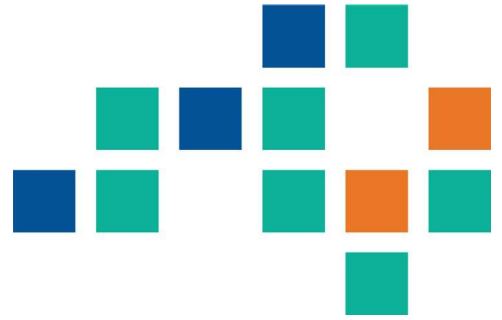







INTERNAL



Soil and Water Management Plan EnergyConnect (NSW - Western Section) Stage 1 45860-HSE-PL-D-0008

REV	DATE	GENERAL DESCRIPTION	PREPARED	REVIEWED	VERIFIED	VERIFIED	APPROVED
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Revision History	
Rev.	Detailed Description
A	Issued for internal review
B	Issued for internal review. Updated to incorporate aspects from <i>EnergyConnect (NSW – Western Section) Submission Report</i>
C	Issued for Transgrid review
D	Updated following receipt of Transgrid’s comments
E	Updated following receipt of Transgrid’s comments and draft Infrastructure Approval
F	Updated following Transgrid review and to address the Infrastructure Approval
G	Updated following Transgrid review and to address agencies comments
H	Updated following Transgrid review and to address comments from the Environmental Representative
J	Updated following DPIE review
K	Updated following receipt of Transgrid comments

Key Document Stakeholders
To be communicated with during reviews and revisions of this document

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Abbreviations

Acronym	Definition
AHD	Australian height datum
Amendment Report	<i>EnergyConnect (NSW – Western Section) Amendment Report</i>
AS/NZ	Australian Standard/New Zealand Standard
ASS	Acid sulfate soils
AWS	Automatic weather station
BC Act	<i>Biodiversity Conservation Act 2016</i>
BoM	Bureau of Meteorology
BTENX	Benzene, toluene, ethylbenzene, xylene, and naphthalene
CEMP	Construction Environmental Management Plan
CLM Act	<i>Contaminated Land Management Act 1997</i>
Contamination	Contamination means the presence in, on or under land or any other aspect of the environment of a substance (i.e. gas, chemical, liquid or other matter) whether occurring naturally or otherwise, which is: <ul style="list-style-type: none"> a) at a concentration above the concentration at which the substance, gas, chemical, liquid or other matter, whether occurring naturally or otherwise, is normally present in, on or under land or any other aspect of the environment in the same locality, being a presence that presents a risk of harm to human health or any other aspect of the environment; or b) toxic, flammable or otherwise capable of causing harm to humans or damage to the environment including asbestos (man-made or naturally occurring), toluene, polychlorinated biphenyls, lead based paints, glues, solvents, cleaning agents, paints, water treatment chemicals, acid producing spoil.
CSSI	Critical State significant infrastructure
Cth	Commonwealth
DAWE	Department of Agriculture, Water and the Environment
DPIE or Department	NSW Department of Planning, Industry and Environment
EIS	<i>EnergyConnect (NSW – Western Section) Environmental Impact Statement</i>
EP&A Act	<i>Environmental Planning and Assessment Act 1979</i>
EPBC Act	<i>Environment Protection and Biodiversity Conservation Act 1999</i>
EPL	Environment Protection Licence
ESCP	Erosion and Sediment Control Plan
ESCS	Erosion and Sediment Control Strategy
GDEs	Groundwater dependent ecosystems
NSW	New South Wales
PASS	Potential acid sulfate soils
PCBs	Polychlorinated biphenyls
PESCP	Progressive Erosion and Sediment Control Plan
Planning Secretary	Planning Secretary under the EP&A Act, or nominee
POEO Act	<i>Protection of the Environment Operations Act 1997</i>
project, the	EnergyConnect (NSW – Western Section)
Response to DPIE Request for Information	The 'additional information letter dated 10 August 2021' in the definition section of the Infrastructure Approval; document is also titled <i>EnergyConnect (NSW – Western</i>

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Acronym	Definition
	<i>Section) Response to DPIE Request for Information – 7 May 2021 and subsequent discussions</i>
RMMs	Revised mitigation measures
SA	South Australia
SAPs	Sensitive area plans
SecureEnergy	Elecnor and Clough Projects Australia Pty Ltd have formed the SecureEnergy Joint Venture (SecureEnergy). SecureEnergy is the contractor who will be carrying out the project on behalf of Transgrid.
Submissions Report	<i>EnergyConnect (NSW – Western Section) Submissions Report</i>
SWMP	Soil and Water Management Plan
UXO	Unexploded Ordnance
WAL	Water access licence
WM Act	<i>Water Management Act 2000</i>
WMS	Work method statements
WWTP	Wastewater treatment plant

1 Introduction

1.1 Context

This *Soil and Water Management Plan* (SWMP or this plan) forms part of the Construction Environmental Management Plan (CEMP) for Stage 1 of EnergyConnect (NSW – Western Section).

This plan has been prepared to address the relevant requirements of the Infrastructure Approval (SSI 10040), the *EnergyConnect (NSW – Western Section) Environmental Impact Statement* (EIS), *EnergyConnect (NSW – Western Section) Submissions Report* (Submissions Report) and the *EnergyConnect (NSW – Western Section) Amendment Report* (Amendment Report) and the additional information letter dated 10 August 2021 (Response to DPIE Request for Information).

1.2 Background

On 29 August 2019 the NSW Minister for Planning and Public Spaces declared the NSW component of EnergyConnect to be critical State significant infrastructure (CSSI) under the *Environmental Planning and Assessment Act 1979* (EP&A Act) on the basis that it is critical to the State for environmental, economic or social reasons. Within NSW, EnergyConnect is therefore subject to assessment under Part 5, Division 5.2 of the EP&A Act.

Transgrid have two environmental planning approval applications for the sections within NSW:

- EnergyConnect (NSW – Western Section) – SA/NSW border to Buronga and Buronga to the NSW/Victorian border (the project); and
- EnergyConnect (NSW – Eastern Section) – Buronga to Wagga Wagga.

A referral under the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) was submitted on 27 May 2020. The Australian Department of Agriculture, Water and the Environment (DAWE) determined the project to be a controlled action on 26 June 2020 and thus, it would be assessed using the bilateral assessment process. As such, the project also requires approval from the Australian Minister for the Environment under the EPBC Act.

The EIS was prepared for the project in October 2020 and was placed on public exhibition from 30 October 2020 to 10 December 2020. A total of 20 submissions were received, with 15 from government agencies, three from organisations and two from the public.

The Submissions Report was prepared for the project in response to the submissions and was finalised on 14 April 2021.

Transgrid also prepared a separate Amendment Report to document design changes and additional environmental assessment undertaken since exhibition of the EIS. The Amendment Report describes the updated project for which approach has been sought and was finalised on 14 April 2021.

On 7 May 2021, Department of Planning, Industry and Environment (DPIE or Department) requested additional information (*EnergyConnect (NSW – Western Section)(SSI-10040) Request for Additional Information*) to assist with the assessment of the project. In response Transgrid prepared and provided the Response to DPIE Request for Information, which included revised mitigation measures (RMMs) in Appendix G which are to be applied. The Response to DPIE Request for Information was dated 10 August 2021.

Approval for the project under the EP&A Act was granted by the NSW Minister for Planning and Public Spaces (Infrastructure Approval SSI 10040). Approval for the project under the EPBC Act was granted by the Australian Minister for the Environment.

Transgrid have engaged SecureEnergy, a joint venture between Elecnor and Clough Projects Australia Pty Ltd to design and construct their portion of the EnergyConnect project.

1.3 Staging

Condition E2 allows preparation of plans on a staged basis, with the approval of the Planning Secretary. Where a plan is staged, the scope of works can be carried out without addressing particular requirements of conditions of approval that are not applicable to the particular stage. This SWMP is staged in accordance with Condition E2.

On 26 November 2021 the project advised DPIE of the intention to stage construction of the project and sought the Secretary’s approval to prepare and submit any strategy, plan or program required by the Infrastructure Approval on a staged basis. The two proposed stages are as follows:

- Stage 1 – upgrade of the existing substation at Buronga, establishment of the Buronga accommodation camp and construction compound, and use and access of two water supply points off Corbett Avenue, Buronga to supply raw water for construction and potable water for the accommodation camp; and
- Stage 2 – all other construction activities.

On 24 December 2021 the Planning Secretary approved the submission of relevant strategies, plans or programs on this staged basis in accordance with condition E2 of Schedule 2 of the Infrastructure Approval. SecureEnergy will construct the project in accordance with the approved stages identified above and will prepare and submit the CEMP and CEMP Sub-plans (and other relevant strategies, plans or programs - including this SWMP) on a staged basis.

The conditions of the Infrastructure Approval, and the RMMs identified in the Appendix G of the Response to DPIE Request for Information, that are relevant to soil, water and contamination aspects of the construction phase are included in Table 2.1 and Table 2.2 respectively. The applicability of each requirement to this SWMP is also addressed in the identified tables.

Stage 1 of construction (covered by this SWMP) is proposed to occur ahead of the main transmission line works in order to expedite the overall delivery program for EnergyConnect. The Department will be notified in writing via the Major Projects portal of the proposed date of commencement of Stage 1 of construction.

This SWMP will be prepared to prior to commencement of construction of Stage 2. The SWMP for Stage 2 will include details of Stage 2 construction activities and will ensure that the relevant conditions of approval are addressed in relation to those activities. Construction of Stage 2 will not commence until the Planning Secretary is satisfied with the CEMP and CEMP Sub-plans for Stage 2.

The Buronga substation is located on Arumpo Road in Buronga. The existing 220kV substation will be upgraded and expanded to a new 330kV substation on a land parcel adjacent to the existing 220kV substation. Refer to Figure 1.1 for the indicative disturbance area of Stage 1 of construction.

The key project components of Stage 1 of construction include, but are not limited to, the activities provided in Table 1.1

Table 1.1 - Key project components of Stage 1 of construction

Key activity	Description of key activity
Environmental investigations, including biodiversity and heritage protection, salvage and recordings.	These key activities nominated in this stage will have already commenced as part of the pre-construction minor works permitted in accordance with the Infrastructure Approval. The definition of ‘construction’ within the Infrastructure Approval excludes these activities. They will therefore not be subject to the Stage 1 CEMP and CEMP sub-plans.
Other survey work, such as road dilapidation surveys, and surveys of the general alignment and existing utilities.	

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Key activity	Description of key activity
Site establishment at Buronga substation upgrade and expansion site	<p>The main site establishment activities that would be undertaken at Buronga substation upgrade and expansion site include:</p> <ul style="list-style-type: none"> clearing of vegetation within the disturbance area (including scrub, undergrowth and ground vegetation); clearing and removal of topsoils. Topsoil would be stockpiled on site for later reuse; establishing crushing and screening plants (if required), ancillary facilities, including but not limited to offices and amenities, and internal roads; and installing fencing (including fencing around the site where required), signage and security measures as well as any necessary construction environmental management measures such as erosion and sediment controls.
Bulk earthworks at Buronga substation upgrade and expansion site	<p>Bulk earthworks to form the Buronga substation pad which includes placement of around 350,000m³ of rock/gravel/soil from the earthworks material site to allow for the construction of the substation pad in preparation for concrete foundations. Crushing and screening activities may be required in order to meet the engineering requirements. Existing soil that does not meet engineering requirements for the substation pad will be temporary stockpiled.</p>
Site establishment of the Buronga accommodation camp	<p>The main activities that would be undertaken at Buronga construction compound and accommodation camp include:</p> <ul style="list-style-type: none"> clearing of vegetation within the disturbance area (including scrub, undergrowth and ground vegetation); clearing and removal of topsoils. Topsoil would be stockpiled on site for later reuse; establishing the accommodation camp and associated facilities, including but not limited to site offices, amenities, wastewater treatment plant, power generators, hazardous material and fuel storage area and internal roads;
Site establishment and operation of the Buronga construction compound	<ul style="list-style-type: none"> establishing and operating site offices and other ancillary facilities, including but not limited to and amenities, and internal roads; connections and pre-commissioning of on-site utilities (wastewater treatment plant, electrical power, lighting and etc.) for the construction compound and accommodation camps; and installing temporary fencing, signage and security measures as well as any necessary construction environmental management measures such as erosion and sediment controls, where required.
Access points	<p>The establishment of access points would include:</p> <ul style="list-style-type: none"> establishing vehicle access and egress points including adjustment of roads to ensure safe vehicle movements; and establishing truck wheel wash or rumble grids. <p>The definition of construction within the Infrastructure Approval does not include road upgrades (which includes access points). Road upgrade works are, however, incorporated within the Traffic and Transport Management Plan as required by condition D40b).</p>
Water supply points – establishment and/or use	<p>A series of water supply points have been identified as suitable connection points to existing water supply pipelines. The proposed water supply points which are to be established and/or used include:</p> <ul style="list-style-type: none"> Alcheringa Drive, Buronga; and Modica Crescent, Buronga.
Utility adjustments and protection	<p>General utility protection and adjustment works, where required, to allow for the Buronga substation expansion and upgrades works to occur, the establishment of the accommodation camp and the establishment and operation of the construction compound.</p>

Some activities nominated in this stage will have already commenced as part of the pre-construction minor works permitted in accordance with the Infrastructure Approval. These works will remain excluded from the definition of ‘construction’ and will therefore not be subject to the Stage 1 CEMP and this SWMP.

This SWMP has been prepared specifically for EnergyConnect (NSW – Western Section) Stage 1 of construction and will be implemented for the duration of Stage 1 of construction.

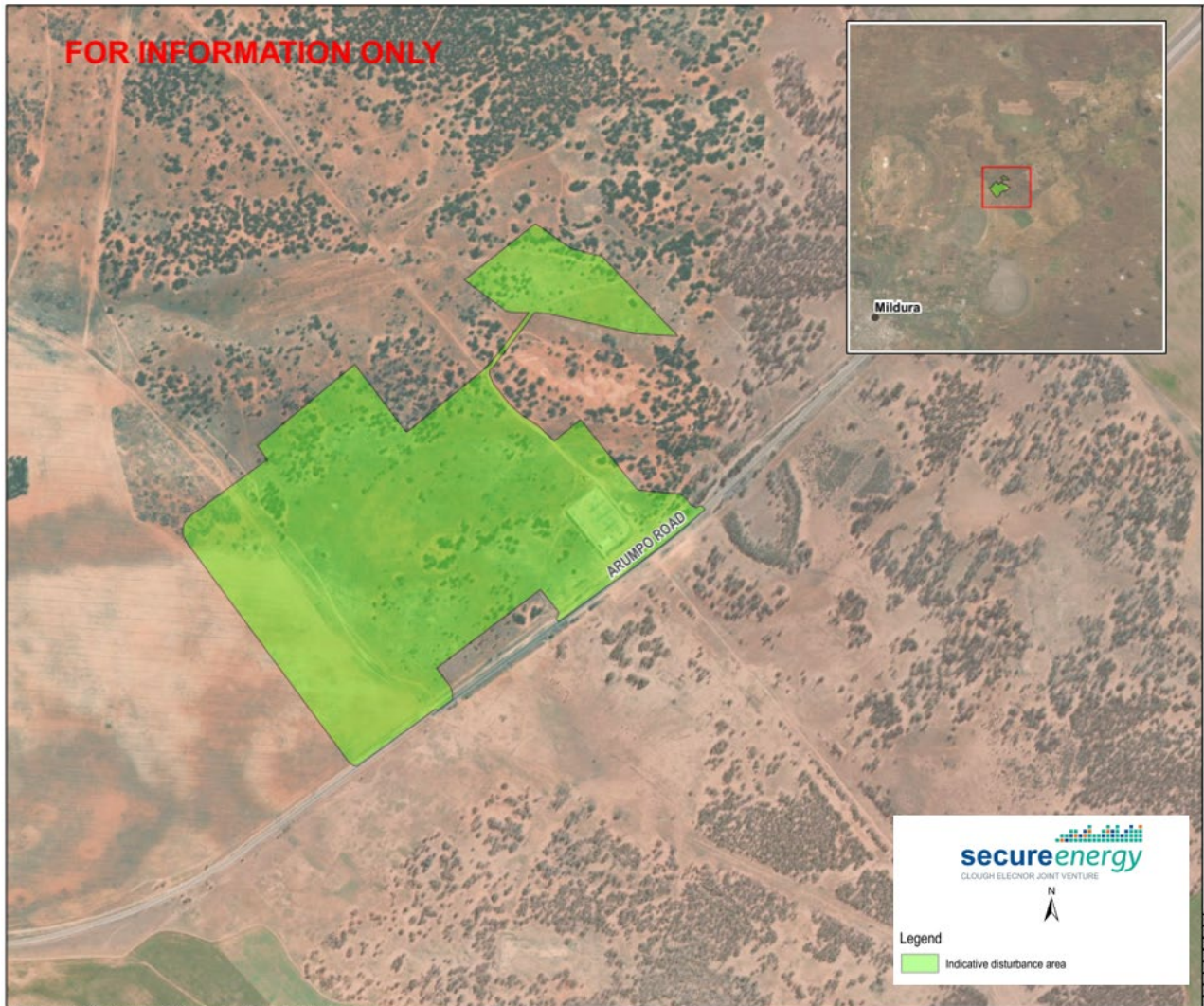


Figure 1.1 - Indicative disturbance area of Stage 1 of construction

1.4 Environmental management system

The overall environmental management system for the project is described in Section 4 of the CEMP. This SWMP is a sub-plan that forms part of the CEMP and is also part of the environmental management framework for the project, as described in the CEMP. Figure 1.2 shows the CEMP framework for the project.

Management measures identified in this plan will be incorporated into relevant site-based documents including, but not limited to, site or activity specific work packs or work method statements (WMS), sensitive area plans (SAPs) or training and awareness activities.

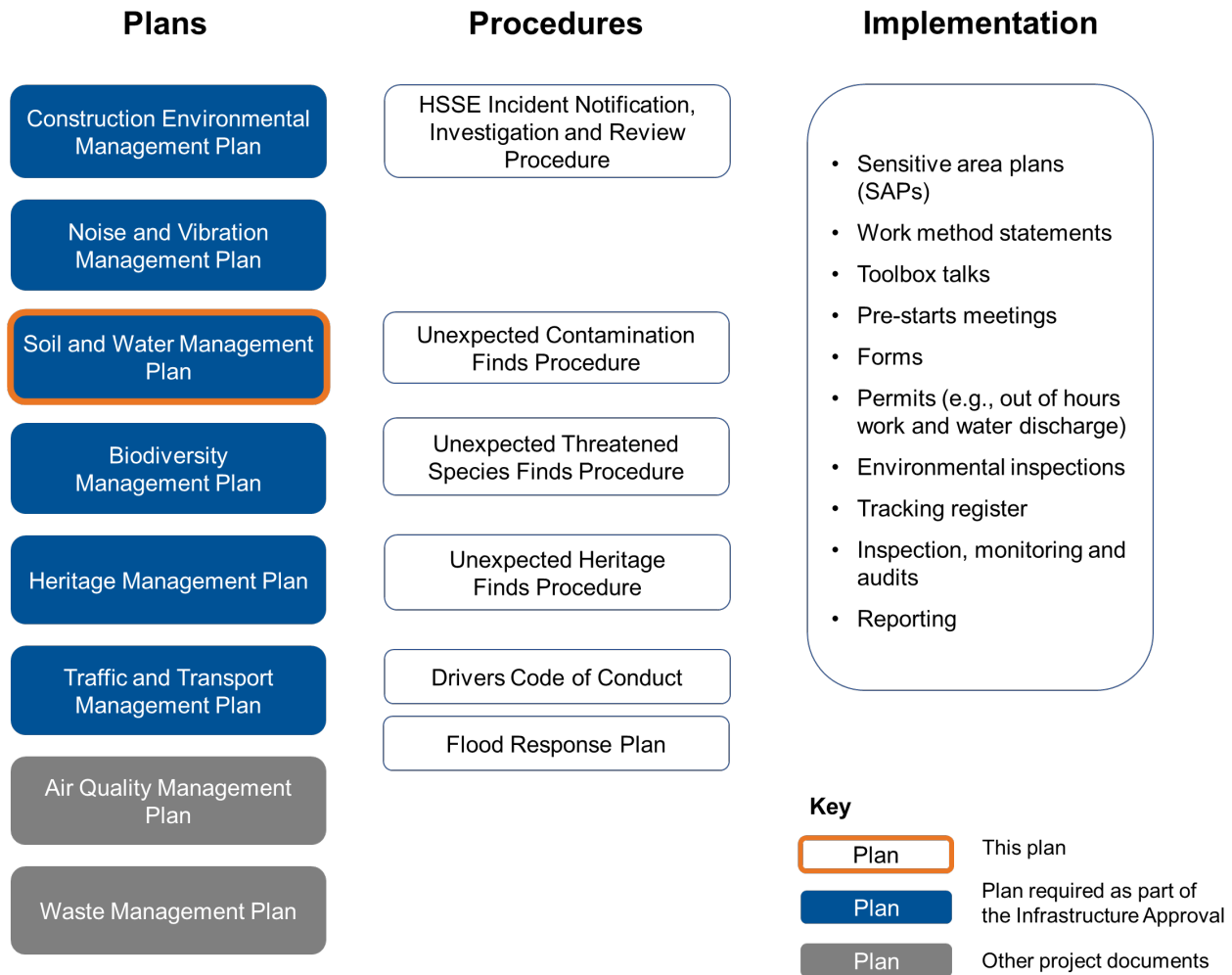


Figure 1.2 - CEMP framework

1.5 Purpose and objective

The purpose of this SWMP is to describe the approach to manage soil and water impacts that will be adopted during construction of the project.

