging from the active operational areas (Including the haul road areas) will pass through several existing sedimentation dams (S4, S5, S6, S7, S7a, S7b, S8 and S9) prior to discharging via a licensed discharge point (LDP1) at pit top.
- New sediment control dams will be constructed as required and utilised as required. The number and capacity of dams will be related to the total area of catchment and the anticipated volume of runoff. The capacity of each dam will be derived from the benchmark design reference for sediment control outlined within the Blue Book. However, notwithstanding the provisions outlined in the Blue Book, each dam will have a minimum capacity equal to 0.25 ML/ha of receiving catchment area.
- All slopes to be contour ploughed to reduce erosion.
- Rehabilitation will commence as soon as practical after each area has been finalised.

The method to prepare an area for reject emplacement is detailed specifically within the following documents:

- Tahmoor South Rehabilitation Strategy
- TAH-CHPP-00002 Reject Disposal Procedure

The primary objective of rehabilitation of the REA is to create a stable final landform with adequate post-mining land use capabilities. All disturbed areas are progressively rehabilitated in accordance with the approved Mine Operations Plan (MOP) or Rehabilitation Management Plan (RMP).

#### 3.2.1.1 REA Water Management

Proposed height changes to the REA will require changes to the water management infrastructure within the REA. The proposed changes to the REA are currently subject to refinement (including determining the required capacities), however generally the following will occur:

- Construction of Upstream 'Clean' Water Drains / Diversion Bunds. To reduce size of the clean water catchment contributing stormwater runoff to the southern low point, cut-off swale drains and / or diversion bunds up-slope in the southern clean water catchment could be utilised to divert stormwater runoff to the east (Dogtrap Creek) and west (Teatree Hollow Creek) as opposed to through the Site.

- Use of temporary erosion and sediment controls where required during construction (swale drains, batter chutes, etc.).
- Potential construction of new basins for the rerouting of dirty water.

The REA stages are in the process of being refined, the ESCP will be updated following the completion of this process.

### 3.2.1.2 Topsoil

Topsoil erosion and sediment control measures include the following:

- Topsoil will be stripped ahead of the active dump areas at the REA. The area stripped will be minimised to the smallest practical area to avoid unnecessarily exposing disturbed ground to weathering processes including erosion.
- Prior to stripping operations, the stripping panel will be delineated on a plan and in the field through the use of survey pegs or similar markers.
- Where possible, topsoil will be stripped in moist condition to reduce deterioration in topsoil quality and dust generation.
- Topsoil limits and the topsoil stripping depths will be shown on the pegs or markers. Topsoil placement depth and stockpiling requirements are detailed within the Tahmoor South Rehabilitation Strategy.
- If possible, topsoil will be immediately placed on final landform rehabilitation areas to a minimal depth of 300mm.
- Where suitable areas are unavailable for immediate re-spreading, topsoil should be stockpiled to a maximum height of 3 metres, in elongated windrows parallel with prevailing winds to reduce the surface area exposed to wind erosion.
- The period of stockpiling will be minimised in order to reduce the detrimental effects of storage on organic material and any native seed in the soil, and to reduce weathering.
- Stockpile locations and design will be selected for ease of access, minimisation of re-handling, segregation from other mining activities and minimisation of soil structure degradation.
- Once stockpiled, the surfaces of the topsoil stockpile will be deep ripped (up to 500mm) and sown with a perennial pasture seed mix to encourage immediate vegetation cover to reduce wind erosion, water erosion and prevent weed colonisation.
- Stockpiles will be clearly identified with signage, and where practical a windrow around the stockpile area to reduce the likelihood of contamination and soil loss. Topsoil stockpiles will be maintained over time to prevent erosion and weed colonisation.
- Appropriate erosion and sediment controls (i.e. sediment fencing) should be installed around the topsoil stockpiles, in areas where the water flowing from the area is not contained within the mine stormwater management system.
- A review of erosion and sediment controls, signage and any windrows will be conducted during the site monthly environmental housekeeping inspection.