The key objective of this plan is to detail management measures and inform site procedures so that soil, water and contamination impacts are minimised and managed within the scope permitted by the Infrastructure Approval. To achieve this, the following will be undertaken:

- implement appropriate measures to address the requirements outlined in the Infrastructure Approval, EIS and Amendment Report;
- implement appropriate measures during construction to minimise soil, water and contamination impacts (including minimising erosion and sedimentation impacts); and
- implement appropriate measures to comply with relevant legislative requirements as described in Section 2.1 of this plan, including ensuring that the project does not cause water pollution as defined in section 120 of the POEO Act.

As a means of assessing environmental performance, environmental objectives (performance measures), targets (criteria) and performance indicators have been established for the project and are provided within Table 4.2 of the CEMP. All performance measures and indicators are applicable to the project, however those most relevant to soil, water and contamination are detailed in Table 1.2.

Table 1.2 - Environmental objectives, targets and performance indicators relevant to soil, water and contamination

Aspect	Objectives (performance measures)	Targets (criteria)	Performance indicators
Compliance	Compliance with legislation, statutory approvals and the Infrastructure Approval	<ul style="list-style-type: none"> Full compliance with statutory approvals. No regulatory infringements (PINs or prosecutions). No formal regulatory warning. 	Number of regulatory infringements (PINs or prosecutions), formal regulatory warning, audits.
	Implement and comply with the CEMP and associated management plans	<ul style="list-style-type: none"> Zero non-compliances identified during each compliance audit of CEMP and sub-plans. 	Number of non-compliance arising from each audit.
Soil and water	Minimise erosion and sedimentation	<ul style="list-style-type: none"> Implementation of controls in accordance with the PESCPs 	Environmental inspections, audits.
	Ensure that the project does not cause water pollution as defined in section 120 of the POEO Act	<ul style="list-style-type: none"> 100% completion of scheduled inspections. 100% compliance with the Dewatering Procedure. 	Environmental inspections, audits.
Incident management and response	Ensure timely communication of incidents. Minimise the risk of an incident by identifying risks and developing actions to minimise those risks	<ul style="list-style-type: none"> All incidents reported in accordance with the CEMP. All risks reviewed in accordance with the SecureEnergy management system. 	Follow up action of incidents as recorded in incident reports.
Inspections and audits	Completion of weekly inspections and audits	<ul style="list-style-type: none"> 100% completion of scheduled audits and weekly inspections. 100% compliance with: <ul style="list-style-type: none"> Dewatering Procedure; and Unexpected Contamination Finds Procedure. 	Environmental inspections, audits.

1.6 Preparation of this plan

In accordance with condition B6 of the Infrastructure Approval, this plan has been prepared by suitably qualified and experienced person. This plan was prepared by Martin Lee.

1.7 Consultation

1.7.1 Development of this plan

In accordance with condition B2 of the Infrastructure Approval, this plan has been prepared in consultation with:

- DPIE Water Division (DPIE Water);
- National Resources Access Regulator (NRAR); and
- Wentworth Shire Council (Council).

The plan was issued to relevant stakeholders for review and comment. Council confirmed that they had no comments on the SWMP. The Natural Resources Access Regulator (NRAR), on behalf of DPIE Water, provided comments in particular in relation to the licensing aspects of the project. DPIE Water advised that they had no further comments to add beyond that provided by NRAR. Comments from the consultation process have been incorporated into this plan where appropriate. Details of all consultation with DPIE Water and Wentworth Shire Council will be submitted to DPIE along with the submission of this management plan.

1.7.2 Ongoing communication and consultation

SecureEnergy will use a range of tools in accordance with the *Community Communication Strategy* (CCS) (45860-CM-PL-G-1001) to facilitate ongoing consultation and communication with the community and stakeholders (including government agencies where necessary) regarding the project. Communication tools include, but are not limited to, stakeholder briefings, project website, community drop-in sessions via the project's mobile van, door knocks and project factsheets. Notifications will be issued for, but not limited to following, commencement of construction, significant milestones and changes to the scope of work. Refer to the CCS for further information.

In accordance with condition E12 a) of the Infrastructure Approval, project documents including the EIS, approved strategies, plans or programs required under the conditions of approval and independent reports will be publicly available on the project website. The project website is <https://www.projectenergyconnect.com.au>. A 24-hour toll-free telephone number (1800 560 577) is also available for any project enquiries. In accordance with condition E12 b) the information will be kept up to date.

1.7.3 Complaints

Complaints will be managed by the Community and Stakeholder Engagement Team with the use of Consultation Manager database. Complaints will be received via phone calls, emails and letters. Any complaint received is regarded as a high priority and will be recorded, tracked and responded to in accordance with the CCS. Complaints will be investigated and dealt with impartially. The key principles of the complaint management process include:

- acknowledge - SecureEnergy staff should respect the communities' right to voice their concerns. All complaints received should be acknowledged to the complainant either by telephone or in writing;
- resolve - SecureEnergy staff should aim at first contact, resolution for all community concerns. SecureEnergy staff should investigate community concerns in detail before negotiating a resolution. All SecureEnergy staff should use their relevant discretions to achieve a mutually acceptable resolution to complaints;
- escalate - all SecureEnergy staff should aim to escalate the complaint if the community member remains dissatisfied with the investigation and/or resolution offered by their first point of contact at SecureEnergy. All complaints where community request to speak to a higher-level representative, should also be escalated;
- record – SecureEnergy staff should aim through the Engagement Team at recording all relevant information, on the community account in Consultation Manager System, regarding customer concerns along with details of all discussions had with the community member in the process of investigating and/resolving the complaint. Detailed information on the resolutions offered to address community concerns should also be clearly recorded;
- communicate – SecureEnergy staff should remain in constant touch with the community member while their concerns are being investigated. The community member should be informed of all steps of the investigation and the resulting outcome at appropriate times;
- report – SecureEnergy should report on all complaints received to the SecureEnergy Management Team and Transgrid. The reporting should include information on the number as well as type of complaints being received, the status of these complaints from time to time and the resulting outcomes or resolutions offered to close them;
- feedback – the SecureEnergy Engagement Team should aim at regular and intensive reviews to identify possible trends in the complaints being received. These reviews should be aimed at highlighting improvements required to avoid complaints being repeated;
- action - SecureEnergy should aim at effective implementation of improvements suggested directly by the community or highlighted by complaint trends.

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Wherever possible, complaints will be resolved directly between SecureEnergy and the stakeholder. If a complaints management process has been followed and the issue cannot be resolved, dispute resolution will be undertaken in accordance with the CCS. As part of this, a Community Complaints Mediator will be engaged to address any complaint where a member of the public is not satisfied by SecureEnergy's response. The escalated review process will include an assessment of the details of the complaint received, any findings of the investigation undertaken in response to the complaint, and any further matters raised by the complainant.

If a complaint requires referral to senior management and Transgrid, the complainant will be informed of this and the outcome of the review process. DPIE may also request that the Environmental Representative (ER) assist in dispute resolution of community complaints.

All complaints will be provided to the ER and a summary of complaints received, such as a complaints register, will be updated monthly on the project website.

1.8 Submission and approval

Prior to submission to DPIE, the SWMP will be reviewed by the Environmental Representative (ER) to ensure that the plan is consistent with the requirements of the Infrastructure Approval. A written statement to this effect will be prepared and submitted to DPIE. This review will be undertaken in accordance with condition A19 of the Infrastructure Approval.

The SWMP will be submitted to DPIE for review and approval by the Planning Secretary prior to the commencement of Stage 1 construction.

Stage 1 of construction will not commence until the CEMP and all sub-plans required under condition B2, or where staging is proposed the plans required for that stage, have been approved by the Planning Secretary. The approved SWMP will then be implemented for the duration of the Stage 1 construction activities.

In accordance with condition E4, Final Layout Plans for Stage 1 will be submitted prior to commencing construction.

1.9 Periodic review

This SWMP will be reviewed at least annually and updated, if required, in accordance with Section 1.10 of the CEMP—Updating the CEMP. This includes the review and, if necessary, revision of this Soil and Water Management Plan within three months of the following:

- submission of an incident report under condition E6 of the Infrastructure Approval;
- submission of an audit report under condition E11 of the Infrastructure Approval; or
- any modifications to the Infrastructure Approval.

Any updates to the SWMP will be approved as described in Section 1.10 of the CEMP.

2 Environmental requirements

2.1 Legislation

Legislation relevant to this SWMP includes:

- *Environmental Planning and Assessment Act 1979* (EP&A Act);
- *Protection of the Environment Operations Act 1997* (POEO Act);
- *Contaminated Land Management Act 1997* (CLM Act); and
- *Water Management Act 2000* (WM Act).

Relevant provisions of the above legislation are detailed within the register of legal and other requirements included in Appendix A1 of the CEMP. Refer to Appendix E for further details on the legislations relevant to this SWMP.

2.2 Conditions of Approval

The conditions of the Infrastructure Approval relevant to soil, water, and contamination for Stage 1 of the project are presented in Table 2.1. A cross reference is also included to indicate where the condition is addressed within this plan or other project management documents.

Table 2.1 - Conditions of Approval relevant to soil, water and contamination

Condition no.	Requirement	Where addressed	How addressed
A1	In meeting the specific performance measures and criteria of this approval, all reasonable and feasible measures must be implemented to prevent, and if prevention is not reasonable and feasible, minimise, any material harm to the environment that may result from the construction, operation, rehabilitation, upgrading or decommissioning of the development.	Section 5	Section 5 identifies the management measures to be implemented to prevent, and if prevention is not reasonable and feasible, minimise harm.
B1	Prior to commencing construction, a Construction Environmental Management Plan (CEMP) must be prepared to detail how the performance outcomes, commitments and mitigation measures specified in the EIS will be implemented and achieved during construction to the satisfaction of the Planning Secretary.	Section 2.3 Section 5 The CEMP	The CEMP has been prepared and will be implemented during construction. The CEMP incorporates and responds to all relevant conditions of the Infrastructure Approval and RMMs identified in the EIS, Submissions Report, Amendment Report and Response to DPIE Request for Information. Section 2.3 and Section 5 of this SWMP describe how the commitments of the EIS relevant to soil and water management will be implemented.

Condition no.	Requirement	Where addressed	How addressed						
B2	<p>The following CEMP Sub-plans must be prepared in consultation with the relevant government agencies identified for each CEMP Sub-plan in Table 1.</p> <p>Table 1: CEMP Sub-plans</p> <table border="1"> <thead> <tr> <th></th> <th>Required CEMP Sub-plan</th> <th>Relevant government agencies and stakeholders to be consulted for each CEMP Sub-plan</th> </tr> </thead> <tbody> <tr> <td>(b)</td> <td>Soil and Water</td> <td>DPIE Water Council</td> </tr> </tbody> </table>		Required CEMP Sub-plan	Relevant government agencies and stakeholders to be consulted for each CEMP Sub-plan	(b)	Soil and Water	DPIE Water Council	Section 1.7	This SWMP was provided to DPIE Water and Wentworth Shire Council for consultation. The outcomes of consultation have been incorporated throughout the SWMP where appropriate.
	Required CEMP Sub-plan	Relevant government agencies and stakeholders to be consulted for each CEMP Sub-plan							
(b)	Soil and Water	DPIE Water Council							
B3	Details of all information requested by an agency to be included in a CEMP Sub-plan as a result of consultation must be provided with the relevant CEMP Sub-Plan.	Section 1.7	This SWMP has been developed in consultation with DPIE Water and Wentworth Shire Council. Details of all consultation with DPIE Water and Wentworth Shire Council will be submitted to DPIE along with the submission of this SWMP.						
B4	Any of the CEMP Sub-plans may be submitted along with, or subsequent to, the submission of the CEMP but in any event prior to the commencement of construction.	Section 1.8	This SWMP will be submitted as a CEMP sub-plan to DPIE for review and approval by the Planning Secretary prior to commencing Stage 1 of construction.						
B5	Construction must not commence until the CEMP and all CEMP Sub-plans have been approved by the Planning Secretary. The CEMP and CEMP Sub-plans, as approved by the Planning Secretary, must be implemented for the duration of construction. Where construction of the development is staged, construction of a stage must not commence until the CEMP and sub-plans for that stage have been approved by the Planning Secretary.	Section 1.8	Stage 1 of construction will not commence until the CEMP and all CEMP sub-plans (including this SWMP), or where staging is proposed and the plans required for that stage, have been approved by the Planning Secretary. The CEMP and CEMP sub-plans (including this SWMP) will be implemented for the duration of construction for Stage 1.						
B6	The CEMP and CEMP Sub-plans required under this approval must be prepared by suitably qualified and experienced persons in accordance with relevant guidelines, and include where relevant:	Title page Section 1.6	This SWMP has been prepared by suitably qualified and experienced people and in accordance with relevant guidelines.						
	a) a summary of relevant background or baseline data;	Section 3	The existing environment (including topography, soils, water and contamination) within and adjacent to the Stage 1 disturbance area is outlined in Section 3.						
	b) details of:								
	(i) the relevant statutory requirements (including any relevant approval, licence or lease conditions);	Section 2 Appendix E	The relevant legislation, conditions, RMMs and guidelines applicable to soil, water and contamination are outlined in Section 2. Appendix E provides further detail on the relevant legislation applicable to soil, water and contamination.						

Condition no.	Requirement	Where addressed	How addressed
	(ii) any relevant limits or performance measures and criteria; and	Section 1.5 Section 4.2 of the CEMP – Objectives and targets	The objectives (performance measures) and targets (criteria) relevant to soil, water and contamination management are outlined in Section 1.5 of this SWMP. The CEMP also provides project-wide environmental objectives (performance measures) and targets (criteria).
	(iii) the specific performance indicators that are proposed to be used to judge the performance of, or guide the implementation of, the development or any management measures;	Section 1.5 Section 4.2 of the CEMP – Objectives and targets	The performance indicators relevant to soil, water and contamination management are outlined in Section 1.5 of this SWMP. The CEMP also provides project-wide performance indicators.
	c) any relevant commitments or recommendations identified in the EIS;	Section 2.3	Relevant soil, water and contamination commitments and recommendations identified in the EIS, known as RMMs, have been outlined in Section 2.3.
	d) a description of the measures to be implemented to comply with the relevant statutory requirements, limits, or performance measures and criteria;	Section 5	Specific soil, water and contamination related safeguards and management measures to address potential impacts associated with Stage 1 of construction and comply with the relevant statutory requirements, limits and performance measures are outlined in Section 5.
	e) a program to monitor and report on the:		
	(i) impacts and environmental performance of the development (including a table summarising all the monitoring and reporting obligations under the conditions of this approval); and	Section 6 Section 6.3 Section 6.4 Section 6.5 Section 6.6	Monitoring, inspections, auditing and reporting is outlined in Section 6.3 to 6.6 of this SWMP.
	(ii) effectiveness of the management measures set out pursuant to paragraph (d);	Section 6	Monitoring of the effectiveness of management measures is outlined in Section 6
	f) a contingency plan to manage any unpredicted impacts and their consequences and to ensure that ongoing impacts reduce to levels below relevant impact assessment criteria as quickly as possible;	Section 6.8 Appendix B Section 8 of the CEMP - Incidents and emergencies Section 10 of the CEMP - Reporting Section 11 of the CEMP - Non-compliance, non-conformance, corrective and preventative action	Section 6.8 outlines a contingency plan in the event that unpredicted impacts are identified. In the event of the discovery of any unexpected contamination, the Unexpected Contamination Finds Procedure (Appendix B) will be followed. The CEMP also provides additional detail regarding incidents and emergencies, reporting, non-compliance, non-conformance, corrective and preventative actions.

Condition no.	Requirement	Where addressed	How addressed
	<p>g) a program to investigate and implement ways to improve the environmental performance of the development over time;</p>	<p>Section 1.9 Section 6 Section 1.9 of the CEMP – Continuous improvement</p>	<p>Section 6 of this SWMP outlines procedures for compliance management, including details for monitoring, inspections, auditing and reporting. This SWMP will be reviewed at least annually as described in Section 1.9 of this SWMP and Section 1.9 of the CEMP. The Plan-Do-Check-Act model will be applied to the continuous improvement process, also outlined in Section 1.9 of the CEMP.</p>
	<p>h) a protocol for managing and reporting any: (i) incident, non-compliance or exceedance of any impact assessment criterion and performance criterion;</p>	<p>Section 6.7 Section 6.8 Section 8 of the CEMP - Incidents and emergencies Section 10 of the CEMP – Reporting Section 11 of the CEMP – Non-compliance, non-conformance, corrective and preventative action</p>	<p>Section 6.7 and 6.8 describe the procedures for emergencies, incidents and non-compliances, including those related to soil, water and contamination. Additional detail for managing incidents and emergencies, non-compliances and non-conformances is included in the CEMP. The protocol for reporting of any incidents, non-compliances or non-conformances is included in Section 10 of the CEMP.</p>
	<p>(ii) complaint; or</p>	<p>Section 1.7.3 Community Communication Strategy</p>	<p>A summary of the complaints management procedure and reporting of complaints is included in Section 1.7.3 of this SWMP. The procedure for managing and reporting any complaints is described in the <i>Enquiries, Complaint and Dispute Resolution Management Procedure</i> provided in the CCS. The procedure includes a complaints management process which outlines how SecureEnergy will respond to complaints related to the project.</p>
	<p>(iii) failure to comply with other statutory requirements; and</p>	<p>Section 6.7 Section 8 of the CEMP – Incidents and emergencies Section 10 of the CEMP – Reporting Section 11 of the CEMP – Non-compliance, non-conformance, corrective and preventative action</p>	<p>In the event of failure to comply with statutory requirements, the procedures summarised in Section 6.7 of this SWMP and described in more detail in the CEMP would be followed.</p>

Condition no.	Requirement	Where addressed	How addressed
	i) set out the procedures that would be implemented to: (i) keep the local community and relevant agencies informed about the operation and environmental performance of the development	Section 1.7.2 Community Communication Strategy	The local community and relevant agencies will be kept informed of construction progress and environmental performance through communication tools such as notifications, the project’s mobile van and the project website as summarised in Section 1.7.2 of this SWMP. Detailed information regarding project communication is found in the CCS.
	(ii) receive, handle, respond to, and record complaints;	Section 1.7.3 Community Communication Strategy	Section 1.7.3 of this SWMP summarises the complaints management system, which includes a process to manage complaints including receiving, recording, tracking and responding to complaints within a defined timeframe. The complaints management system is described in detail in the CCS.
	(iii) resolve any disputes that may arise;	Community Communication Strategy Section 7.2 of the CEMP - Complaints management	Section 1.7.3 of this SWMP describes dispute resolution, which is described in detail in the CCS. Wherever possible, complaints will be resolved directly between SecureEnergy and the stakeholder.
	(iv) respond to any non-compliance;	Section 6.7 Section 10.1 of the CEMP - Reporting non-compliances Section 11 of the CEMP – Non-compliance, non-conformance, corrective and preventative action	Section 6.7 of this SWMP outlines that where a non-compliance has been identified, corrective actions will be developed as required and implemented to address the non-conformance that occurred (as described in more detail in the CEMP). Reporting of non-compliances will be undertaken as described in the CEMP.
	(v) respond to emergencies; and	Section 6.7 Section 8.1 of the CEMP – Emergency preparedness and emergency responses	Emergency management and planning including environmental emergencies related to soil, water and contamination will be undertaken in accordance with the Clough management system and relevant procedures as described in Section 6.7 of this SWMP. Additional detail regarding emergency management is described in the CEMP.
	j) a description of the roles and environmental responsibilities, authority and accountability for all relevant employees, as well as training and awareness; and	Table 5.1 Section 6.1 Section 6.2 Section 4.9 of the CEMP – Roles and responsibilities	Section 6.2 identifies that SecureEnergy’s organisational structure and overall roles and responsibilities are outlined in the CEMP. Specific responsibilities for the implementation of mitigation measures are detailed in Section 5 of this SWMP. Training and awareness for all site personnel is outlined in Section 6.1.

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Condition no.	Requirement	Where addressed	How addressed
	<p>k) a protocol for periodic review of the CEMP and associated subplans and programs.</p>	<p>Section 1.9 Section 1.10 of the CEMP – Updating the CEMP</p>	<p>This SWMP will be reviewed at least annually in accordance with the CEMP.</p>
	<p><i>Note: The Planning Secretary may waive some of these requirements if they are unnecessary or unwarranted for particular management plans.</i></p>	<p>Noted</p>	<p>Noted</p>
Water Supply			
D15	<p>The Applicant must ensure that it has sufficient water for all stages of the development, and if necessary, adjust the scale of the development to match its available water supply.</p> <p><i>Note: Under the Water Act 1912 and/or the Water Management Act 2000, the Applicant is required to obtain the necessary water licences for the development.</i></p>	<p>Section 2.4.2</p>	<p>Discussions with Wentworth Shire Council and private water owners regarding water supply volumes and access options have commenced and will be ongoing throughout the project where required.</p>
Erosion and Sedimentation			
D16	<p>The Proponent must:</p>		
	<p>a) minimise erosion and control sediment generation; and</p>	<p>Section 5.1 Table 5.1 – SW5 and SW9</p>	<p>A Certified Professional in Erosion and Sediment Control will prepare the initial ESCP for the project, which will be used as a basis for the development of the Progressive Erosion and Sediment Control Plans (PESCPs).</p> <p>The PESCPs will outline controls to be implemented to minimise soil erosion and sedimentation of waters.</p>
	<p>b) ensure all land disturbances have appropriate drainage and erosion and sediment controls designed, installed and maintained in accordance with <i>Managing Urban Stormwater - Soils and Construction Volume 1</i> (Landcom, 2004) and <i>Managing Urban Stormwater – Soils and Construction Volume 2C Unsealed Roads</i> (DECC, 2008);</p>	<p>Table 5.1 – SW4 Appendix A</p>	<p>An <i>Erosion and Sediment Control Strategy</i> (Appendix A) has been prepared in line with the erosion and sediment principles and requirements of the listed guidelines.</p>
Pollution of Waters			
D17	<p>Unless otherwise authorised by an EPL, the Proponent must ensure the development does not cause any water pollution, as defined under Section 120 of the POEO Act.</p>	<p>Table 5.1 – SW3</p>	<p>No pollution to water, as defined under section 120 of the POEO Act, is to occur, unless authorised by an EPL.</p> <p>There are no watercourses in the immediate vicinity of the Stage 1 disturbance area.</p>
D18	<p>The Proponent must:</p>		
	<p>a) ensure the concrete batching plants and substation are suitably bunded; and</p>	<p>Not applicable to Stage 1 works.</p>	<p>Not applicable to Stage 1 works.</p> <p>A concrete batching plant is not proposed as part of Stage 1 works.</p>

Condition no.	Requirement	Where addressed	How addressed
	b) minimise any spills of hazardous materials or hydrocarbons, and clean up any spills as soon as possible after they occur.	Table 5.1 – SW13 to SW19 Appendix C	Spill kits will be provided in strategic and accessible locations adjacent to chemical storage areas, relevant work area and refuelling area. locations such as If a spill occurs during construction of the project, <i>the Spill Response Procedure</i> will be followed.
D19	The Proponent must ensure that any groundwater dewatering activities do not discharge to watercourses	Not applicable to Stage 1 works.	Not applicable to Stage 1 works. Groundwater dewatering activities are not proposed as part of Stage 1 works.
Riparian Areas			
D20	The Proponent must ensure:		
	a) all waterway crossings are constructed in accordance with the <i>Water Guidelines for Controlled Activities on Waterfront Land</i> (NRAR, 2018), unless DPIE Water agrees otherwise; and	Not applicable to Stage 1 works.	Not applicable to Stage 1 works. Waterway crossings are not required as part of Stage 1 works.
	b) the geomorphic condition of the major rivers and distributary channels crossed by the development is not impacted.	Not applicable to Stage 1 works.	Not applicable to Stage 1 works. The Darling River, Great Darling Anabranh or Murray River are not in the vicinity of the Stage 1 disturbance area.
Flooding			
D21	The Proponent must ensure that the development:		
	a) does not materially alter the flood storage capacity, flows or characteristics in the development area; and	Section 3.3.4 Table 5.1 – SW10	Stage 1 disturbance area is unlikely to experience flooding, and the construction activities proposed are temporary and unlikely to impact flood behaviour or exacerbate existing flooding characteristics.
	b) is designed, constructed and maintained to reduce impacts on surface water, localised flooding and groundwater at the site, unless otherwise agreed by Council.	Section 3.3.4	Not applicable to Stage 1 works. The Stage 1 disturbance area is not identified as flood prone land.
Acid Sulfate Soils			
D22	The Proponent must ensure that any construction activities in identified areas of acid sulfate soil risk are undertaken in accordance with the <i>Acid Sulfate Soil Manual (Acid Sulfate Soil Management Advisory Committee, 1998)</i> .	Not applicable to Stage 1 works.	Not applicable to Stage 1 works. Stage 1 disturbance area is not identified as acid sulfate soil risk prone area.

Condition no.	Requirement	Where addressed	How addressed
Salinity			
D23	The Proponent must ensure that any construction activities in identified areas of moderate to high salinity are undertaken in accordance with the <i>Salinity Training Manual</i> (DPI, 2014) and <i>Book 4 Dryland Salinity: Productive use of Saline Land and Water</i> (NSW DECC, 2008).	Section 3.2.3 Table 5.1 – SW11	No soil salinity data for Stage 1 disturbance area was available at the time of writing this plan. A visual soil salinity inspection will be undertaken prior to ground disturbance. Where saline soil is confirmed, construction activities in areas of moderate to high salinity will be managed in accordance with <i>Book 4 Dryland Salinity: Productive use of Saline Land and Water</i> (NSW DECC 2008) and the <i>Salinity Training Manual</i> (DPI, 2014).
Soil and Water CEMP Sub-Plan			
D24	The Soil and Water CEMP Sub-Plan required under condition B2 must include provisions for:		
	a) ensuring the requirements in conditions D15 to D23 are complied with;	Management of Condition D16 to D23 requirements are outlined in the above rows.	How conditions D15 to D23 are addressed is outlined in the above rows.
	b) managing flood risk during construction;	Section 3.3.4 Section 5.6	The Stage 1 disturbance area is not identified as flood prone land. Section 5.6 includes details relating to flood emergency management in the unlikely event of an extreme flood event.
	c) investigating, assessing and managing contaminated land, soils and groundwater in the development area;	Investigating, assessing and managing contaminated land is addressed in 3.4. and Table 5.1 – SW12. Investigating, assessing and managing soil is addressed in Section 3.2 and Table 5.1 – SW4, SW5 and SW13. Investigating, assessing and managing groundwater is addressed in Section 3.3.5 and Table 5.1 – SW7 and SW8.	Potential contaminants were identified within Stage 1 disturbance area, however, the EIS evaluated the risk of encountering contamination as low. If any suspected contaminated land, soils and groundwater is discovered during the construction of the project, the <i>Unexpected Contamination Finds Procedure</i> will be followed.

Condition no.	Requirement	Where addressed	How addressed
	d) investigating, assessing and managing the potential for asbestos and other hazardous materials in the development area; and	Investigating, assessing and management asbestos and other hazardous material is addressed in Section 3.2.4, 3.4. and Table 5.1 – SW12. Appendix B	The EIS indicates that the risk of naturally occurring asbestos being present within project area is low. No asbestos containing material has been identified within the Stage 1 disturbance area. If any suspected asbestos and/or other hazardous material is discovered during the construction of the project, the <i>Unexpected Contamination Finds Procedure</i> will be followed.
	e) managing any unexpected and/or suspected contaminated land, asbestos and unexploded ordinance excavated, disturbed or otherwise discovered during construction.	Appendix B Table 5.1 – SW12	If any unexpected contaminated land, asbestos and unexploded ordinance is discovered during the construction of the project, the <i>Unexpected Contamination Finds Procedure</i> will be followed.
Final Layout Plans			
E4	Prior to commencing construction, the Proponent must submit detailed plans of the final layout of the development to the Department via the Major Projects website, including: a) details on siting of transmission towers, ancillary infrastructure and / or ancillary facilities; and b) showing comparison to the approved layout. The Proponent must ensure that the development is constructed in accordance with the Final Layout Plans.	Section 1.8	In accordance with condition E4, Final Layout Plans for Stage 1 will be submitted prior to commencing construction.

2.3 Revised mitigation measures

The revised mitigation measures (RMMs) for the project are defined in Appendix G of the Response to DPIE Request for Information. The RMMs relevant to soil, water, and contamination management for the project are detailed in Table 2.2 below. The RMMs provided below are extracts from the Response to DPIE Request for Information. A cross reference is also included to indicate where the measure is addressed within this plan or other project management documents.

The management measures that will be implemented for the project are provided in Section 5 of this plan.

Table 2.2 - Revised mitigation measures relevant to soil and water and contamination

Reference	Revised mitigation measures	Applicable locations	Where addressed	How addressed
SCG1	Locations of transmission line structure foundations, and ancillary construction sites will be positioned to avoid disturbance to any known farm dams where practicable.	Transmission line	This measure is not relevant to Stage 1 works.	Not applicable to Stage 1 works. No known farm dams in the vicinity of Stage 1 disturbance area.
SCG2	Existing areas of waterlogging and poor drainage will be avoided, where possible, with regard to both access tracks and permanent structures.	Locations mapped as moderate to high-risk salinity	Table 5.1	Existing areas prone to waterlogging or poor drainage will be

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Reference	Revised mitigation measures	Applicable locations	Where addressed	How addressed
				identified within the ESCP and PESCPs.
SCG3	Construction materials will be selected to withstand high saline soil and groundwater environment (where applicable).	Locations mapped as moderate to high-risk salinity	Table 5.1	Interaction between construction materials and high saline soil and groundwater environment will be considered during detailed design, where applicable.
SCG4	A review of additional geotechnical and hydrogeology data, and any publicly available mapping of high priority groundwater dependent ecosystems (GDEs) as documented in the latest relevant water sharing plan, will be carried out to confirm the groundwater conditions and to: <ul style="list-style-type: none"> determine if any additional mitigation measures are required to limit groundwater inflows, or impacts to GDEs; and confirm no or minimal impact to groundwater sources as per the minimal impact criteria listed within the Aquifer Interference Policy. 	All locations	Section 3.3.5	The Stage 1 disturbance area is identified as low potential GDEs. No groundwater extraction is proposed within the Buronga substation area and thus is unlikely to result in any groundwater dependent ecosystem impacts in the vicinity of the area.
SCG5	Disturbance to areas of medium risk of contamination will be avoided or minimised where practicable during construction. This includes the position of foundations for transmission line structures and ancillary construction sites. Areas of medium risk of contamination that will be disturbed by construction activities will be further investigated including completion of a site inspection. Where considered to be required, a Phase 2 investigation will be completed in accordance with NEPM 2013. Mitigation measures identified through further investigation will be implemented.	All locations	This measure is not relevant to Stage 1 works.	Not applicable to Stage 1 works. The Stage 1 disturbance area was identified as low contamination risk as per Section 3.4.1.
SCG6	To limit the potential for groundwater inflows, the construction methodology for transmission line structure foundations will ensure that excavations will not occur within 40 metres of the Darling River, Great Darling Anabranh or Murray River. Where groundwater may be encountered, the design and construction methodology will be adjusted to minimise groundwater inflows. The depth of groundwater will be confirmed prior to commencement of construction at each relevant transmission line structure locations.	All locations	This measure is not relevant to Stage 1 works.	Not applicable to Stage 1 works. The Darling River, Great Darling Anabranh or Murray River are not in the vicinity of Stage 1 disturbance area.
SCG7	Direct impacts to registered bores GW088454 (nested), GW087531 and GW600452 will be avoided, where possible. If the bores are:	Transmission line – Registered bores GW088454 (nested),	This measure is not relevant to Stage 1 works.	Not applicable to Stage 1 works. Registered bore GW087531 is located on the opposite side

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Reference	Revised mitigation measures	Applicable locations	Where addressed	How addressed
	<ul style="list-style-type: none"> not required to be removed during construction, then they will be clearly demarcated with a 5x5 metre construction exclusion zone; and are to be removed during construction or unavoidably damaged, then make good provisions will apply in consultation with the registered bore owner. 	GW087531 and GW600452		of Arumpo Road and outside the indicative Stage 1 disturbance area.
SCG8	Prior to ground disturbance in areas of potential acid sulfate soil occurrence (e.g. in low lying areas surrounding former or current lakes and river beds), testing will be carried out to determine the presence of actual and/or potential acid sulfate soils. If acid sulfate soils are encountered, they will be managed in accordance with the <i>Acid Sulfate Soil Manual</i> (ASSMAC, 1998) and Transgrid's HSE Guideline.	All locations	This measure is not relevant to Stage 1 works.	Areas of disturbance subject to Stage 1 of the project were identified as low risk of acid sulfate soils per Section 3.2.2.
SCG9	<p>Prior to ground disturbance, a visual inspection will be undertaken for the presence of saline soils. Areas of known or suspected salinity will be subject to further testing as required.</p> <p>If salinity is confirmed, excavated soils will be managed in accordance with <i>Book 4 Dryland Salinity: Productive use of Saline Land and Water</i> (NSW DECC 2008) and the <i>Salinity Training Manual</i> (DPI, 2014) to manage salinity impacts.</p> <p>Erosion controls will be implemented in accordance with <i>Blue Book</i> (Landcom, 2004).</p>	All locations	Table 5.1	<p>No soil salinity data for the Stage 1 disturbance area was available at the time of writing this plan.</p> <p>A visual soil salinity inspection will be undertaken prior to ground disturbance.</p>
SCG10	Earthworks and construction activities that result in compaction of soils will be limited where possible in areas within 40 metres of the Darling River, Murray River and Great Darling Anabranh to prevent potential impacts to groundwater.	Transmission line – locations adjacent to the Darling River, Murray River and Great Darling Anabranh	This measure is not relevant to Stage 1 works.	<p>Not applicable to Stage 1 works.</p> <p>The Darling River, Great Darling Anabranh or Murray River are not in the vicinity of Stage 1 disturbance area.</p>
SCG11	<p>A bore condition assessment is to be conducted prior and post construction on GW088454 (nested), GW087531 and GW600452 where required to identify any adverse impact to the bores integrity that may have resulted during construction.</p> <p>If impacts are identified, repair or replacement of the bore will be undertaken in discussion with the registered owner.</p>	Registered bores GW088454 (nested), GW087531 and GW600452	Table 5.1	Registered bore GW087531 is located 600m southeast of Buronga. Therefore only registered bore GW087531 is addressed in Section 5 of this plan.
SCG12	Construction materials, spoil and waste will be suitably stored to minimise the potential for soil, groundwater or water quality impacts.	All locations	Table 5.1	Material will be appropriately stored within the construction site compound.
SCG13	The discovery of previously unidentified contaminated material will be managed in accordance with a contamination unexpected finds procedure.	All locations	Table 5.1 Appendix B	If any unexpected suspected contaminated land, asbestos and unexploded

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Reference	Revised mitigation measures	Applicable locations	Where addressed	How addressed
				ordinance is discovered, the <i>Unexpected Contamination Finds Procedure</i> will be followed.
SCG16	<p>A site-specific risk assessment will occur for locations where there is a risk of encountering UXO. The risk assessment will be carried out prior to any activities that could interact with UXO. This will include field verification to validate the historical assessment of UXO contamination and identify appropriate mitigation practices. The risk assessment will occur with input from an appropriate UXO specialist and will identify if and when an explosives engineer is required during site activities.</p> <p>An unexpected finds procedure will be implemented. The procedure will specify the actions that site personnel must take to minimise the risk to and from any UXO encountered.</p> <p>The management actions identified in the risk assessment will be implemented prior to and during all relevant site activities. All personnel conducting intrusive works within an identified UXO area will be provided with appropriate safety and awareness briefing(s) prior to the participating in the intrusive works.</p>	Til Til UXO area Oak Plains UXO area	This measure is not relevant to Stage 1 works.	Not applicable to Stage 1 works. Identified UXO prone areas are not in the immediate vicinity of Stage 1 disturbance area.
HF1	Permanent operational infrastructure and landforms within the transmission line corridor will be designed and implemented/formed to minimise any potential scour and erosion risks associated with surface water runoff.	All locations	Table 5.1	Disturbed surfaces in the immediate vicinity of permanent infrastructure will be shaped to minimise scouring and erosion.
HF2	<p>Detailed construction planning will consider flood risk at construction areas. This will include identification of measures that will be implemented to not worsen flood impacts downstream and on other property and infrastructure during construction up to and including the 1% AEP flood event, and review of site layout and staging of construction works to avoid or minimise obstruction of overland flow paths and to limit the extent of flow diversion required.</p> <p>Procedures as detailed in the flood emergency management procedures will be implemented in response to flood events, including the evacuation of personnel.</p>	Transmission line and construction sites within flood prone land	Section 3.3.4	Not applicable to Stage 1 works. The Stage 1 disturbance area is not identified as flood prone land.
HF3	A water quality monitoring program will be implemented to establish baseline water quality conditions in the Darling River, Darling Anabranh and Murray River prior to construction, and to observe any changes in water quality that may be attributable to the proposal during construction. The frequency, location and duration of sampling will be detailed in the monitoring program, but will include:	Transmission line – Darling River, Darling Anabranh, and Murray River	This measure is not relevant to Stage 1 works.	Not applicable to Stage 1 works. The Darling River, Great Darling Anabranh or Murray River are not in the vicinity of Stage 1 disturbance area.

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Reference	Revised mitigation measures	Applicable locations	Where addressed	How addressed
	<ul style="list-style-type: none"> at least two monitoring locations located downstream and upstream of the proposal on the Darling River, Darling Anabranh and, Murray River; and monitoring for total dissolved solids, total suspended solids, total nitrogen and total phosphorus. <p>Sampling will commence at least 6 months prior to the commencement of construction at each respective location, and then monthly during construction the surfaces in the vicinity of the waterways that were disturbed by proposal activities are adequately stabilised and no longer pose a significant sedimentation risk to the waterways.</p> <p>The monitoring program will include corrective and preventative actions that will be taken to address any water quality issues caused by the proposal, as indicated by the water quality monitoring results.</p>			
HF4	Water supply options and management will be undertaken in accordance with agreements between the construction contractor and Wentworth Shire Council.	All locations	Table 5.1	Discussions with Wentworth Shire Council regarding water supply options have commenced and will be ongoing throughout the project where required.
HF5	<p>Erosion and sediment measures will be implemented in accordance with the principles and requirements in:</p> <ul style="list-style-type: none"> <i>Managing Urban Stormwater – Soils and Construction, Volume 1</i> (Landcom 2004), and <i>Volumes 2A and 2C</i> (NSW Department of Environment, Climate Change and Water 2008), commonly referred to as the 'Blue Book'; <i>Best Practice Erosion and Sediment Control</i> (IESCA – 2008) Transgrid's HSE Guideline; and <i>Guidelines for Controlled Activities on Waterfront Land</i> (NRA 2018). <p>Additionally, any water collected from construction areas would be appropriately treated and discharged to avoid any potential contamination.</p>	All locations	Table 5.1 Appendix A Appendix D	An <i>Erosion and Sediment Control Strategy</i> has been prepared in line with the erosion and sediment principles and requirements of the listed guidelines. Additionally, a <i>Dewatering Procedure</i> has been prepared and outlines the appropriate methods to discharge the water.
HR8	All chemicals, fuels or other hazardous substances will be stored in accordance with the supplier's instructions and relevant legislation, Australian Standards and applicable guidelines. The capacity of any bunded area shall be at least 130 per cent of the largest chemical volume contained within the bunded area. The location of the bunded enclosure/s shall be shown on the site plans.	All locations	Table 5.1	All chemicals, fuels or other hazardous substances will be stored in a bunded area, with the capacity of the bunding sized at 130 per cent of the largest chemical volume. Locations of bunded areas will be shown

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Reference	Revised mitigation measures	Applicable locations	Where addressed	How addressed
				on the ESCP and PESCPs.
HR10	Appropriate spill containment equipment will be provided and located at strategic, accessible locations.	All locations	Table 5.1	Spill kits will be provided in strategic and accessible locations adjacent to chemical storage area, relevant work area and refuelling area. If spills occur during construction of the project, the <i>Spill Response Procedure</i> will be followed.
LP5	Disturbed areas will be stabilised and appropriately rehabilitated as soon as feasible and reasonable following the completion of construction. This will be carried out in consultation with the relevant landholder.	All locations	This measure is not relevant to Stage 1 works.	Not applicable to Stage 1 works. No rehabilitation works proposed as part of Stage 1 works.

2.4 Licences and permits

2.4.1 Environment protection licence

Subject to the outcomes of geotechnical investigations, crushing and screening may be required. If necessary, an Environment Protection Licence (EPL) will be obtained in accordance with POEO Act for the project for the scheduled activity of crushing and screening. The EPL will detail conditions which must be complied with when undertaking the crushing and screening activities. Any relevant conditions of the EPL will be incorporated into this SWMP.

2.4.2 Water licensing and approvals

Water use approval

Under Section 89 of the WM Act, water use approval grants the right for its holder to use water for a particular purpose at a particular location. However, under section 5.23 of the EP&A Act, the project is exempt from requiring a water use approval.

Water access licence

Section 60A of the WM Act requires that a water access licence (WAL) to be obtained in order to extract water from a water source, such as a river, lake or surface water runoff, or an aquifer, in water-sharing plan areas. It is an offence to take water from a water source without a water access licence.

The project will purchase water from the existing water market within the region or from local council facilities under existing WAL arrangements. Water will be purchased under standard supply/purchase agreement with various water suppliers/landholders who holds existing WAL agreements. As part of the ongoing discussions with potential water suppliers, water supply locations would be confirmed during final negotiations with the water supplier. Ongoing consultation with water suppliers may also identify other water sources that may be used for the construction of the proposal which would be secured under standard supply/purchase agreement from existing facilities. Proposed water supply points are listed in Section 3.3.7.