All proposed erosion and sediment control measures will be implemented in advance of, or in conjunction with, topsoil stripping operations. Triggers to review these controls are captured as part of the Ground Disturbance Permit.

Further details regarding the re-spreading of topsoil in rehabilitation areas are included in the approved MOP or RMP. *TAH-HSEC-00053 Rehabilitation & Topsoil Management Procedure* outlines specific procedures for rehabilitation and topsoil management.

### 3.2.2 Clearing

Control measures for erosion and sedimentation due to land disturbance and clearing include the following:

- Clearance of the smallest practical area of land for the shortest possible time. This will be achieved by limiting the cleared width to that required to accommodate excavation and areas required for overburden emplacement and topsoil stockpiling.

- Prior to clearing commencing, the limits of clearing shall be marked by pegs or other markers to clearly define the disturbance boundaries. All operations will be planned to ensure that there is no disturbance outside these limits.
- Planning works so that only the areas which are under active excavation are cleared.
- Clearing will not be undertaken until earthwork operations are ready to commence with the correct equipment approvals/checks completed for site use, Work Authorisation and Ground Disturbance Permit completed to the satisfaction of the Project Supervisor.

All proposed erosion and sediment control measures will be implemented in advance of, or in conjunction with, clearing operations. Triggers to review these controls are captured as part of the Ground Disturbance Permit.

### 3.2.3 Pit Top Area

Pit top area erosion and sediment control measures include the following:

- All run-off from disturbed areas is diverted into a series of sediment retention dams before release into the natural drainage system. All dirty water run-off from the coal stockpile area and the pit top area will be collected in dams for settling out of solids. Water will be reused from these dams for dust suppression purposes.
- Regular inspections and maintenance of pit top drains, drainage lines and erosion and sediment structures.
- All high traffic areas shall be adequately protected, and isolated from runoff entering the site.
- Visual inspection of sediment and erosion control safeguards (dams, sediment traps, contour banks, channels, diversions, silts fences and hay bales) are undertaken monthly and after periods of heavy rainfall to ensure their structural integrity. Excess sediment will be removed from banks and drains and from behind sediment trapping devices. Dams will be desilted as soon as practicable. Repairs will be undertaken as necessary.
- Monitoring of water quality (total suspended solids) from sedimentation dams is undertaken daily and prior to the release of waters into the natural system.
- Where required, dams will be flocculated to reduce sedimentation prior to release of water.

### 3.2.4 Access Tracks

Access track construction erosion and sediment control measures include the following:

- Any new access tracks will be constructed in accordance with the Blue Book and the Guidelines for watercourse crossings on waterfront land (DPI 2012).
- Sealing new access track if practical.
- Including cross fall and outfall drainage, where required, to prevent concentration of runoff.
- Minimising disturbance of existing ground.
- Limiting construction of access tracks across existing drainage lines.
- Maintaining vegetation buffers between access tracks and watercourses where possible.
- Ensuring tracks are free draining.

## 3.3 Sediment Dams

**Table 3** below provides a summary of the main surface water storages (mine and stormwater sedimentation dams) at Tahmoor Coal.

**Table 3 Sediment Dam Capacities**

Dam	Capacity	Location	Catchment	Use	Type of Dam
M1	1.8ML	Pit Top	M1-M4 combined catchment area of 12.4 ha	These dams act together to treat mine water pumped from underground and stormwater. These dams discharge via	Mine water dam