As part of the ongoing discussions, the project will ensure that the existing WAL arrangements have adequate water entitlement and allocation such that there is sufficient water for the applicable stages

of construction. Where necessary, the amount of water used will be allocated depending on the project activity at the time, or additional water supply will be sought in consultation with Transgrid.

SecureEnergy will request for a copy of the existing WAL agreements held by the water suppliers/landholders. The details of the licences will be checked to confirm the water to be purchased is regulated and eligible for project use. Copies of licences will be saved on to the project document management and storage system.

Water management works approval

As all water will be purchased under existing licence agreements with the various water suppliers/landholders, water will be extracted from existing water supply points. The water supply points will be identified once ongoing discussions with potential water suppliers are finalised. It is anticipated that a series of existing water supply points will provide connection points to existing water supply pipelines. Proposed water supply points are listed in Section 3.3.7.

No new extraction infrastructure is proposed for the project. However installation of connection points such as piped connections or standpipes to the existing water supply points are required for certain water supply points. Further details on installation of connection to water supply points are provided in Section 3.3.7.

It should also be noted that under section 5.23 of the EP&A Act the project is exempt from requiring a water management works approval.

2.5 Guidelines

The guidelines, specifications and policy documents referenced in this plan includes:

- *Managing Urban Stormwater: Soils and Construction Volume 1* (Landcom, 4th Edition March 2004) and Volume 2D Main Roads Construction (DECC 2008) - commonly referred to as the 'Blue Book';
- *Managing Urban Stormwater – Soils and Construction, Volumes 2A and 2C* (NSW Department of Environment, Climate Change and Water 2008) - commonly referred to as the 'Blue Book'; and
- *Best Practice Erosion and Sediment Control* (IESCA – 2008).

3 Existing environment

This section summaries the existing environmental setting relating to aspects of soil, water and existing contamination within and adjacent to Stage 1 of the project. The information below is from Chapter 15 and 20 of the EIS, Technical Paper 6 (Hydrology, flooding and water quality), Technical Paper 12 (Phase 1 contamination assessment), and the Amendment Report.

3.1 Topography

The topography of the project is largely flat with gentle slopes towards the existing large watercourses including the Darling River, Darling Anabranch and the Murray River. The general topography of the project area for Stage 1 comprises of a gentle undulating slope of approximately 1% gradient running from north-east to south-west. Buronga substation sits on a local elevated point of approximately 52m Australian Height Datum (AHD).

Potential archaeological deposit number 27 (PAD27), which is outside the indicative disturbance area of Stage 1 of construction, is the local high point at approximately AHD of 56m. Refer to the *Heritage Management Plan* (45860-HSE-PL-D-0009) for further details regarding PAD27.

3.2 Soils

3.2.1 Geology and soils

Published geological mapping data indicates Buronga substation is situated on a surficial layer of aeolian sediments of the Woorinen Formation from the Quaternary period. This material includes alluvial flood plains, dune sands and swamp or lake deposits.

The soils in the vicinity of the Buronga substation are expected to be generally comprised of calcarosols soils according to Australian Soil Classification (CSIRO, 2016). Technical Paper 12 (Phase 1 contamination assessment) provides a findings summary from previous investigation. Findings from the following investigations are as follows:

- *Douglas Partners (2020a), Report On Geotechnical Investigation, South Australia Border To Balranald* indicate that there is a general absence of a distinct topsoil layer along the alignment, the upper 300 mm of soil typically contained some roots or rootlets from the surface vegetation throughout the landscapes. Surface soils have a moderate to high potential for dispersion; and
- *Douglas Partners (2020d), Geotechnical Investigation, PEC – Proposed Buronga Substation Expansion, Arumpo Road, Buronga* concluded that the general subsurface soil profile primarily consists of natural Clayey Sands and Sands. The geotechnical logs from the investigation does not indicate any areas of fill material.

3.2.2 Acid sulfate soils

Acid sulfate soils (ASS) and potential acid sulfate soils (PASS) are naturally occurring soils containing iron sulfides. The EIS concluded there is a low risk of acid sulfate soils occurring across the project corridor, with the potential exception of low lying areas surrounding lakes and river beds, which are mapped as potentially containing acid sulfate soils.

Published maps provided in the EIS indicates that Buronga substation is situated on land marked as extremely low probability of ASS occurrence. Hence, no ASS or PASS are anticipated to be encountered during Stage 1 of the project.

3.2.3 Soil salinity

Dryland salinity is the accumulation of salts in the soil surface and groundwater in non-irrigated areas. The majority of the project corridor is mapped as having low salinity potential, with no mapped areas of high salinity soils.

Soil salinity risk mapping included in Technical Paper 12 (Phase 1 contamination assessment) indicates no dryland salinity or saline land in the locations that will be affected by the Stage 1 scope

of works. Technical Paper 12 (Phase 1 contamination assessment), however, goes on to indicate “*Geotechnical testing has indicated that while saline soils would likely be encountered within the proposal study area, this is not likely to present a significant contamination risk*”. No site-specific soil salinity data for locations that would be affected by the Stage 1 scope of works was available at the time of writing this plan. Prior to the commencement of ground disturbance associated with the Stage 1 of the project, a visual assessment will occur in the areas that will be affected to confirm the presence of saline soils. Refer to Table 5.1 for further details.

3.2.4 Naturally occurring asbestos

Naturally occurring asbestos refers to the mineral component found within natural component of soils or rocks. The EIS concluded there are no mapped areas indicating naturally occurring asbestos minerals to be present within the disturbance area for Stage 1 of the project. Therefore, no naturally occurring asbestos impacts are expected during Stage 1 of the project.

3.3 Water

3.3.1 Rainfall

Climatic data including temperature, rainfall and humidity were obtained from the Bureau of Meteorology (BoM) for Mildura Airport automatic weather station (AWS) (Station ID: 076031) located approximately 21km to the southwest of Buronga substation and 16km to the west of the closest transmission line.

Table 3.1 provides a summary of the climate statistics for Mildura Airport AWS from 1946 to 2020.

Table 3.1 - Summary of climate statistics for Mildura Airport AWS

Month	Temperature (1946 to 2020)		Rainfall (1946 to 2020)		Mean 9am condition (1946 to 2020)			Mean 3pm condition (1946 to 2020)		
	Max (°C)	Min (°C)	Mean rainfall (mm)	Mean days of rain	Temp. (°C)	Relative humidity (%)	Wind speed (km/h)	Temp. (°C)	Relative humidity (%)	Wind speed (km/h)
Jan	32.5	16.8	21.9	2.5	21.7	52	15.7	30.5	27	16.9
Feb	31.8	16.5	21.5	2.1	20.9	56	14.5	29.9	30	16
Mar	28.5	13.9	19.4	2.4	18.5	61	13.4	27.1	33	15.6
Apr	23.7	10.2	19.5	2.8	14.9	68	11.6	22.7	40	15.4
May	19.1	7.4	25.3	4.1	10.8	81	9.5	18.3	50	15.1
Jun	16	5.2	22	4.6	7.8	88	9.4	15.3	56	15.6
Jul	15.5	4.4	24.7	5.1	7.1	86	10.4	14.6	54	17.3
Aug	17.3	5.2	25.2	5.1	9.1	78	12.8	16.4	47	19.3
Sep	20.6	7.3	26.6	4.3	12.7	67	15.7	19.4	40	19.7
Oct	24.2	9.8	28.2	4.4	16.1	57	17.4	22.6	34	19.7
Nov	27.7	12.6	25.9	3.6	18.4	53	16.6	25.9	30	18.4
Dec	30.4	15	25.5	2.8	20.5	50	16	28.4	27	18.1
Annual average	23.9	10.4	285.8 *	43.8 *	14.9	67	13.6	22.6	39	17.3

Note: * = annual total

In addition, Technical Paper 6 (Hydrology, flooding and water quality) obtained data from Irymple weather station (station number: 076015), located approximately 16km south of Buronga substation. Irymple weather station recorded an average annual rainfall of 271mm between 1908–2020. The

data showed rainfall occurs fairly evenly across the year, with higher peak rainfall values from November to April.

Due to the low average rainfall values and relatively low gradient of the topography, generally limited surface water run-off is expected to be generated from the catchment.

3.3.2 Waterbodies and watercourses

There are no watercourses in the immediate vicinity of the Buronga Substation. The closest waterbodies to the Buronga substation are Gol Gol Swamp and Gol Gol Lake, which are located around 1.5km to the south-west. These large freshwater bodies are temporal systems. Gol Gol Lake is 494 hectares in size and is situated north-east of Gol Gol Swamp. Historically, the lake and swamp would have received water from the Murray River however the waterbodies are now disconnected due to a number of flow control structures that were installed in the 1950s. Generally the potential for water quality impacts to these waterbodies is considered to be very low to negligible, given the distance of Gol Gol Swamp and Gol Gol Lake to the project area of Stage 1, that lack of watercourses generally in the locality and the generally flat topography.

3.3.3 Water quality

Water quality for Gol Gol Swamp and Gol Gol Lake were not assessed as part of the EIS. However, water quality within the nearby water catchment is known to be impacted by existing land uses, particularly agricultural activities. Surface water run-off from agricultural areas is commonly identified as a diffuse source of high levels of nutrients, with this run-off being captured in major watercourses resulting in degradation of water quality.

The existing water quality for the nearby Murray-Darling Basin has been monitored and assessed by a range of external management plans and other documents. The State of the Catchment (OEH, 2010), and National Water Quality Assessment (Sinclair Knight Merz, 2011) identified that levels of phosphorus and turbidity often exceeded the trigger values provided in the *Australian and New Zealand Guidelines for Fresh and Marine Water Quality* (ANZECC and ARMCANZ, 2000).

The EIS concluded that the existing water quality within the project area predominately exceeds the water quality trigger values outlined in the *Basin Plan Annual Report 2018-2019* (MDBA, 2020) for nutrients (nitrogen and phosphorus), pH, turbidity and dissolved oxygen. It should also be noted that no background water quality monitoring was carried out as part of the EIS assessment. As such, the EIS has not identified the water quality levels specifically within the disturbance area for Stage 1 of the project

3.3.4 Flood prone land

The historical flood patterns of the project area are highly variable due to the semi-arid climate, sporadic rainfall, drought events and the topography.

A high-level flood risk assessment was completed in 2020 to understand the potential extent of flooding in the vicinity of the project with key findings included in Technical Paper 6 (Hydrology, flooding and water quality). The flood risk assessment found that the Buronga substation area is located out of the floodplain with Gol Gol Lake being the nearest flooded area.

The locations where works are proposed around the Buronga substation are unlikely to experience flooding, and the construction activities proposed in this location are temporary and unlikely to impact flood behaviour or exacerbate existing flooding characteristics beyond the Stage 1 work area.

3.3.5 Groundwater

Local groundwater levels vary across the wider project area due to influences from surface water features, climatic conditions and localised geological controls, such as topography and the presence of perched shallow aquitards.

Previous geotechnical investigations conducted for EnergyConnect (NSW – Western Section) the EIS concluded that groundwater levels generally range from 2.8 to 12.5m below ground level. This water level is inferred to be associated with upper aquifers, including:

- unconfined perched aquifers; and
- unconfined alluvial aquifers, within a few kilometres of major surface water bodies.

Technical Paper 12 (Phase 1 contamination assessment) provides a findings summary from previous investigations. Findings from the investigation *Douglas Partners (2020d), Geotechnical Investigation, PEC – Proposed Buronga Substation Expansion, Arumpo Road, Buronga* noted that no free groundwater was observed during the geotechnical investigation at Buronga substation.

As per the EIS and upon review of the groundwater dependent ecosystems (GDEs) via Groundwater Dependent Ecosystems Atlas, the locations that will be affected by the Stage 1 scope of works, specifically Buronga, have been identified as a low potential GDE. Refer to Figure 3.1 below. In addition, no groundwater extraction is proposed within the Buronga substation area and thus is unlikely to result in any groundwater dependent ecosystems impacts in the vicinity of the area.

3.3.6 Registered groundwater bores

Technical Paper 13 (Groundwater impact assessment) identified 53 registered bores under the BoM's National Groundwater Information System. Only one registered bore, GW087531, is located in proximity to the locations that will be affected by Stage 1 of the Project. GW087531 is located approximately 600m south of Buronga Substation, on the south side of Arumpo Road. Refer to the Figure 3.2 for the location of the bores.

There are no direct impacts proposed to GW087531, however given the close proximity of the bore to Stage1 works, GW087531 will be subjected to a bore condition assessment as part of the Stage 1 of the project.

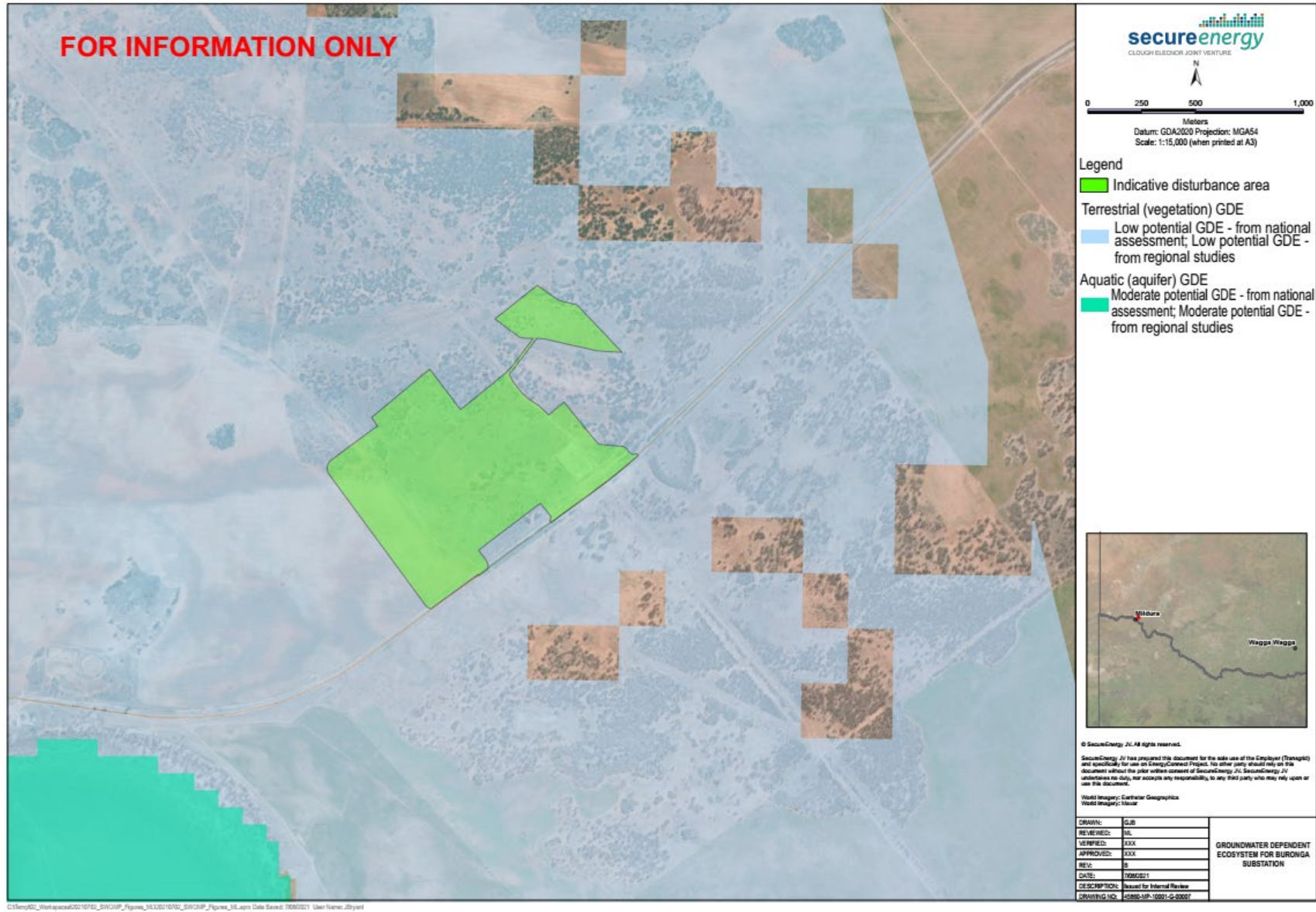


Figure 3.1 - Low potential groundwater dependent ecosystem near Buronga substation

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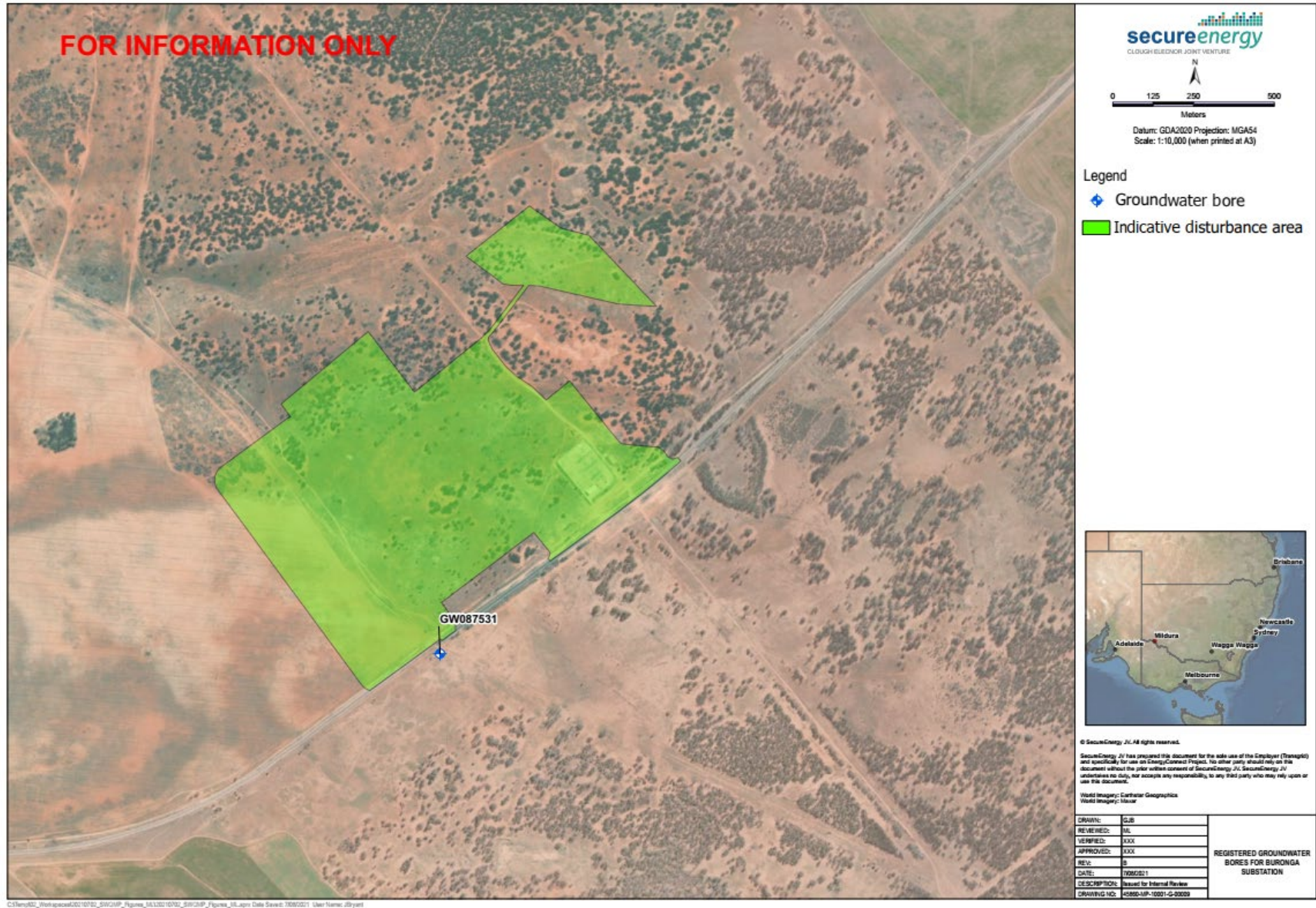


Figure 3.2 - Registered groundwater bores near Buronga substation

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3.3.7 Water supply points

A series of water supply points have been identified in the EIS as suitable connection points to existing water supply pipelines. The water supply points nominated for the project are provided in Table 3.2 below. No new extraction infrastructure from existing watercourses is being proposed as part of the project. Water will be purchased under licensing agreements with the various water suppliers/landholders as required. These agreements are part of ongoing discussions and final locations will be determined during final negotiations. Additional water supply points may also be identified as the detailed design stage is progressed in order to reduce the distance and number of vehicle movements associated with water supply.