Dam	Capacity	Location	Catchment	Use	Type of Dam
				Licence Point 1. Chemical flocculation added when required to remove fine sediment and improve the quality of discharges through any LDP's.	
M2	0.5 ML	Pit Top	As above	As above.	Mine water dam
M3	9.0 ML	Pit Top	As above	As above	Mine water dam
M4	8.0 ML	Pit Top	As above	As above	Mine water dam
S1	14.5 ML	Coking coal stockpile	S1 to S3 combined catchment area of 10.6 ha	The coking coal stockpile acts as a retention basin during major storms.  Discharges to S2.	Mine water dam
S2/S3	8.3 ML	Stockpile area	As above	These dams are kept full and are used to supply water used for dust suppression.  Discharges to S4.	Mine water dam
S4	36.9 ML	East of stockpile area over rail line	29.8 ha	This dam is designed to act as a retention basin with a controlled outlet. Discharges via License Point 4. Chemical flocculation added when required.	Mine water dam
S5	small	Reject loading bin		Silt trap only. Discharges to dam S6.	Mine water dam
S6	1.5 ML	Reject loading bin area	0.24 ha	This dam is designed to act as a retention basin with a controlled outlet. Discharges to Dam S9.	Mine water dam
S7a	12.0 ML	S7 & S7a and S7b are connected to treat runoff from the reject disposal area	S7a and S7b combined catchment area of 14 ha	These dams are designed to act as retention basins with a controlled outlet from S7 to S8.  Discharges to dam S8.	Mine water dam
S7b	1.0 ML	As above	As above	As above	Mine water dam
S7	41.5 ML	As above	26 ha	As above	Mine water dam
S8	0.45 ML	Reject area final dam	2.4 ha	Final dam in reject area dam complex. Discharges via Licence Point 5. Chemical flocculation added when required.	Mine water dam
S9	0.4 ML	Reject area haul road	1.7 ha	Silt trap only for sealed haul road. Discharges via Licence Point 3.	Mine water dam

### 3.4 Temporary Controls

Temporary erosion and sediment control measures will be installed as required during earthworks to prevent erosion and sediment laden water entering the surrounding environment. Sediment fences and other temporary controls will be designed in accordance with the Blue Book.

## 4 Monitoring

Monitoring of erosion and sediment structures will be conducted regularly during the site monthly environmental housekeeping inspection. General monitoring measures associated with erosion and sediment control will include:

- Inspection of all erosion and sediment control structures.
- Confirmation that erosion and sediment control structures are implemented and effective.
- Monitoring of water levels and general water quality in sediment dams.
- Monitoring of silt build-up in sediment dams.
- Inspection of any water monitoring equipment i.e. dam water level sensors.
- Dewatering of sediment dams prior to and following high rainfall events.

## 5 Maintenance and Corrective Actions

General maintenance measures will include the modification, repair or replacement of any erosion and sediment control structures not installed or operating in accordance with the blue book. Maintenance will be completed at a frequency commensurate with the level of risk associated with each of the respective structures.

In the event that erosion and sediment control structures are assessed as being no longer relevant for the management of erosion and sediment laden water on site, all structures will be removed, and the site remediated appropriately.

General corrective actions associated with the maintenance of erosion and sediment control structures are outlined within **Table 4**.

**Table 4 Corrective Actions**

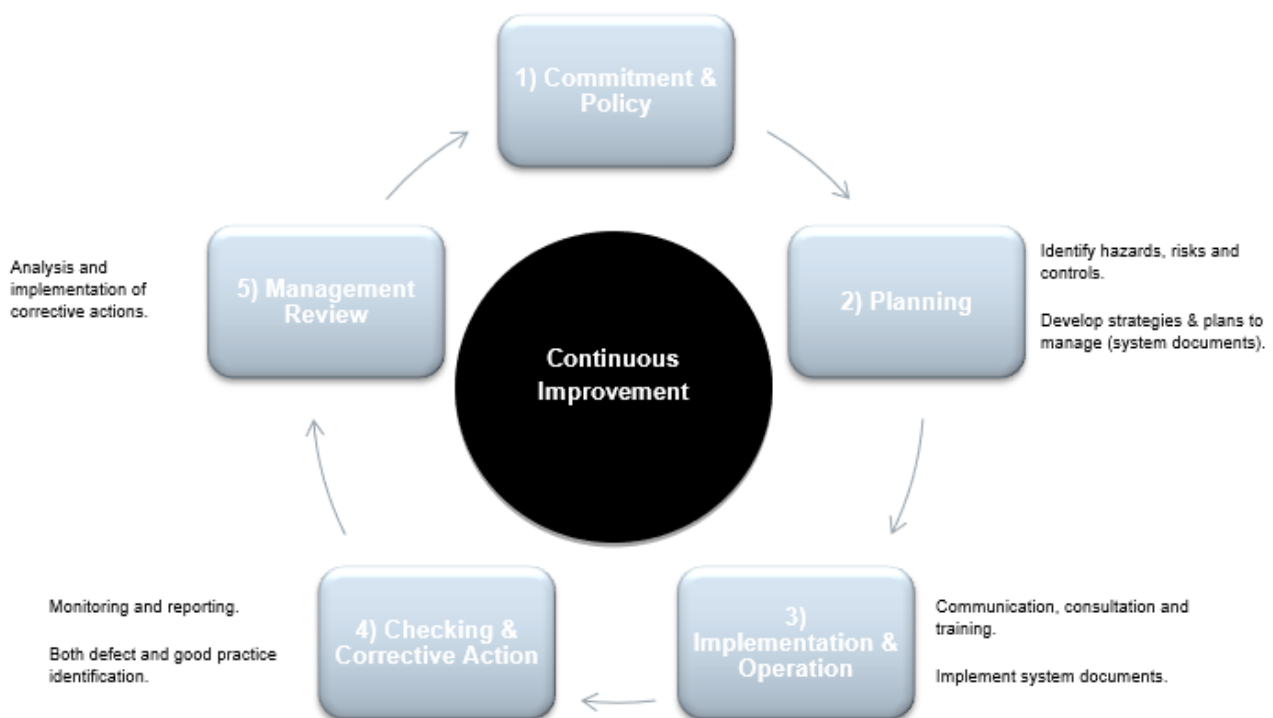
Issue	Corrective Action	Responsibility
Type, location or condition of erosion and sediment control structure is ineffective.	Erosion and sediment control structure to be repaired or replaced as soon as practicable. Continue regular inspections of control structure.	Environment Specialist /Project Supervisor
High water level within REA sediment dams.	Dewater sediment dam as required, prior to high rainfall events (greater than 20 millimetres of rainfall in 24 hours) and within 5 days of a high rainfall event. Continue regular inspections of control structure.	Environment Specialist /Dam Supervisor
Erosion within newly disturbed area	Install necessary erosion and sediment control structures in line with the Blue Book.	Project Supervisor
Sediment builds up around erosion and sediment control structure	Desilt erosion and sediment control structure and review structures efficiency. Continue regular inspections of control structure.	Project Supervisor/ Environment Specialist

## 6 Adaptive Management and Continuous Improvement

In accordance with Condition E4 of the Consent, where a non-compliance with the performance measures outlined within this document has occurred, Tahmoor Colliery will:

- a) take all reasonable and feasible steps to ensure that the non-compliance ceases and does not recur;
- b) consider all reasonable and feasible options for remediation (where relevant) and submit a report to the Department describing those options and any preferred remediation measures or other course of action; within 14 days of the non-compliance occurring (or other timeframe agreed by the Planning Secretary), submit a report to the Planning Secretary describing these remediation options and any preferred remediation measures or other course of action; and
- c) implement reasonable remediation measures as directed by the Planning Secretary

Tahmoor Coal have adopted the “Plan-Do-Check-Act” model as shown in **Figure 1**. This model will be applied to all aspects of Tahmoor Coal’s environmental management and is utilised to embed the continuous improvement process in all system documents.



**Figure 1: Continuous Improvement Model**

## 7 Reporting, Review and Improvement

All internal and external reporting and the review of this document will be undertaken in accordance with Sections 6.0 of the Tahmoor South Water Management Plan.

## 8 Document Information

Relevant legislation, standards and other reference information will be regularly reviewed and monitored for updates and will be included in the site management system. Related documents and reference

information in this section provides the linkage and source to develop and maintain site compliance information.

## 8.1 Related Documents

Related documents, listed in the below table, are internal documents directly related to or referenced from this document.