Table 3.2 - Water supply points

Location	Type	Description
Alcheringa Road, Buronga	Non-potable	<p>This site would be located at the point of the existing Buronga re-lift pump station operated by Western Murray Irrigation pipeline.</p> <p>The area is currently cleared and adjacent to Alcheringa Road. It is estimated that, at peak construction, the site would accommodate up to 20 loads per day (indicatively using between 15,000 and 40,000L water trucks).</p> <p>Preliminary survey works have been undertaken and indicate there are existing and readily accessible water supply points at Alcheringa Drive, Buronga. However, the Alcheringa Drive supply point will require the following augmentation to the existing air valve and offtake:</p> <ul style="list-style-type: none"> • limited horizontal pipework; • supports for new pipework; and • a mechanical meter. <p>In addition, minor civil works is require to allow access to this water supply point which includes the installation of a gravel access track. Refer to Figure 3.3 below. The layout and design of the access track is subject to change during detailed design phase.</p>
Modica Crescent Buronga	Potable	<p>Water supply from this site will be filled through a metered hydrant from the water main on the side of the road. No installation of new standpipe and connection works is anticipated.</p>

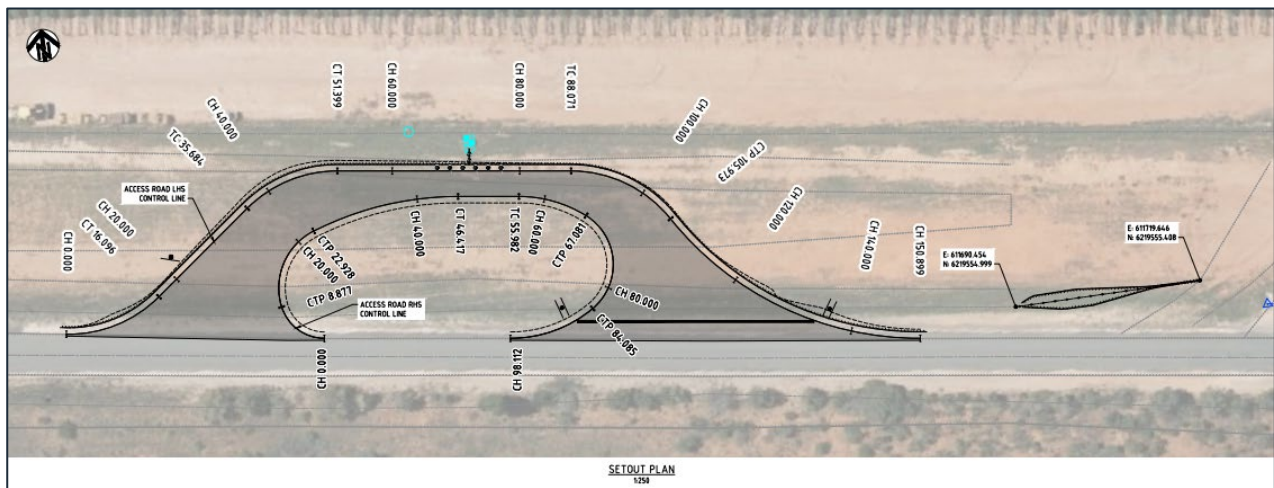


Figure 3.3 - Indicative works for water supply point at Alcheringa Road, Buronga

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3.4 Contamination

3.4.1 Site history

A desktop contamination assessment was undertaken as part of the EIS. The majority of the land within the project corridor is agricultural land with no significant development and sparsely intersected by infrastructure such as roads and electrical easements.

A search of the NSW EPA contaminated land database was undertaken in July 2020 as part of the desktop assessment. No records were identified within the project corridor.

The EIS concluded there was no evidence to suggest gross contamination in the soils and groundwater within the project area for Stage 1. However, the EIS reviewed previous investigations and historical aerial photographs, and identified the existing Buronga substation as an area where there is the potential to encounter contamination during construction. The EIS determined the preliminary risk evaluation is low. Refer to Table 3.3 for further details. Any such contamination would most likely be limited to areas within the existing substation only.

It should be noted that the *Preliminary Site Investigation For Contamination, Project EnergyConnect – Proposed Buronga Substation Expansion, Arumpo Road, Buronga* included limited soil testing. As such, contamination could be encountered during construction. Any unexpected contamination find encountered during construction would be managed through the *Unexpected Contamination Finds Procedure* (45860-HSE-PR-G-1003).

Table 3.3 - Area of potential contamination

Area of potential contamination	Potential contamination source	Potential contaminants	Potential for encountering contamination	Preliminary risk evaluation
Buronga substation	Spills from maintenance activities on-site, leaks of transformer oils.	Potential contaminants including hydrocarbons, polychlorinated biphenyls (PCBs), benzene, toluene, ethylbenzene, xylene and naphthalene (collectively referred to as BTEXN).	Medium potential for contaminants to be present within existing substation. Low potential for groundwater contamination.	Low

3.4.2 Unexploded ordnance

The Oak Plains Unexploded Ordnance (UXO) area is located to the south east of Arumpo Road and approximately 2km away from the existing Buronga substation as shown in Figure 3.4 which there is a substantial occurrence of UXO reported. The existing 220kV transmission line currently passes through the Oak Plains UXO area.

The project area also crosses the Til Til (NSW) UXO area east of Pooncarie Road in which there is a slight occurrence of UXO.

Stage 1 of the project does not directly interact with the Oak Plains and Til Til UXO areas. However, during Stage 1 works there may be indirect interaction with the identified UXO areas through the use of access roads (such as Sliver City highways and local roads). The likelihood for direct interaction with UXO via vehicle movement would be low. Refer to Table 5.1 for the management measures in relation to UXO.

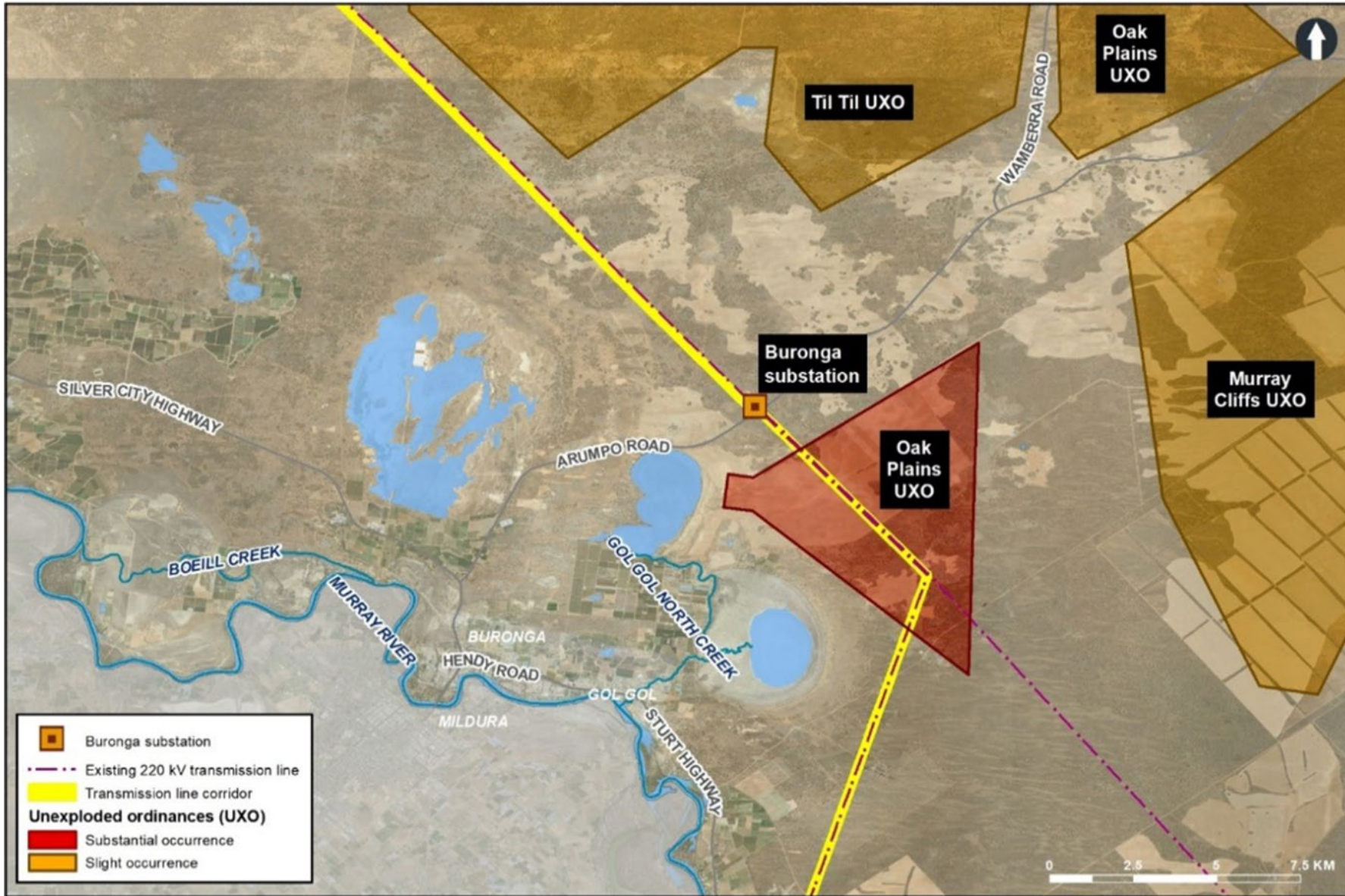


Figure 3.4 - Oak Plains UXO area as shown in Submissions Report

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4 Environmental aspects and impacts

4.1 Construction activities

An environmental aspect is an element of an organisation's activities, products, or services that has or may have an impact on the environment (ISO 14001 Environmental Management Systems). The relationship of aspects and impacts is one of cause and effect.

Key aspects of Stage 1 that could result in adverse impacts to soil and water quality or contamination include:

- surface and/or ground disturbance as a result of vegetation clearing and grubbing;
- surface and/or ground disturbance as a result of ground excavation and earthworks;
- surface and/or ground disturbance as a result of vehicular and machinery movements;
- encountering unexpected existing contaminated/hazardous material as a result of surface and/or ground disturbance; and
- spills and leaks during the operation of plant and machinery, chemical handling or refuelling activities.

4.2 Impacts

The potential for impacts on soil and water will depend on a number of factors. Primarily impacts will be dependent on the nature, extent and magnitude of construction activities and their interaction with the natural environment.

The potential impacts to soil, water and contamination attributable to Stage 1 works might include:

- erosion and sedimentation due to surface and/or ground disturbance;
- reduction soil and/or water quality from spills or leaks;
- soil contamination; and
- health and safety impacts when encountering unexpected contamination finds.

5 Management measures

5.1 Erosion and sediment control

An *Erosion and Sediment Control Strategy* (ESCS) (45860-HSE-DOC-D-0002) has been prepared and provided in Appendix A. The ESCS describes the project's approach to minimising erosion and managing sediment generation for the project. The ESCS outlines the overarching principles to be considered and integrated into the development of the Erosion And Sediment Control Plan (ESCP) and any Progressive Erosion and Sediment Control Plans (PESCPs) required for the work area.

A Certified Professional in Erosion and Sediment Control will prepare the initial ESCP for the project. Environmental staff will then typically use the ESCP as a basis to develop PESCPs in consultation with Project Engineers, Superintendents and Supervisors. This will ensure that erosion and sediment control management is incorporated into the planning stage of construction activities and is coordinated in its approach. PESCPs will be updated as required as sites and associated erosion and sediment control requirements change.

The Environmental Manager will approve PESCPs in the first instance. Minor changes thereafter will be approved by environment staff in consultation with the Environmental Manager, as required. PESCPs are designed for use as a practical guide and may be produced in conjunction with Work Packs or WMSs.

5.2 Stockpile management

The project will utilise temporary stockpiles to store excess topsoil and subsoil material from stripping and earthworks activities. The following techniques will be applied to the management of stockpiles:

- the location of stockpiles will be planned in advance of topsoil stripping and bulk earthwork. Stockpile locations will be selected such that they are:
 - away from areas of retained vegetation (such as biodiversity exclusion zones);
 - where practicable located on slopes less than 10%;
 - positioned such that erosion of the stockpile and the surrounding area is minimised;
- stripped topsoil will be stockpiled separately from woody material and vegetation;
- as required by the PESCP, clean water diversions will be installed upslope of stockpiles and sediment controls will be installed downslope; and
- stockpiles will be appropriately stabilised to minimise the risk of erosion. The PESCP will detail requirements in relation to stabilisation with stabilisation based on the size of the stockpile, the duration that the stockpile will remain in place and proximity to watercourses.

In relation to stockpiling of waste, the project will avoid or reduce waste generation where practicable. Where avoiding or reducing waste is not possible, waste is to be reused, recycled, or recovered. Waste separation and segregation will be promoted on-site to facilitate reuse and recycling as a priority of the waste management program as follows:

- waste segregation onsite – waste materials will be separated onsite according to waste streams and relevant classifications into dedicated bins/areas for either lawful reuse or collection by a waste contractor to offsite facilities lawfully permitted to receive the material; and
- waste separation offsite – wastes to be deposited into one bin where space is not available for placement of multiple bins, and the waste is to be sorted offsite by a waste contractor.

5.3 Reuse of treated wastewater

As water is a valuable resource within Western NSW, the project will reuse the wastewater produced from the wastewater treatment plants as part of the construction processes to minimise the volume taken from other local sources.

Wastewater treatment plants (WWTPs) would be established at the accommodation camp sites to manage wastewater generated from construction compounds and accommodation camps (including but not limited to showers, kitchens, laundries, toilets, and other facilities). Refer to the *Accommodation Camp Management Plan* (45860-HSE-PL-G-1027) for further information on the management and operation of the WWTPs.

The treated wastewater will be discharged to a basin type structure (turkey's nests/storage pond) lined with high density polyethylene/geosynthetic clay liner, the wastewater will then be collected and transported via water carts or similar devices for reuse in the following, but not limited to opportunities:

- use in dust suppression on roads;
- use in compaction of soils;
- use in the emplacement areas;
- wheel wash sites; and
- general washdown of equipment.

Wastewater will not be discharged to watercourses or other water bodies. Wastewater is not to be used near food crops or food pastures.

A *Dewatering Procedure* (45860-HSE-PR-G-1006) has been developed and provide in Appendix D. The Dewatering Procedure addresses the following:

- reinforces the project need for wastewater reuse;
- provides detail on the treated wastewater quality objectives;
- outlines the water quality testing process; and
- outlines the process to manage the application of the treated wastewater.

Prior to the application of treated wastewater to land, the following factors will be considered to understand if the environment has the capacity to receive the additional water loading:

- the existing soil conditions;
- existing environmental aspects such as salinity or flood prone areas;
- the likelihood of potential runoff at the application areas;
- distance from sensitive receivers and aquatic environments; and
- previous and upcoming climatic and weather conditions.

The consideration of these aspects is provided within the *Dewatering Procedure*.

5.4 Unexpected contamination finds

Contamination means the presence in, on or under land or any other aspect of the environment of a substance, gas, chemical, liquid or other matter, whether occurring naturally or otherwise, which is:

- a) at a concentration above the concentration at which the substance, gas, chemical, liquid or other matter, whether occurring naturally or otherwise, is normally present in, on or under land or any other aspect of the environment in the same locality, being a presence that presents a risk of harm to human health or any other aspect of the environment; or
- b) toxic, flammable or otherwise capable of causing harm to humans or damage to the environment including asbestos (man-made or naturally occurring), toluene, polychlorinated biphenyls, lead based paints, glues, solvents, cleaning agents, paints, water treatment chemicals and acid producing spoil.

Contamination that may not have been detected during previous investigations may be discovered during Stage 1 of the project, particularly during earthworks activities. Such contamination may be discovered due to observations such as:

- odour;
- unusual discolouration or staining of soil or rock;
- seepage of unusual liquids from soil or rock;
- unusual colour, odours, or sheens on groundwater and/or surface water;
- unusual metal objects or other foreign debris;
- presence of oil;
- presence of waste or rubbish above or below ground; and
- actual or potential asbestos or asbestos containing material.

In such instances, action is required to manage the potential contaminated soil/material encountered during excavation or construction activities. If potentially contaminated material is encountered, the *Unexpected Contamination Finds Procedure* (45860-HSE-PR-D-0003) will be followed.

Works in the vicinity will be stopped or modified and will not recommence until the material has been analysed and management measures developed. The actual or potential contaminated material will be segregated. Segregated locations will be determined on site in consultation with engineers and construction supervisors.

5.5 Disposal of contaminated material

Where contaminated material requires removal from site, the classification, transport and disposal will be carried out in accordance with the *Waste Management Plan* (45860-HSE-PL-D-0013) prepared for Stage 1 of the project. Key actions from the *Waste Management Plan* include:

- all waste material that is to be disposed of off the project will be dealt with in accordance with the POEO Act and *Waste Classification Guidelines Part 1: Classifying Waste* (EPA, 2014);
- wastes that are unable to be reused or recycled will be disposed of at a licensed waste management facility, or a place lawfully permitted to accept such waste;
- hazardous waste and wastes regulated under a Chemical Control Order will be managed by appropriately qualified and licensed contractors, in accordance with the requirements of the *Environmentally Hazardous Chemicals Act 1985*;
- a waste register will be maintained, detailing types of waste, amounts, date, and details of disposal; and
- a section 143 notice under the POEO Act will be obtained (from the landowner) should waste be transported to a site which is not licensed under the POEO Act to accept such waste. Sites and/or facilities licensed for receipt of waste under the POEO Act will not require a section 143 notice.

5.6 Flood emergency management

A *Flood Response Plan* (45860-HSE-PL-D-0010) has been prepared for the project and forms part of the *Traffic and Transport Management Plan* (45860-HSE-PL-D-0004) in accordance with condition D40 e) of the Infrastructure Approval.

For Stage 1 of the project, Buronga substation, Buronga construction compound and accommodation camp, and the earthworks material sites are highly unlikely to experience flooding as the area is located outside of the floodplains at 1% AEP.

The Flood Response Plan details the procedure and options for safe access to and from the site in the event of an extreme flood event. Section 4 of the Flood Response Plan outlines the actions to

be undertaken in preparation for a flood event as well as the appropriate flood response and evacuation routes to take in the event of a flood.

The substation design will consider drainage lines such that internal surface runoff will drain into pipe and pits network. It is anticipated that the substation site would be designed to be situated 3m above the existing ground level therefore surface water and localised flooding outside the substation boundary would not impact the substation area.

Temporary construction areas such as the accommodation camps and construction compound will be designed to also include drainage lines such that external runoff would not drain into the site and internal surface runoff will drain into the designated sediment basin where the water will be reused for construction activities. This will therefore assist in mitigating localised flooding.

5.7 Soil and water management measures

A range of environmental requirements and mitigation measures are identified in the EIS, Response to DPIE Request for Information and Infrastructure Approval. Safeguards and management measures will be implemented to minimise or manage soil, water and contamination impacts.

Specific soil, water and contamination related safeguards and management measures to address impacts associated with Stage 1 of the project are outlined in Table 5.1.