**Table 5 Related Documents**

Number	Title
In Development	Rehabilitation Strategy
TAH-CHPP-00002	Reject Disposal Procedure
TAH-HSEC-00053	Rehabilitation & Topsoil Management Procedure
In Development	Mine Operations Plan
In Development	Rehabilitation Management Plan
In Development	Water Management Plan.
In Development	Surface Water Management Plan
NA	Ground Disturbance Permit

## 8.2 Reference Information

Reference information, listed in the below table, is information that is directly related to the development of this document or referenced from within this document.

**Table 6 Reference Information**

Title
Department of Environment and Climate Change (DECC), 2008. Managing Urban Stormwater – Soils and Construction, Volume 2A Installation of services.
Department of Environment and Climate Change (DECC), 2008. Managing Urban Stormwater – Soils and Construction, Volume 2C Unsealed Roads.
Department of Environment and Climate Change (DECC), 2008. Managing Urban Stormwater – Soils and Construction, Volume 2D Main Road Construction.
Department of Environment and Climate Change (DECC), 2008. Managing Urban Stormwater – Soils and Construction, Volume 2E – Mines and Quarries.
Department of Primary Industries (DPI), 2012. Controlled Activities on Waterfront Land
Department of Primary Industries (DPI), 2013. Policy and Guidelines for Fish Habitat Conservation and Management
NSW Fisheries, 2003. Why Do Fish Need To Cross The Road? Fish Passage Requirements for Waterway Crossings
SMEC, DEC 21, REA Filling Sequencing Report