Table 5.1 - Soil and water management measures

ID	Measurement/Requirement	When to implement	Responsibility	Source document
General				
SW1	Training will be provided to all project personnel, including relevant sub-contractors on soil and water management measures and the requirements from this plan through inductions, toolboxes and targeted training.	Pre-construction and construction	Environmental Manager, HSSE team	Good practice
SW2	The interaction between construction materials and high saline soil and groundwater environment will be considered during detailed design, where applicable.	Pre-construction and construction	Design Manager	RMM SCG3
SW3	No pollution to water, as defined under section 120 of the POEO Act, is to occur, unless authorised by an EPL.	Pre-construction and construction	Environmental Manager	Condition D17
Erosion and sediment control				
SW4	<p>An <i>Erosion and Sediment Control Strategy</i> (ESCS) (45860-HSE-DOC-D-0002) provided in Appendix A has been prepared in line with the principles and requirements in:</p> <ul style="list-style-type: none"> • <i>Managing Urban Stormwater – Soils and Construction, Volume 1</i> (Landcom 2004), commonly referred to as the 'Blue Book'; • <i>Managing Urban Stormwater – Soils and Construction, Volumes 2A and 2C</i> (NSW Department of Environment, Climate Change and Water 2008); • <i>Best Practice Erosion and Sediment Control</i> (IESCA – 2008); • Transgrid's HSE Guideline; and • <i>Guidelines for Controlled Activities on Waterfront Land</i> (NRA 2018). <p>The ESCS will be implemented to guide the development of the ESCP and PESCPs for the project.</p> 	Construction	Environmental Manager	Condition D16 b) RMM HF5 RMM SCG9
SW5	<p>A Certified Professional in Erosion and Sediment Control will prepare the initial Erosion and Sediment Control Plan (ESCP) for the project, which will be used as a basis for Progressive Erosion and Sediment Control Plans (PESCPs) development.</p> <p>PESCPs will be prepared and implemented for locations where soil disturbance will occur. The PESCPs will outline controls to be implemented to manage and aim to minimise soil erosion and movement of sediment and other pollutants to land and/or waters.</p> <p>The PESCPs will be progressively updated throughout the project to reflect the current construction activities occurring on site and to allow the removal of any measures that are ineffective or no longer needed.</p>	Pre-construction and Construction	Certified Professional in Erosion and Sediment Control Environmental Manager	Condition D16 a) RMM HF5
SW6	Location of known heritage items, specifically PEC-W-PAD27 and PEC-W-103 for Stage 1 works will be considered during the preparation of PESCPs to ensure that potential harm due to surface water runoff from site is avoided or minimised.	Construction	Environmental Manager, Supervisor	RMM AH7

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EnergyConnect (NSW – Western Section) Stage 1 Soil and Water Management Plan

ID	Measurement/Requirement	When to implement	Responsibility	Source document
	Refer to the <i>Heritage Management Plan</i> (45860-HSE-PL-D-0009) for further details regarding heritage items (PEC-W-PAD27 and PEC-W-103).			
SW7	Disturbed surfaces in the immediate vicinity of permanent infrastructure will be shaped to avoid concentrating flows and reduce surface water runoff velocities to minimise the potential for scour and erosion.	Pre-Construction, construction	Design Manager, Environmental Manager	RMM HF1 Condition D16 a)
SW8	Any existing areas prone to waterlogging or poor drainage will be identified within the PESCP and will be avoided during construction where possible.	Construction	Environmental Manager	RMM SCG2 Condition D21 b)
SW9	Construction materials and spoil will be appropriately stored on site and within the construction site compounds with the aim to minimise erosion and sediment-related impacts in adjacent areas.	Construction	Supervisor, Environmental Manager	RMM SCG12
SW10	The project will not materially alter the flood storage capacity, flows or characteristics in the development area or off-site.	Construction	Design Manager, Environmental Manager	Condition D21 a)
Additional soil assessment and management				
SW11	A visual inspection will be undertaken for the presence of saline soils prior to ground disturbance to areas. Areas of known or suspected salinity will be subject to further testing as required. If salinity is confirmed in areas of moderate to high salinity, construction activities will be managed in accordance with <i>Book 4 Dryland Salinity: Productive use of Saline Land and Water</i> (NSW DECC 2008) and the <i>Salinity Training Manual</i> (DPI, 2014).	Construction	Environmental Coordinator, Environmental Manager, Supervisor	RMM SCG9 Condition D23 Condition D24 c)
Unexpected contamination find				
SW12	Promptly notify the Site Supervisor or Environmental Manager of any suspected or actual contamination exposed during construction activities. Cease all work activities within the vicinity of actual or suspected contaminated land. The <i>Unexpected Contamination Finds Procedure</i> (45860-HSE-PR-D-0003) provided in Appendix B is to be followed.	Construction	All personnel	Condition D24 d) and e) RMM SCG13 CLM Act
Chemicals, fuels or other hazardous substances				
SW13	Construction materials such as fuels, chemicals, vehicles and equipment will be appropriately stored to minimise the introduction of contaminants to the existing soil, groundwater and surface water runoff.	Construction	Supervisor, Engineer, Environmental Coordinator	RMM SCG12
SW14	All chemicals, fuels or other hazardous substances will be stored in accordance with the supplier's instructions, any relevant legislations or Australian Standards or the applicable guidelines.	Pre-construction and construction	Supervisor, Environmental Manager	RMM HR8
SW15	All chemicals, fuels or other hazardous substances will be stored in a bunded area, with the bunding sized at of 130 per cent of the largest chemical volume contained within the bunded area. The location of the bunded enclosure/s will be shown on the PESCPs.	Pre-construction and construction	Supervisor, Environmental Manager	RMM HR8

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EnergyConnect (NSW – Western Section) Stage 1 Soil and Water Management Plan

ID	Measurement/Requirement	When to implement	Responsibility	Source document
SW16	In the event of a spill incident of chemicals, fuels or other hazardous substances, the <i>Spill Response Procedure</i> (45860-HSE-PR-G-1004) provided in Appendix C will be followed.	Pre-construction and construction	Supervisor, Environmental Manager	RMM HR8
SW17	Appropriate spill containment equipment (i.e. spill kits) will be provided and placed at strategic and accessible locations within the site such as adjacent to chemical storage area, relevant work area and refuelling area.	Construction	Supervisor, Environmental Manager	RMM HR10
SW18	Dedicated refuelling equipment will be used during on-site refuelling to minimise the potential for spills.	Construction	Supervisor, Environmental Manager	Good practice
SW19	Any refuelling by hand will occur in a location that minimises the potential for soil and water contamination if spillage occurs, (e.g. on an impervious surface, ute trays, inside a container and etc).	Construction	Supervisor, Environmental Manager	Good practice
Unexploded Ordnance (UXO)				
SW20	<p>A site-specific risk assessment will occur for locations where there is a risk of encountering UXO. The risk assessment will be carried out prior to any activities that could interact with UXO. This will include field verification to validate the historical assessment of UXO contamination and identify appropriate mitigation practices. The risk assessment will occur with input from an appropriate UXO specialist and will identify if and when an explosives engineer is required during site activities.</p> <p>An unexpected finds procedure will be implemented. The procedure will specify the actions that site personnel must take to minimise the risk to and from any UXO encountered. The management actions identified in the risk assessment will be implemented prior to and during all relevant site activities.</p> <p>All personnel conducting intrusive works within an identified UXO area will be provided with appropriate safety and awareness briefing(s) prior to the participating in the intrusive works.</p>	Construction	HSSE team	RMM SCG16
SW21	Promptly notify the Site Supervisor or Environmental Manager of any suspected or potential unexploded ordnance exposed during construction activities. Cease all work activities within the vicinity of actual or suspected unexploded ordnance find. The <i>Unexpected Contamination Finds Procedure</i> (45860-HSE-PR-D-0003) provided in Appendix B is to be implemented.	Construction	All personnel	RMM SCG13
Water supply				
SW22	Copies of existing water access licence agreements from the applicable water suppliers/landholders will be requested and saved on to the project document SharePoint site.	Pre-construction and construction	Environmental Manager, HSE team	Good practice
SW23	Water supply options and management will be undertaken in accordance with agreements with Wentworth Shire Council.	Construction	Environmental Manager	RMM HF4

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EnergyConnect (NSW – Western Section) Stage 1 Soil and Water Management Plan

ID	Measurement/Requirement	When to implement	Responsibility	Source document
SW24	The use of water during construction will be minimised by: <ul style="list-style-type: none"> the reuse of treated wastewater for beneficial reuse as described in Section 5.3 of this plan; the potential use of dust suppression surfactants for dust suppression where required and appropriate. 	Construction	Supervisor, Environmental Manager	Amendment Report Table C-1 RMM AQ1
Dewatering				
SW25	The <i>Dewatering Procedure</i> (45860-HSE-PR-G-1006) provided in Appendix D will be implemented for the discharge of any runoff or stormwater which collects within construction areas (such as sediment basins, trenches, sumps) to minimise the potential for soil and water impacts.	Construction	Supervisor, Environmental Manager	RMM HF5
Registered bores				
SW26	A bore condition assessment to identify the integrity of bore GW087531 will be conducted prior to and post construction. If damaged during project activities, repair or replacement of the bore will be undertaken in consultation with the registered owner.	Pre-construction and construction	Environmental Manager	RMM SCG11
Material tracking and record keeping				
SW27	A waste register will be maintained, detailing types of waste collected, amounts and details of disposal.	Pre-construction and construction	Environmental Advisor	Amendment Report Table C-1
Monitoring and inspections				
SW28	Monitoring of weather forecasts (including rainfall radar) to determine when adverse weather conditions are predicted to affect work locations. When significant rainfall is predicted, a pre-rainfall inspection will be carried out to check the condition existing sediment and erosion controls, and repairs carried out and additional controls installed if necessary.	Pre-construction and construction	Environmental Manager, HSE team	Good practice
SW29	Weekly environmental inspections are to be undertaken, which includes inspection of any erosion and sediment controls present on-site, spill response equipment, stockpiles and the site access point(s).	Construction	Environmental Manager	Good practice
SW30	If groundwater is intercepted during excavation activities, the interception of such groundwater will be monitored by site personnel and geotechnical specialist and reported to NRAR in accordance with Clause 21(6) of the <i>Water Management (General) Regulation 2018</i> . Where there is the potential for water take to exceed the 3ML exemption provision, additional approvals and sufficient entitlement will be obtained.	Construction	Environmental Manager	<i>Water Management (General) Regulation 2018</i>

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6 Compliance management

6.1 Training and awareness

All site personnel will undergo the SecureEnergy site induction. The induction training addresses elements related to soil, water and contamination management including, but not limited to:

- relevant legislation;
- complying with the conditions of the Infrastructure Approval;
- the environmental management system;
- the CEMP;
- land disturbance and clearing requirements and procedures;
- spill response requirements and procedures;
- the *Erosion and Sediment Control Strategy* (45860-HSE-DOC-D-0002);
- the purpose, general content and location of PESCPs; and
- sensitive area plans.

Targeted training in the form of toolbox talks or specific training will also be delivered to personnel with a key role in soil, water and contamination management. Examples of training topics may include:

- specific erosion and sediment controls, including the requirements of site-specific PESCPs;
- no-go zones;
- UXO within the project area;
- unexpected finds procedure for contamination finds; and
- spill response and dewatering procedures.

Further details regarding the staff induction and training are in Section 6 of the CEMP.

6.2 Roles and responsibilities

SecureEnergy's organisational structure and overall roles and responsibilities are outlined in Section 4 of the CEMP.

The project environmental management structure incorporates the following site personnel:

- Environmental Manager responsible for overall management of the CEMP and CEMP sub-plans; and
- Environmental Advisors to assist in implementing and monitoring measures in the CEMP and CEMP sub-plans.

SecureEnergy's Project Director, in consultation with functional managers, will ensure that appropriate resources are available to effectively manage the implementation of the CEMP and CEMP sub-plans during delivery of the project. All SecureEnergy staff, subcontractors and visitors are required to operate in accordance with this SWMP and related environmental management plans during construction.

Specialist consultants and subcontractors will be engaged for environmental support roles, as required, such as Certified Professional in Erosion and Sediment Control for the preparation of an Erosion and Sediment Control Plan for the project.

Specific responsibilities for the implementation of mitigation measures are detailed in Section 5 of this SWMP.

6.3 Monitoring

The proposed monitoring program for Stage 1 works relevant to the water is identified in Table 6.1.

Table 6.1 - Monitoring program

Item	Scope	Frequency	Responsibility	Records/ reporting
Weather forecasts and observations	Monitoring of weather forecasts (including rainfall radar) from Mildura Airport AWS to determine when adverse weather conditions are predicted.	Weekly weather forecast; and Daily when adverse weather is predicted.	Supervisors	BOM website Pre-starts
Water quality discharge	Water that requires discharge (other than wastewater) will be tested (as required) prior to reuse/discharge and managed in accordance with the <i>Dewatering Procedure</i> (45860-HSE-PR-G-1006).	Prior to water discharge	Supervisors Environmental Manager or delegate	<i>Dewatering permit</i> (45860-HSE-FO-G-1006)
During discharge (irrigation) of sediment basin water	Monitoring of discharge location to ensure that is not extending beyond the nominated area, not exceeding soil infiltration rates and not causing erosion or scouring of the soil.	As required	Supervisors Environmental Manager Environmental Coordinator	Visual assessment Record details on Discharge Permit if required

6.4 Inspections

The proposed inspections timing for Stage 1 works relevant to the soil and water management are identified in Table 6.2.

Table 6.2 - Inspection timing

Item	Scope	Frequency	Responsibility	Records/reporting
Weekly inspections	Inspection of the site erosion and sediment controls, spill response equipment, stockpiles and the site access point(s).	Weekly	Environmental Manager or delegate	<i>Environmental Inspection Checklist</i> (45860-HSE-CHK-G-1008)
Saline soil inspection	Visual inspection of works areas for indicators of saline soil prior to ground disturbances.	Prior to ground disturbances	Supervisors	Report by exception in Daily Diary
Pre-rainfall inspection	Inspection of the environmental controls across the site to assess site preparedness for upcoming predicted rainfall event. Inspection to be undertaken on working days, if safe to do so. Issue actions to repair/maintain any damaged controls, or install additional controls if necessary.	Prior to predicted rainfall greater than 15mm at 80% chance of occurring.	Environmental Manager or delegate Supervisors	<i>Pre-rainfall inspection checklist</i> (45860-HSE-CHK-G-1009)
Post rainfall inspection	Post rainfall inspections to evaluate the effectiveness of erosion and sediment controls measures and issue appropriate actions to repair or maintain any controls and/or install additional controls where required. Post rainfall inspections will occur after a rainfall event. For the purpose of this inspection, a rainfall event occurs when more than 5mm of rain has been received and runoff occurs.	Within the next working day, if safe to do.	Environmental Manager or delegate Supervisors	<i>Post rainfall inspection checklist</i> (45860-HSE-CHK-G-1010)

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6.5 Auditing

No specific auditing is proposed for soil and water matters as part of Stage 1.

Audits will be undertaken to assess the effectiveness of the management measures and overall compliance, including with this plan, and other relevant approvals, licences and guidelines. Audit requirements are detailed in Section 9.3 of the CEMP.

6.6 Reporting

Reporting which will be undertaken in accordance with the SWMP is summarised within Table 6.3.

Table 6.3 - Reporting program

Item	Scope	Frequency	Responsibility	Recipient
Unexpected finds report	Report findings associated with unexpected contamination finds will be undertaken in accordance with the <i>EnergyConnect (NSW – Western Section) Unexpected Contamination Finds Procedure</i> (45860-HSE-PR-D-0003).	As required	Environmental Manager	Transgrid EPA
Audit reports	Independent audits will be undertaken in accordance with the Infrastructure Approval. The audit will include soil and water management measures (based on the Independent Auditor's program). Audit reports will be prepared. Further detail in relation to auditing is provided within Section 9.3 of the CEMP.	Audits will occur within 12 weeks of the commencement of construction and then at intervals no greater than 26 weeks from the date of the initial Independent Audit or as otherwise agreed by the Secretary.	Environmental Manager/ Independent Auditor	Transgrid DPIE
Groundwater intercepted during aquifer interference activities	An exemption within the <i>Water Management (General) Regulation 2018</i> allows for 3ML per project per year to be intercepted during aquifer interference activities without the need for a water access licence. If groundwater is intercepted during excavation activities, the interception of such groundwater will be monitored by site personnel and geotechnical specialist and reported to NRAR in accordance with Clause 21(6) of the <i>Water Management (General) Regulation 2018</i> . Where there is the potential for water take to exceed the 3ML provision, additional approvals and sufficient entitlement will be obtained.	As required	Environmental Manager	Transgrid NRAR

6.7 Emergencies, incidents and non-compliances

6.7.1 Emergencies

Emergency management and planning including emergencies related to soil, water and contamination will be undertaken in accordance with the Clough management system and relevant procedures. Emergencies will be managed through Clough three-tiered management system approach. Depending on the severity of the emergency, emergencies will be managed in accordance with the following:

- Level 1 – on-site emergencies will be in accordance with the *Project Specific Emergency Preparedness and Response Plan* (45860-HSE-PL-G-1015);

- Level 2 – emergency situations where response exceeds the capacity of site resources incidents will be coordinated by the Incident Coordination Team; and
- Level 3 – an emergency situation where the incident has the potential to, or has impacted, the business in terms of, reputation, and commercial liability. Incidents will be supported by the Major Incident Management Team.

Emergencies will be responded to in accordance with the level of the emergency (listed above). For each level of emergency, the situation will be assessed, the site support requirements will be established and notification will occur. A Level 1 emergency will result in activation of the *Project Specific Emergency Preparedness and Response Plan* (45860-HSE-PL-G-1015). A Level 2 emergency will result in activation of the Incident Coordination Team, and a Level 3 emergency will result in activation of the Incident Management Team.

Refer to Section 8.1 of the CEMP – Emergency preparedness and emergency response for further details.

6.7.2 Environmental incidents

Environmental incidents, including incidents related to soil, water and contamination (e.g. unauthorised/unapproved discharge of water, contamination of water quality, chemical and hazardous material spills) will be managed as described in Section 8.2 of the CEMP – Environmental incidents and the Incident, Notification and Investigation Procedure Flowchart provided in Appendix A4 of the CEMP. All site personnel are authorised to suspend a work activity that is likely to cause, or is actually causing or contributing to an incident. A supervisor/manager may request additional staff be deployed to the site to provide additional capacity or capability to manage the incident.

Incident reporting is described in Section 8.3 of the CEMP – Incident notification and reporting.

All environmental incidents that occur on the project, regardless of how minor, must be reported to a supervisor by personnel involved or witnesses to the incident immediately after the incident occurs. The Environmental Manager will be notified immediately of any environmental incident. Transgrid will be notified of incidents and near misses immediately. Formal, documented reporting of incidents will be completed, and will be submitted to Transgrid in accordance with requirements under the Contract. The Environmental Representative will also be included on all incident notifications.

For incidents which are reportable to DPIE, notification will occur to DPIE via the Major Projects website immediately after becoming aware that an incident has occurred. A written notification will then be provided to DPIE via the Major Projects website within seven days after becoming aware of the incident. Refer to Section 8.3.1 of the CEMP - Incident notification and reporting in accordance with the Infrastructure Approval for further details requirements of the notification.

6.7.3 Non-compliances

Where a non-compliance with the Infrastructure Approval has been identified, including those relevant to soil, water and contamination (e.g. not following the notification or reporting requirements in the Unexpected Contamination Finds Procedure), corrective actions will be developed as required and implemented to address the non-compliance that occurred.

Reporting of non-compliances will be undertaken as described in Section 10.1 of the CEMP – Reporting non-compliances. The Planning Secretary will be notified in writing via the Major Projects website within seven days after Transgrid becomes aware of any non-compliance. The written non-compliance notifications will contain the requirements set out in condition E8 of the Infrastructure Approval and will include details such as:

- the non-compliance;
- the reasons for the non-compliance (if known); and
- what actions have been taken, or will be taken, to address the non-compliance.

Refer to Section 10.1.1 of the CEMP - Reporting non-compliances in accordance with the Infrastructure Approval for further details requirements of the notification.

A non-compliance which has been notified as an incident does not need to also be notified as a non-compliance.

Failure to comply with other statutory requirements such as the EPBC Act Approval will be reported in accordance with Section 10.1.2 of the CEMP. Any other reporting will occur in accordance with Section 10.1.3 of the CEMP.

Where a non-compliance has been identified, the non-compliance will be reviewed by the Environmental Manager to determine the reason for the non-compliance, and what corrective actions have, or will be taken, to address the non-compliance. Preventative actions will be developed as required and implemented to minimise the potential for recurrence.

Section 11 of the CEMP – Non-compliance, non-conformance, corrective and preventative action describes the process for non-compliance management.

6.8 Contingency plan

Although the project has been assessed through the environmental impact assessment process and potential impacts identified, unpredicted impacts may occur as the project progresses. In the event that unexpected impacts are identified, the action or cause will be categorised and as required will be managed as:

- an emergency or environmental incident in accordance with Section 8 of the CEMP – Incidents and emergencies; and/or
- a non-compliance or non-conformance in accordance with Section 11 of the CEMP – Non-compliance, non-conformance, corrective and preventative action.

Reporting of the unpredicted impacts would be in line with the above processes and as described in Section 10 of the CEMP – Reporting.

Corrective and preventative actions may be generated from a number of sources, including but not limited to incidents, audits and management reviews. The actions will be managed in accordance with the Clough management system to ensure that the required actions are tracked and closed out in a timely manner. The completion of the required actions will be recorded, and will include details on the source of the action (e.g. audit, inspection or other), the action required, target close out date, actual close out date and the person responsible.

Through the identification of corrective and/or preventative actions through the above processes, the following steps will occur as relevant:

- a) determine the relevant impact assessment criterion/criteria, below which the impact should be reduced, consistent with the requirements of this SWMP;
- b) identify options to reduce the unexpected impacts to below the relevant criterion/criteria and appropriate timeframe for implementation;
- c) implement the selected measure(s) to reduce the unexpected impacts; and
- d) identify and implement an appropriate monitoring program to determine the effectiveness of the selected measure(s) to reduce the unexpected impact.

If the above monitoring program identifies that the unexpected impacts have not been reduced to below the nominated criterion/criteria, items b) to d) of the contingency process will be repeated.

This section does not apply to unexpected contaminations finds. These will be managed in accordance with the *Unexpected Contamination Finds Procedure* included in Appendix B of this SWMP.

6.9 Continuous improvement

A continuous improvement process is described in Section 1.9 of the CEMP and is based on a Plan-Do-Check model. The Plan-Do-Check-Act model outlines the following:

- Plan stage - outlines the environmental objectives and the process to achieve the results;
- Do stage - focuses on the implementation of the EMS; and
- Check stage - comprises ongoing monitoring of the environmental management performance against the environmental objectives, for the purpose of identifying opportunities for improvement; and
- Act stage - undertaking the required actions in order to achieve the environmental objectives.






Appendix A - Erosion and Sediment Control Strategy

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INTERNAL



Erosion and Sediment Control Strategy EnergyConnect (NSW - Western Section) 45860-HSE-DOC-D-0002

REV	DATE	GENERAL DESCRIPTION	PREPARED	REVIEWED	VERIFIED	VERIFIED	APPROVED
A	22/04/2021	Issued for internal review	A.Kriegel / M.Lee	R.Walker-Edwards	G.Crighton	JL.Barrenechea	D.Whatmough
B	03/05/2021	Issued for TransGrid review	A.Kriegel / M.Lee	R.Walker-Edwards	G.Crighton	JL.Barrenechea	D.Whatmough
C	22/06/2021	Issued for TransGrid review	M.Lee	R.Walker-Edwards	G.Crighton	JL.Barrenechea	D.Whatmough
D	23/07/2021	Issued for TransGrid review	 M.Lee	 R.Walker-Edwards	 G.Crighton	 JL.Barrenechea	 D.Whatmough

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Revision History	
Rev.	Detailed Description
A	Issued for internal review
B	Issued for TransGrid review
C	Updated following receipt of TransGrid comments
D	Updated following receipt of TransGrid comments

Key Document Stakeholders
To be communicated with during reviews and revisions of this document

1 Introduction

This Erosion and Sediment Control Strategy (ESCS or this strategy) is part of the Soil and Water Management Plan (SWMP) EnergyConnect (NSW – Western Section) and forms part of the overall environmental management framework for the project.

1.1 Purpose

The purpose of this ESCS is to outline the overarching principles to be considered and integrated into the development of the progressive erosion and sediment control plans (PESCPs). The PESCPs will be prepared and implemented progressively during construction of EnergyConnect (NSW – Western Section).

This strategy has been prepared to address the relevant requirements of the Infrastructure Approval (SSI 10040), the *EnergyConnect (NSW – Western Section) Environmental Impact Statement (EIS)* and the *EnergyConnect (NSW – Western Section) Amendment Report*.

PESCPs will be developed by SecureEnergy prior to commencement of soil disturbance activities undertaken in association with the Infrastructure Approval. The PESCPs will provide more detailed and up-to-date information relating to specific areas and control measures. The PESCPs will be implemented concurrently with site relevant activities and regularly updated to reflect the evolution of site conditions as the project progresses.

2 Environmental requirements

The project's approach to erosion and sediment control will be in accordance with the principles identified in:

- *Managing Urban Stormwater – Soils and Construction, Volume 1* (Landcom 2004), and *Volumes 2A and 2C* (NSW Department of Environment, Climate Change and Water 2008), commonly referred to as the 'Blue Book';
- *Best Practice Erosion and Sediment Control* (IECA – 2008);
- TransGrid's HSE Guideline; and
- *Guidelines for Controlled Activities on Waterfront Land* (NRA 2018).

2.1 Hierarchy of erosion and sediment control principles

The guidelines listed above generally describes the hierarchy for erosion and sediment management principles in the following order:

1. integrate erosion and sediment management measures with construction planning;
2. minimise area of disturbance / area of soil exposure to erosion;
3. promptly stabilise / rehabilitate disturbed areas;
4. manage water flow through the site through drainage controls;
5. design and install appropriate erosion control;
6. design and install appropriate sediment control to maximise sediment retention on site; and
7. monitor controls and adjust control measures to maintain the required standard.

3 Existing environment

The existing environmental setting relating to the aspects of soil and water quality within and adjacent to the project is identified in Section 3 of the *Soil and Water Management Plan (45860-HSE-PL-D-0008)*. Additional information is available in Chapter 15 and 20 of the *EnergyConnect (NSW – Western Section) Environmental Impact Statement*; Technical Paper 6 (Hydrology, flooding and

water quality) of the EIS; and Section 6.8 and 6.12 of the *EnergyConnect (NSW – Western Section) Amendment Report*.

3.1 Soils

Published geological mapping data indicates Buronga substation is situated on a surficial layer of aeolian sediments of the Woorinen Formation from the Quaternary period. This material includes alluvial flood plains, dune sands and swamp or lake deposits.

The soils within the Buronga substation are expected to be generally comprised of calcarosols according to Australian Soil Classification (CSIRO, 2016).

Findings from previous investigations were provided in Technical Paper 12 (Phase 1 contamination assessment) of the EIS which indicates that there is a general absence of a distinct topsoil layer along the alignment and that the upper 300mm of soil typically contains some roots or rootlets from the surface vegetation throughout the landscapes. Surface soils have a moderate to high potential for dispersion.

3.2 Watercourses

There are three major river systems in the Lower Murray Darling regions. The Murray River from the Hume Dam, the Darling River and the Great Darling Anabranh. The Darling River and the Great Darling Anabranh supply water to a number of large lakes, some of which are used as water storages, including Lake Victoria and Gol Gol Swamp. The Lower Murray Darling River systems have been modified with a weir system that is highly regulated, making it difficult to return flow to pre-development conditions.

3.3 Rainfall intensity

Climatic data was obtained from Mildura Airport automatic weather station (AWS) (Station ID: 076031), located approximately 21km to the southwest of Buronga substation and 16km to the west of the closest transmission line. Mildura Airport AWS recorded an average annual rainfall of 285mm between 1946 and 2020. The data showed rainfall occurs fairly evenly across the year, with higher peak rainfall values from May to December.

Similarly, data was obtained from Irymple weather station (station number: 076015), located approximately 16km south of Buronga substation. Irymple weather station recorded an average annual rainfall of 271mm between 1908 and 2020. The data showed rainfall occurs fairly evenly across the year, with higher peak rainfall values from November to April.

Due to the low average rainfall values and relatively low gradient of the topography, generally limited surface water run-off is expected to be generated from the catchment.

4 Induction / training

Training and awareness of the principles of erosion and sedimentation will be provided through site inductions, pre-start meetings and toolbox talks.

5 Key management strategies

5.1 Context

It is important to note that the principal objective for managing erosion and sediment on a construction site is to take all reasonable and practicable measures to minimise the short and long-term soil erosion and the adverse effects of sediment transportation.

Generally, the context of the term 'reasonable' means an action based on sound judgement and affordable cost while the contextual meaning of the term 'practicable' is an action capable of being implemented with available means, with reason or with prudence.

It is also important to acknowledge the fact that each construction site demands a unique set of erosion and sediment control measures. Thus, a control measure that is observed to work well in one location does not mean it will work well in another location.

SecureEnergy is conscious that EnergyConnect is a long linear infrastructure where the environmental setting and climate may vary spatially. Hence, the suitability of erosion and sediment control measures will depend on both the location in which the controls are being applied, and the construction activities which are to occur.

5.2 SecureEnergy's erosion and sediment control principles

The hierarchy of principles identified in Section 2.1 has provided guidance for the development of erosion and sediment control principles for the project. These eight principles are listed below.

A compliance matrix is also presented in Annexure A, with this compliance matrix detailing how SecureEnergy's principles address the guidelines listed within Section 2.

SecureEnergy Principle 1 – Appropriate planning and documentation

Prior to disturbance of the area and soil exposure, erosion and sediment control issues will be considered and integrated into construction planning, programming and site documentation, which will include the following:

- consider the existing landscape environment and identify areas of key risks to erosion and sediment issues;
- consider sensitive areas and features including, but not limited to, location of known heritage features both within and adjacent to the construction area, biodiversity flora and fauna, watercourses and riparian land;
- develop the site layout and construction process to prevent or minimise environmental harm due to erosion and sediment control issues (e.g. material stockpiles to be located away from surface water flow paths);
- construction planning to minimise extent/duration of soil disturbance; and
- prepare effective and flexible PESCPs that are adjusted and adapted to changing site conditions. The initial PESCP will be prepared prior to soil disturbance activities and implemented concurrently with relevant site activities where required.

SecureEnergy Principle 2 – Minimise the extent and duration of disturbance

To minimise erosion of disturbed areas, aim to complete work and stabilise disturbed areas progressively.

SecureEnergy Principle 3 – Control stormwater flows onto, through and from the site

To reduce erosion and surface water runoff volumes that will eventually require treatment, and to maximise the efficiency of sediment control measures, aim to:

- separate 'clean' run-on water from 'dirty' water run-off;
- manage areas susceptible to concentrated water flow; and
- break up slope lengths and minimise catchment areas within the work area where possible, to reduce run-off volume and velocities to manageable levels.

SecureEnergy Principle 4 – Use erosion control measures to prevent on-site damage

To minimise erosion of disturbed areas and unlined drains, aim to:

- protect the soil surface from raindrop impact;

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- protect the soil surface to minimise erosion; and
- convey run-off in a non-erosive manner.

SecureEnergy Principle 5 – Use sediment control measures to prevent off-site damage

To minimise the off-site transport of eroded sediment, aim to:

- intercept and capture 'dirty' sediment laden run-off water prior to leave the site boundary;
- slow the velocity of 'dirty' water so that soil particles can settle out by gravity;
- chemically treat sediment laden water to remove very fine suspended soil particles (where required); and
- locate control measures as close to the sediment source as possible, while not impeding construction activities.

SecureEnergy Principle 6 – Minimise impacts on waterfront land

To minimise impacts to waterfront land, aim to:

- protect ground stratum native vegetation within vegetated riparian zones of the Great Darling Anabranch, Darling River and/or Murray River to the greatest extent practicable, with vegetation clearing ideally limited to the tree stratum only, with trunk bases being retained in-situ;
- minimise the extent of vegetation clearing generally within vegetated riparian corridors wherever practicable in constructing the transmission line structures; and
- maintain 40m buffer from Darling River, Murray River and Great Darling Anabranch for construction activities resulting in soil compaction

SecureEnergy Principle 7 – Stabilise disturbed areas quickly

To minimise erosion of disturbed areas, aim to:

- strip and stockpile site topsoil material for reuse in the restoration / stabilisation phase; and
- stabilise disturbed surfaces progressively following completion of works at each location to minimise erosion.

SecureEnergy Principle 8 – Inspect and maintain control measures

The effectiveness of erosion and sediment controls is related to both the selection of appropriate techniques and the maintenance of these measures. SecureEnergy will:

- inspect control measures regularly (e.g. before / after rainfall and during weekly environmental inspections) ;
- maintain, modify and/or implement new control measures as identified and required by the inspection; and
- remove temporary control measures once an area has been stabilised.

5.3 Sediment basins

Sediment basins are stormwater management devices and are not proposed in all construction areas. Generally, sediment basins will only be required in areas where soil disturbance occurs over an area greater than 2,500m² per sub-catchment. However and more accurately, the requirement of a sediment basin can be determined when there is an annual soil loss greater than 150m³/year calculated in accordance with the Blue Book. As such, key areas such as borrow pits, laydown areas or earthworks activities at substations will be assessed to determine if a sediment basin is required.

Generally, sediment basins will be constructed where the soil loss calculations indicate they are required. Sediment basins will be constructed and operated in accordance with the Blue Book.

Annexure A – Compliance matrix

No.	Principle / objective	SecureEnergy ESC principles								
		1	2	3	4	5	6	7	8	N/A
Principles of Construction Site Erosion and Sediment Control (IECA 2008)										
1	Appropriately integrate the development into the site									✓*
2	Integrate erosion and sediment control issues into site and construction planning	✓								
3	Develop effective and flexible erosion and sediment control plans based on the anticipated soil, weather and construction conditions	✓								
4	Minimise the extent and duration of soil disturbance		✓				✓			
5	Control water movement through the site			✓			✓			
6	Minimise soil erosion				✓		✓			
7	Promptly stabilise disturbed areas							✓		
8	Maximise sediment retention on the site					✓				
9	Maintain all erosion and sediment control measures in proper working order at all times								✓	
10	Monitor the site and adjust erosion and sediment control practices to maintain the required performance standard								✓	
Blue Book management principles (Landcom 2004)										
1	Assess the soil and water implications of development at the subdivision or site planning stage, including those relating to ecologically sustainable development. Investigate the salinity and the acid sulfate potentials of the soil where their disturbance is likely to expose and/or exacerbate this problem	✓								
2	Plan for erosion and sediment control concurrently with engineering design and before earthworks begin, ensuring proper assessment of site constraints and integration of the various components	✓								
3	Minimise the area of soil disturbed and exposed to erosion		✓							
4	Conserve topsoil for later site rehabilitation / revegetation							✓		
5	Control water flow from the top of, and through the development area			✓						
6	Rehabilitate disturbed lands quickly							✓		
7	Maintain soil and water management measures appropriately during the construction phase								✓	
TransGrid’s HSE Guideline										
1	Minimising disturbance		✓							
2	Stabilise high traffic areas	✓								
3	Slow down or redirect water flow through the site			✓						
4	Protect disturbed areas with gravel, mulches, erosion matting or blankets				✓					
5	Stabilise disturbed areas ASAP once work is complete							✓		
6	Avoid allowing sediment to leave the worksite or enter drainage					✓				
Guidelines for Controlled Activities on Waterfront Land (NRA 2018)										
1	Establish and preserve the integrity of riparian corridors						✓			
2	Seek to minimise disturbance and harm of riparian corridors		✓							

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No.	Principle / objective	SecureEnergy ESC principles								
		1	2	3	4	5	6	7	8	N/A
3	Minimise the number of creek crossings of riparian corridors						✓			
4	Treat stormwater run-off before discharging into riparian corridors			✓						

* To be managed through the permanent design process


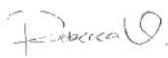



Appendix B - Unexpected Contamination Finds Procedure

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INTERNAL



Unexpected Contamination Finds Procedure EnergyConnect (NSW – Western Section) 45860-HSE-PR-D-0003

REV	DATE	GENERAL DESCRIPTION	PREPARED	REVIEWED	VERIFIED	VERIFIED	APPROVED
A	29/03/2021	Issued for internal review	M.Lee	R.Walker-Edwards	G.Crighton	JL.Barrenechea	D.Whatmough
B	12/05/2021	Issue for TransGrid Review	M.Lee	R.Walker-Edwards	G.Crighton	JL.Barrenechea	D.Whatmough
C	23/06/2021	Issue for TransGrid Review	M.Lee	R.Walker-Edwards	G.Crighton	JL.Barrenechea	D.Whatmough
D	23/07/2021	Issue for TransGrid Review	M.Lee	R.Walker-Edwards	G.Crighton	JL.Barrenechea	D.Whatmough
E	23/08/2021	Issue for TransGrid Review	 M.Lee	 R.Walker-Edwards	 G.Crighton	 JL.Barrenechea	 D.Whatmough

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Revision History	
Rev.	Detailed Description
A	Issued for internal review
B	Issued for TransGrid review
C	Updated following receipt of TransGrid comments
D	Updated following receipt of TransGrid comments
E	Updated and issued for TransGrid review

Key Document Stakeholders
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1 Introduction

This Unexpected Contamination Finds Procedure (UCFP) is part of the Soil and Water Management Plan (SWMP) for EnergyConnect (NSW – Western Section) and forms part of the overall environmental management framework for the project.

1.1 Purpose

The purpose of this procedure is to detail the actions to be taken in the event that an unexpected actual or potential contamination find is encountered during project works.

This procedure has been prepared to address the relevant requirements of the *EnergyConnect (NSW – Western Section) Response to DPIE Request for Information – 7 May 2021 and subsequent discussions* and the Infrastructure Approval (SSI 10040) granted by the Minister for Planning and Public Spaces.

2 Induction/Training

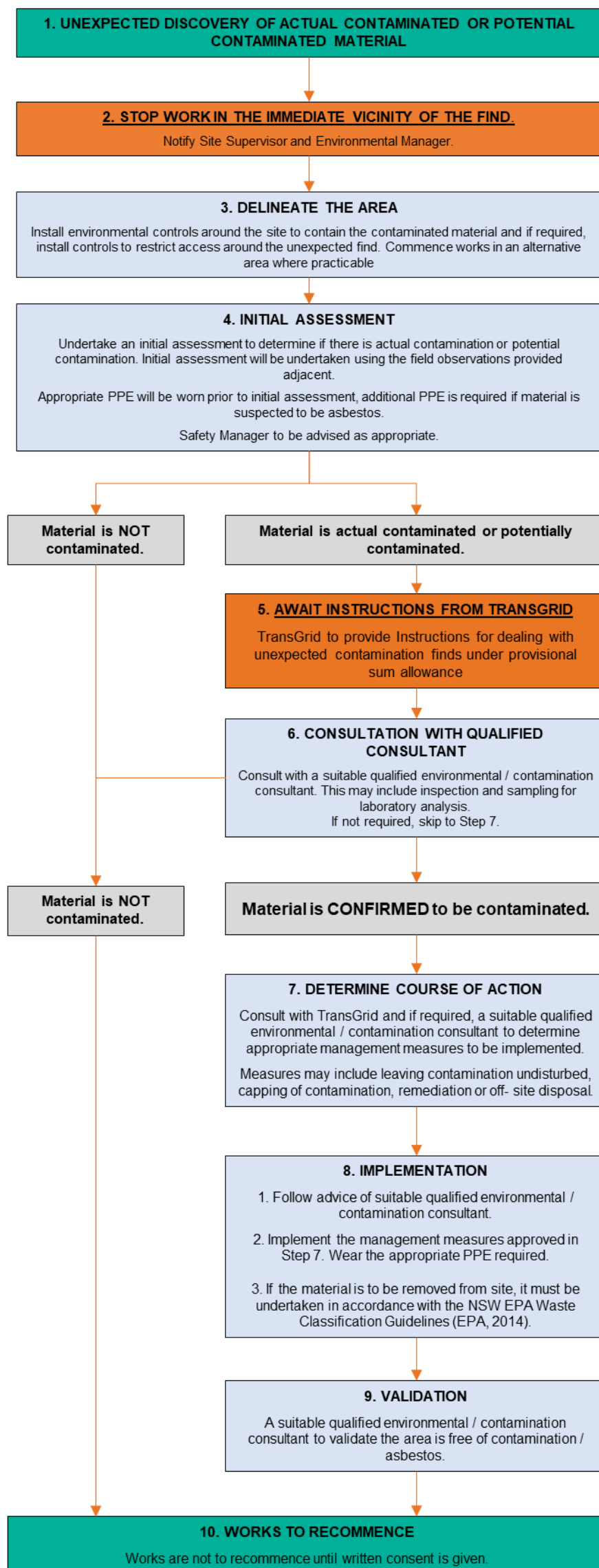
All site personnel (including sub-contractors) will undertake an induction which will include details relating to this procedure. Training may also occur through toolbox talks, pre-starts and targeted training as required.

3 Scope

This procedure is applicable for the following:

- all activities conducted by site personnel (including sub-contractors) for the project that have the potential to uncover / encounter contaminated finds (usually during construction);
- where the project does not have approval to disturb the contaminated material; and
- where safeguards for managing the disturbance (apart from this procedure) are not contained in the environmental impact assessment.

Contaminated Land Procedure Unexpected Contamination Finds Procedure



Purpose

The purpose of this procedure is to detail the actions to be taken in the event that an unexpected actual or potential contaminated material is encountered during construction works associated with Stage 1 and Stage 2 of EnergyConnect (NSW – Western Section).

Definition

Contamination means the presence in, on or under land or any other aspect of the environment of a substance (i.e. gas, chemical, liquid or other matter) whether occurring naturally or otherwise, which is:

- (a) at a concentration above the concentration at which the substance, gas, chemical, liquid or other matter, whether occurring naturally or otherwise, is normally present in, on or under land or any other aspect of the environment in the same locality, being a presence that presents a risk of harm to human health or any other aspect of the environment; or
- (b) toxic, flammable or otherwise capable of causing harm to humans or damage to the environment including asbestos (man-made or naturally occurring), toluene, polychlorine biphenyls, lead based paints, glues, solvents, cleaning agents, paints, water treatment chemicals and acid producing spoil.

Field observations

Contamination that may not have been detected during previous investigation works may be discovered during the course of the project. Such contamination may be discovered due to the following field observations:

- odour;
- unusual discolouration or staining of soil or rock;
- seepage of unusual liquids from soil or rock;
- unusual colour, odours or sheens on groundwater and/or surface water;
- unusual metal objects;
- presence of oil;
- presence of waste or rubbish above or below ground; and
- actual or potential asbestos or asbestos containing material (ACM).

Actions

If unexpected contamination is discovered, the following procedure will be implemented:

- **STOP ALL WORKS** in the immediate vicinity of the discovery. Do not remove or unnecessarily disturb the area of the find;
- follow the adjacent flowchart;
- notify the Site Supervisor and the Environmental Manager; and
- Do not recommence work until advised to do so in writing.

Personal Protective Equipment (PPE)

The appropriate Personal Protective Equipment (PPE) will be worn prior to any contamination investigation/management. This may include, but not be limited, to:

- eye goggles;
- face mask;
- rubber boots;
- rubber gloves;
- disposal work clothes; and
- full face respirator with vapour cartridge.






Appendix C - Spill Response Procedure

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INTERNAL



Spill Response Procedure EnergyConnect (NSW – Western Section) 45860-HSE-PR-G-1004

REV	DATE	GENERAL DESCRIPTION	PREPARED	REVIEWED	VERIFIED	VERIFIED	APPROVED
A	30/04/2021	Issued for internal review	L.Coetzee	R.Walker-Edwards	G. Crighton	JL.Barrenechea	D.Whatmough
B	06/05/2021	Issued to TransGrid	L.Coetzee	R.Walker-Edwards	G. Crighton	JL.Barrenechea	D.Whatmough
C	15/06/2021	Issued to TransGrid	M.Lee	R.Walker-Edwards	G. Crighton	JL.Barrenechea	D.Whatmough
D	23/07/2021	Issued to TransGrid	 M.Lee	 R.Walker-Edwards	 G. Crighton	 JL.Barrenechea	 D.Whatmough

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Revision History	
Rev.	Detailed Description
A	Issued for internal review
B	Issued to TransGrid
C	Updated following receipt of TransGrid comments
D	Updated following receipt of TransGrid comments

Key Document Stakeholders
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1 Introduction

This Spill Response Procedure (SRP or procedure) forms part of the *Soil and Water Management Plan* (SWMP) (45860-HSE-PL-D-0008) for EnergyConnect (NSW – Western Section).

1.1 Purpose

The purpose of this procedure is to describe the emergency spill response approach that will be employed by SecureEnergy personnel and subcontractors during construction of the EnergyConnect (NSW – Western Section) project.