# Appendix A – Water Pathways



## Tahmoor Coal Water Pathways

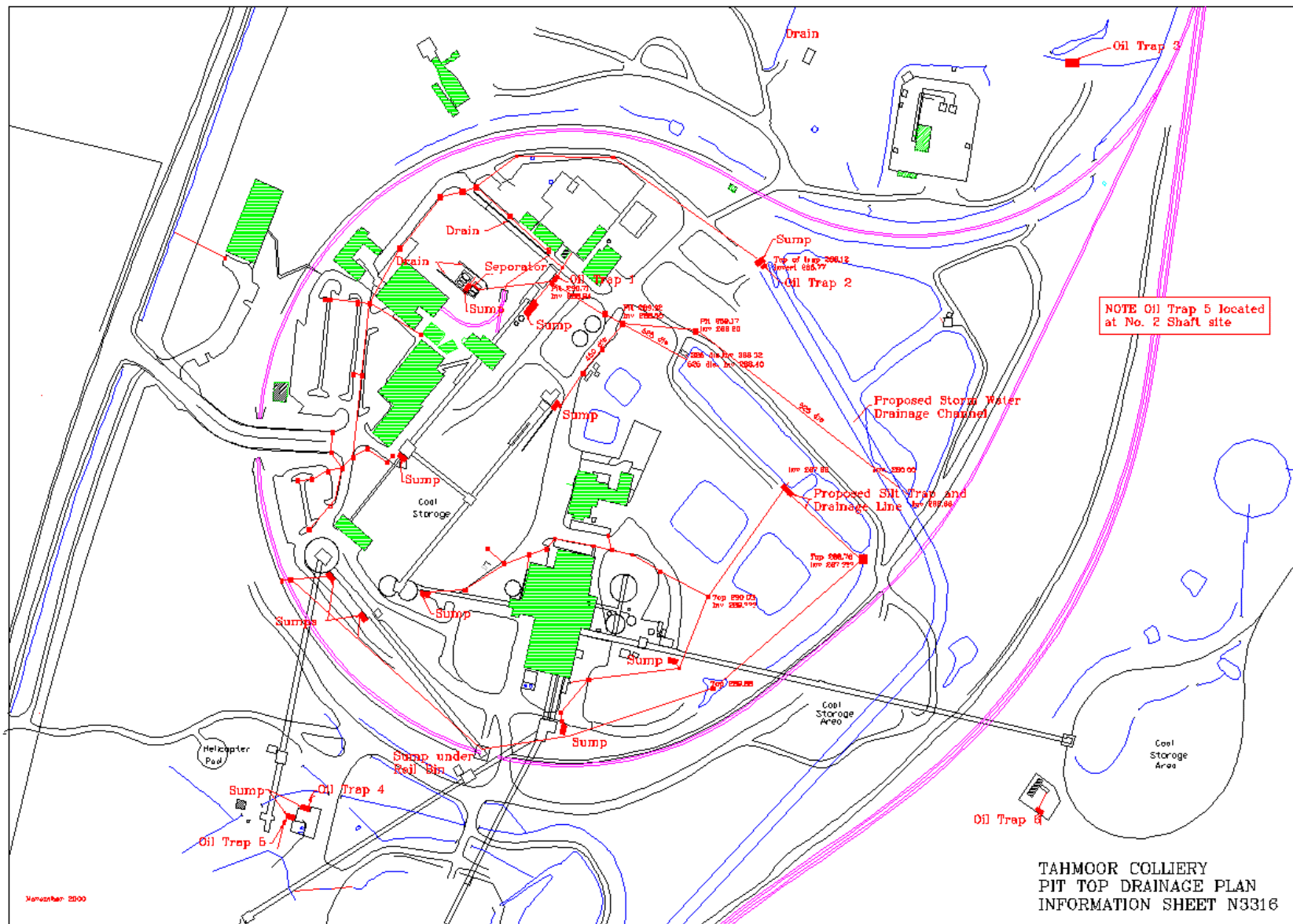
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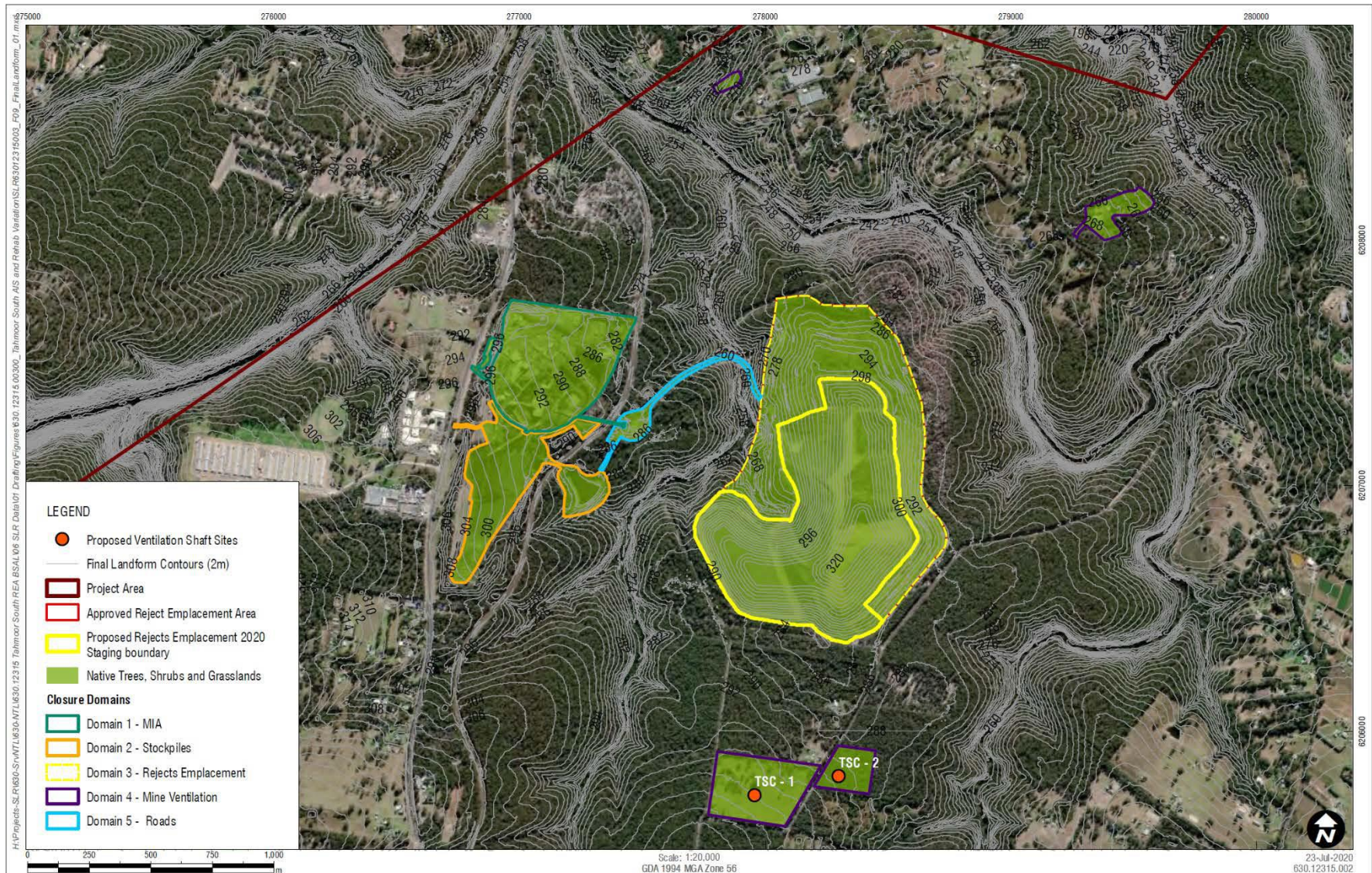
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## Appendix B – Plans





# Current approved REA Final Landform (under refinement)



# Appendix C – Letter of Endorsement





Ms Zina Ainsworth  
Manager Environment and Community  
SIMEC Mining  
2975 Remembrance Drive  
Tahmoor NSW 2573

16/08/2021

Dear Ms. Ainsworth

**Tahmoor South Coal (SSD-8445)  
Management Plan Experts Endorsement**

I refer to your request (SSD-8445-PA-2) for the Secretary's approval of suitably qualified persons to prepare the Management Plans for the Tahmoor South Coal (SSD-8445).

The Department has reviewed the nominations and information you have provided and is satisfied that these experts are suitably qualified and experienced. Consequently, I can advise that the Secretary approves the appointment of the following experts to prepare the following Management Plans:

Management Plan	Suitably Qualified Person
Noise Management Plan	Michelle Grierson – Senior Environmental Scientist Umwelt Australia Pty Ltd Katie Teyhan (Technical Reviewer) - Associate Acoustics Manager Newcastle EMM
Spontaneous Combustion Management Plan	Michelle Grierson – Senior Environmental Scientist Umwelt Australia Pty Ltd
Water Management Plan	Camilla West - Senior Water Resources Scientist Tony Marszalek - Director and Principal Water Resources Engineer Hydro Engineering & Consulting Pty Ltd
Groundwater Management Plan	Will Minchin – Hydrogeologist Maxime Philibert - Hydrogeologist SLR Consulting
Biodiversity Management Plan	Luke Baker - Team Leader Ecology Niche Environment and Heritage
Rehabilitation Strategy	Michelle Grierson – Senior Environmental Scientist Umwelt Australia Pty Ltd
Traffic Management Plan	Michelle Grierson – Senior Environmental Scientist Umwelt Australia Pty Ltd
Social Impact Management Plan	Amanda Bateman – Community Liaison Specialist Tahmoor Coal Pty Ltd

It is noted that it was proposed that Michelle Grierson – Senior Environmental Scientist Umwelt Australia Pty Ltd was proposed to prepare the Air Quality and Greenhouse Gas Management Plan. Given the significance of the technical aspects associated with air quality and greenhouse gas emissions at the project, the Department requests that a technical specialist be proposed to work with Ms Grierson to prepare this Air Quality and Greenhouse Gas Management Plan. Please provide further details of the proposed air quality expert by lodging further details via the portal.

If you wish to discuss the matter further, please contact Wayne Jones on (02) 6575 3406.

Yours sincerely

A handwritten signature in black ink, appearing to be 'S O'Donoghue', written in a cursive style.

Stephen O'Donoghue  
Director  
Resource Assessments  
As nominee of the Secretary