2 Induction/training

All site personnel (including sub-contractors) will undertake an induction which will include information in relation to spill response. Training may also occur through toolbox talks, pre-start briefings and targeted training as required.

3 Scope

This procedure is to be applied in the event of a chemical, fuel or oil spill that arises due to the project activities.

4 Control measures

4.1 Preventative spill measures

In order to minimise the potential for environmental impacts to water and soil from spills the following will be undertaken by SecureEnergy:

- training in use of spill containment materials, their locations and spill response will be undertaken proactively as required particularly for personnel who are working within or near to aquatic environments and are involved in regularly handling and using potentially contaminating substances (e.g. personnel who are carrying out refuelling activities);
- unless avoidable, refuelling, washing and maintenance of vehicles and mechanical plant will occur at least 50m from waterbodies;
- plant and equipment will undergo regular checks and subsequent repair for potential leakages or worn hydraulic hoses;
- all chemicals including fuels and oils will be stored when not in use in bunded areas; and
- all chemicals and hydrocarbons will be stored and handled as per manufacturer's instructions.

Regular inspection of chemical storage areas will be undertaken to assess compliance of the above measures.

4.2 Reactive spill measures

All spills are to be managed in accordance with the steps detailed within Annexure A. This includes the following steps:

1. Assess the situation;
2. Cease work and if safe to do so, control the spill;
3. Report the incident;
4. Clean up the spill;
5. Dispose of contaminated materials; and
6. Investigation and reporting.

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4.3 Spill containment

Spill containment materials such as those listed in Table 4.1 referred to as ‘spill kits’ will be kept and stocked on site at any location where there is significant risk/potential impact of a spill including at refuelling areas, chemical storage and within the vicinity of waterways. Spill kits could be stored in a fixed location or be mobile. Spill kits will be placed in dedicated, visible and accessible locations.

The spill kits will be appropriately sized according to the volume of chemicals and fuels being stored or used and the activities which are being undertaken. All staff would be made aware of the location of the spill kit and trained in its use. Spill kits would be restocked as soon as possible after each use and all used material replaced.

Table 4.1 provides examples of appropriate application of material types. Spill kit inspections are to be undertaken on regular intervals such as during the weekly environmental site inspections detailed within Section 9.1 of the Construction Environmental Management Plan. The inspections would check that spill kits are present at the required locations, are accessible and appropriately stocked.

Table 4.1 - Spill containment materials

Product	Description/Application
Pads, pillows and socks	<ul style="list-style-type: none"> Used to clean-up (absorb) small to medium liquid spills on land rather than containing. Thin absorbent mats placed over spills. Cushion shaped products containing absorbent fibres, used directly under a leak or drip. Absorbent socks placed at the low point of a spill. Consider the need to have a spill kit containing these at the source of the activity and extras in-stock on site. If these materials are not enough to clean-up the spill, consider using absorbent granular materials or equivalent.
Sorbents	<ul style="list-style-type: none"> Used during clean-up, sorbents are materials that soak up the spill such as saw dust, granules or peat mixture. Spread the sorbent over the contaminant after control materials have been applied. Recover the contaminant/sorbent mixture using shovels/excavator bucket or similar. Sorbents can be used from small to large spills.
Drip trays and washout bunds	<ul style="list-style-type: none"> Used to contain incidental leaks during plant and equipment maintenance. Containers should be maintained and liquids/sludge collected. Consider if these containers are not sufficient to contain leaks/washout then construction of permanent bunding may be suitable.
Manual recovery	<ul style="list-style-type: none"> Used to physically remove the contaminant either by excavating the contaminant and adjacent soil on land or pump / vacuum truck removal for contaminant and adjacent liquid/sludge in waterbodies. Control materials should be installed prior to manual recovery to prevent spread during recovery task.

5 Incident management

Incidents will be managed (including notifications and investigations) in accordance with the Section 8 of the Construction Environmental Management Plan. Incident investigations will include a review of events leading up to the incident and a review of what improved practices may be required.

In accordance with Part 5.7 the *Protection of the Environment Operations Act 1997*, SecureEnergy will immediately notify EPA in the following circumstances:

- if the actual or potential harm to the health or safety of human beings or ecosystems is not trivial; or
- if actual or potential loss or property damage (including clean-up costs) associated with an environmental incident exceeds \$10,000.

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Annexure A

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SPILL RESPONSE PROCEDURE

IN THE EVENT OF A SPILL

1. ASSESS THE SITUATION

- Is it safe to take action?
- What is the source of spill and can it be stopped, controlled or shutdown?
- Consult the Safety Data Sheet - What PPE and emergency equipment is required?
- Are there any other hazards that need to be controlled? E.g. ignition sources?
- Do I need further assistance?



2. CEASE WORK AND IF SAFE TO DO SO, CONTROL THE SPILL

- Stop work that has resulted in the spill
- Stop the flow immediately
- Contain the spill
- Divert the spill away from waterways if needed
- Use bunds, sand etc. to limit the spread of the spill
- If spill enters the drainage system stop the spill at the low point (or it's furthest extent) if possible



3. REPORT THE INCIDENT

- Report the event to the Site Supervisor
- Site Supervisor to evaluate area and make area safe if possible and assess if further assistance needed
- Site Supervisor to notify the environment and safety teams
- Environment team to notify TransGrid
- HSE senior representative on site to call emergency services for large spills beyond the capacity of the work crew to contain or contains hazardous substances, call 000 and request Fire and Rescue HAZMAT



4. CLEAN UP THE SPILL

- Do not hose away spills into the drains or waterways
- If necessary, cover spills during rain events and divert upstream waters through use of a bund to avoid spread and further contamination
- Clean up all contaminated material, soils and water as soon as possible



5. DISPOSE OF CONTAMINATED MATERIALS

- Contaminated materials will be disposed of offsite at licensed waste disposal facility. This includes the absorbent material used for clean up



6. INVESTIGATION AND REPORTING

- Re-stock spill kits as soon as possible after the incident
- The environmental team will investigate and report the spill as required within Section 8 of the CEMP
- Implement lessons learnt to avoid reoccurrence of the incident

Notes

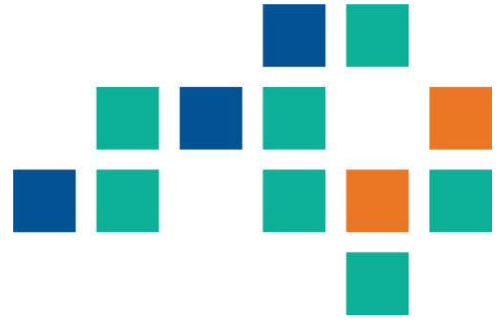
- Ensure the safety of yourself and others whilst implementing this procedure
- Use appropriate personal protective equipment prior to making contact with any spill material
- Responsible persons includes personnel involved in the cause of the event, witness to the event, supervisors, Secure Energy HSE Team, construction personnel and emergency response personnel
- Major incidents should refer to the SecureEnergy's *Emergency Preparedness and Response Plan* (458060-HSE-PL-G-1015)

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Appendix D - Dewatering Procedure

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Dewatering Procedure EnergyConnect (NSW – Western Section) 45860-HSE-PR-G-1006

REV	DATE	GENERAL DESCRIPTION	PREPARED	REVIEWED	VERIFIED	VERIFIED	APPROVED
D	30/07/2021	Issued to TransGrid	M.Lee	R.Walker-Edwards	G.Crighton	JL.Barrenechea	D.Whatmough
E	26/08/2021	Issued to TransGrid	M.Lee	R.Walker-Edwards	G.Crighton	JL.Barrenechea	D.Whatmough
F	3/12/2021	Issued to TransGrid	 M.Lee	 R.Walker-Edwards	 G.Crighton	 JL.Barrenechea	 D.Whatmough

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Revision History	
Rev.	Detailed Description
A	Issued for internal review
B	Issued to TransGrid
C	Updated following receipt of TransGrid comments
D	Updated following receipt of TransGrid comments
E	Issued for TransGrid review and to address draft Infrastructure Approval (Revision 3 dated 12/08/2021)
F	Updated to address Environmental Representative's comments and Transgrid comments

Key Document Stakeholders
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1 Introduction

This *Dewatering Procedure* (45860-HSE-PR-G-1006) is part of the *Soil and Water Management Plan* (SWMP) for EnergyConnect (NSW – Western Section) and forms part of the overall environmental management framework for the project.

1.1 Purpose

The purpose of this Dewatering Procedure is to describe how SecureEnergy propose to manage dewatering activities during construction of EnergyConnect (NSW – Western Section).

In particular, this procedure describes the process for the management of water that requires discharging, including water within sediment basins and water captured in other construction areas including trenches, excavations and sumps.

2 Induction/training

All personnel taking part in construction activities shall be informed through site inductions, pre-start meetings, or toolbox talks of the significance of the surrounding environment and potential dewatering impacts.

All staff involved in dewatering activities will undergo site induction and/or specific training relating to this dewatering procedure. This will include (but not be limited to):

- relevant legislation;
- the existence of this procedure;
- sediment basin management; and
- Dewatering Permits.

3 Scope

This procedure is applicable for the following:

- dewatering activities conducted by site personnel (including sub-contractors) for the project from erosion and sediment controls points such as sediment basins, sumps and excavations; and
- dewatering of wheel washes/vehicle washdown areas.

4 Management of sediment basin water and water from other construction areas

It is important to note that dewatering from sediment basins or other construction areas for the project is not to be confused with the dewatering requirements of the wastewater from the turkey's nests that are outlined in the *Accommodation Camp Management Plan (45860-HSE-PL-G-1027)*.

Sediment basins are stormwater management devices to capture sediment laden runoff water. The need for a sediment basin is governed by the volume of soil loss that may occur rather than solely on the location and environmental setting of the project.

Sediment basins are not proposed in all construction areas. Section 6.3.2 of the *Managing Urban Stormwater: Soils and Construction Volume 1 4th Edition* (Landcom, 2004) (also known as the Blue Book) states that sediment basins will generally will only be required in areas where soil disturbance occurs over an area greater than 2,500m² per sub-catchment. However and more accurately, the requirement for a sediment basin can be determined when there is an annual soil loss is greater than 150m³/year calculated in accordance with the Blue Book. Where the calculated soil loss is less than 150m³/year, other erosion and sediment control devices can be installed instead.

Key areas such as borrow pits, laydown areas or the substations during earthworks activities will be assessed to determine if a sediment basin is required or if other suitable erosion and sediment controls could be implemented. Generally, sediment basins will not be required along the transmission alignment due to limited earthworks activities supplemented by the low potential for soil erosion due to the flat topography.

4.1 Sediment basin type design

The EIS describes large proportions of clay and sand within the soil profile of the project area. All sediment basins are likely to be batch-treatment Type F or D sediment basins. Generally, the sediment basins will be designed in accordance with the Blue Book and *Best Practice Erosion and Sediment Control* (IECA, 2008). The advice of a soil conservation specialist will be followed during the design of the sediment basin.

A summary of how Type D sediment basins are generally designed and operated is outlined in Table 4.1 and an example cross-section diagram for the sediment basin is provided in Figure 4.1.

Table 4.1 - Sediment basin type (Source: IECA, 2008)

Parameter	Type D Sediment Basin
Sizing determined by	The ability to catch all runoff from a nominated storm event, in this case the 5-day, 80th percentile rainfall event of up to 17mm (based on <i>Best Practice Erosion and Sediment Control</i> (IECA, 2008) <i>Appendix B - Sediment Basin Design and Operation Version 2</i> and rainfall data taken from BoM for Buronga substation). Note: design parameters to be refined in consultation with soil conservation specialist prior to finalising basin design.
Design features	Single chamber only.
Method of discharge	Passive overflow during rainfall when capacity is overwhelmed. Once treated, detained water is pumped or piped out.
Chemical treatment	Yes. Can use slow-acting coagulants and flocculants such as gypsum if required.
Flocculant delivery method	Flocculant typically applied by hand or via recirculation pumps where required.
Relative effectiveness	Only effective for the water detained in the basin (i.e. an event up to 17mm over a five-day). If rainfall events exceed the design criteria levels, basins will overflow and the water will not receive treatment.
Potential to detain water for construction use	Yes. Detained water available for onsite re-use.

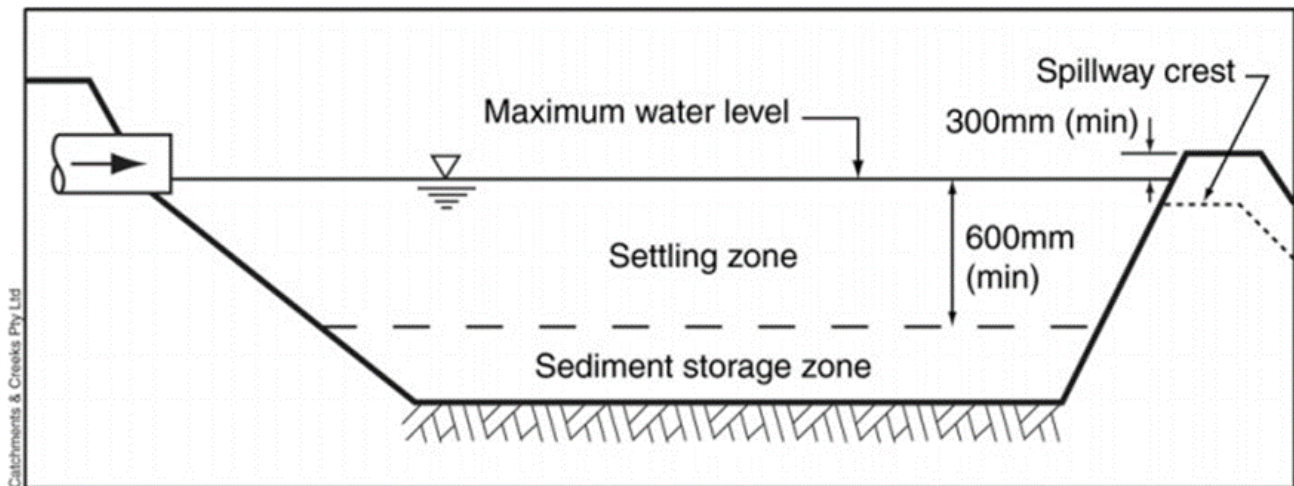


Figure 4.1 - Typical section through Type D sediment basin (Source: IECA, 2008)

4.2 Commissioning

As sediment basins are constructed and commissioned, the construction team will ensure they have followed the Inspection and Test Plan (ITP) and basin design.

4.3 Discharge timing

Sediment basins will not be discharged without a *Dewatering Permit* (45860-HSE-FO-G-1006) in place which has been approved by a member of the Environment Team. Generally, water detained within a sediment basin will be dewatered onsite within five calendar days following the cessation of the rain event, so that the basin and sediment storage capacity is reinstated. If rain occurs again during the five-day period, the five-day requirement resets.

However, any constructed sediment basins will also serve a secondary purpose to capture and store water for beneficial reuse during the project. As the project is located in a region that can experience prolonged periods without significant rainfall, the need to reinstate the basin storage capacity five days after a rainfall event can be diminished.

The Environment Team will monitor the forthcoming weather forecasts and the captured water in the sediment basins, and an assessment will be made on whether dewatering is required based on upcoming forecast weather, local climate, topography and proximity/connection to sensitive environments down gradient. The assessment will include consultation with the Construction Team to determine the upcoming construction activities and the volume of water that may be required.

As such, captured water in the sediment basins might be retained for periods greater than five days to enable beneficial reuse of the water for construction activities and dust suppression purposes.

4.4 Sediment basin treatment

Prior to reusing or discharging the water from the sediment basin and stormwater captured from other construction areas such as sumps, open excavations, trenches, the water will meet the quality criteria provided in Table 4.2.

Table 4.2 - Water quality criteria for sediment basin and other construction areas

Parameter	Units	Water quality criteria
pH	pH units	6.5 to 8.5
Total suspended solids (TSS)	mg/L	50
Oil and grease	Visible	Nil

4.5 Sediment basin maintenance

The following will be carried out to in relation to maintenance of sediment basins:

- all sediment basins are to be inspected for capacity (indicated by marker) following the cessation of a rainfall event that results in surface water runoff;
- if possible, water detained in a sediment basin will be reused for construction purposes, such as dust suppression or compaction, or irrigated to native/existing vegetated areas as described in Section 6.2. If water is to be reused for construction purposes or discharged, the water quality provided in Table 4.2 apply;
- once acceptable water quality has been achieved, water will generally be discharged from the sediment basin to ensure adequate storage capacity (indicated by marker) for the next storm event;
- after water is discharged from the sediment basin, a visual inspection will be made to determine if sediment has accumulated above the marked sediment storage zone. If this is the case, desilting of the basin will be scheduled;
- sediment extracted from the sediment basin will be incorporated into earthworks where suitable;
- where basins are dewatered using pumps, the inlets are to have a float attached to minimise the risk of drawing sediment from the bottom of the basin; and
- all discharges from sediment basins and other ponded water from excavation will be directed in a manner that does not cause scour where it will infiltrate into the soil, or otherwise reuse in accordance with Section 6.1.

4.6 Sediment basin overtopping event

As detailed within Table 5.1, sediment basins will be designed for a 5 day 80th percentile rainfall depth. For the project area, the 5 day 80th percentile rainfall depth is 17mm. Basin design requirements will, however, be confirmed in consultation with a soil conservation specialist prior to basin installation.

If the amount of rainfall exceeds the design capacity, the basin will overflow. As such, design of the sediment basin will include a spillway to direct the water during overtopping. Overtopping events will be recorded in the post rainfall inspections. In the event the overtopping event has caused material harm to the environment, it will be recognised as an environmental incident and the protocols in Section 8 of the CEMP will be followed.

5 Other types of dewatering

5.1 Biosecurity wheel wash management

Wheel wash bays will be installed at designated locations to minimise the transmission of weeds or pathogens to the surrounding environment. As such, the water at the wheel wash bay will need to be managed so it does not impact the surrounding environment which it is meant to protect.

As water from these wheel washes may contain biocides, antifungals or other disinfectants, the management of water from wheel wash bays will be determined on a case-by-case basis. If the wastewater treatment plants (WWTPs) are capable of treating the contaminants present, the water from the wheel wash bays will be collected, transported and treated by the WWTPs for reuse on the project. This will be further discussed with the plant operator where required.

If the WWTPs cannot treat the water from the wheel wash bays to the acceptable quality for reuse, the water will generally be drained to a containment sump that is lined with geofabric or other suitable material if wheel washes contain biocides, antifungals or other disinfectants to avoid percolation. The water will be left to evaporate so that the residue is left behind. Prior to the decommissioning of the washdown bay and containment sump or as required, any residue material will be tested and

removed offsite as waste in accordance with the *Waste Management Plan* (45860-HSE-PL-D-0013) for the project.

In the event the water from the washdown bay is at risk of overtopping within the containment sump, the project will dewater the sumps into intermediary bulk containers (IBCs). This water would then be removed offsite as waste in accordance with the *Waste Management Plan* for the project.

5.2 Vehicle washdown in ancillary yards

Vehicle washdown bays will be set up along the construction corridor and/or at the construction compound. Wheel washdown bays proposed at the accommodation camps are detailed within the *Accommodation Camp Management Plan* (45860-HSE-PL-G-1027). These vehicle washdown bays are generally for vehicle and plant maintenance and cleaning, however, the cleaning process could potentially remove weeds and pathogens that remain attached to the vehicles. The general preference is to utilise a pressure washer to minimise the volume of water used and runoff generated, and eco-friendly vehicle wash detergents will be used where necessary.

Washdown bays will be positioned to avoid any low points and stormwater drainage lines and will consider the direction of water runoff. Water from the washdown bays will be diverted to a designated sump which would capture silts, mud and soapy water. If de-silting is required at these washdown bays, the accumulated silts and sediments will be visually inspected for any contamination (including oil, grease, detergents, weeds and seeds), tested (as required for classification purposes) and disposed of in accordance with the *Waste Management Plan*. If the residue is deemed to be uncontaminated and suitable for reuse, it would be mixed into other dry material and reused on the project.

5.3 Chemical bunds and secondary containment

Chemical bunds that are used for secondary containment on the project may occasionally fill with rainwater. If the chemical bund has no visible signs of contamination the water will be collected and re-used or discharged in accordance with this procedure. If the bund has signs of oils/grease or hydrocarbons, the water will be collected and transported to facility authorised to accept the liquid waste as per the *Waste Management Plan*.

6 Water reuse and discharge options

Water is a valuable resource within Western NSW and the project aims to reuse water where possible. During construction, the project will reuse water from a range of sources such as treated wastewater released from the WWTPs into turkey's nests, sediment basins, trenches, piles, sumps and open excavations. Generally, water will be taken via a standpipe arrangement into a watercart vehicle and transported to the intended usage site.

Refer to the *Accommodation Camp Management Plan* (45860-HSE-PL-G-1027) for the reuse and discharge options of water from the WWTPs and turkey's nest.

Water will be reused in various construction activities such as, but not limited to, dust suppression throughout the project corridor (including at transmission tower construction areas, onto and adjacent to access tracks, unsealed roads, and unsealed areas in construction compounds and accommodation camps), soil compaction, wheel wash, vehicle washdown areas and for site restoration, particularly where revegetation activities are required. Where water is not reused on the project, it will be discharged into existing vegetated areas. **Water is not to be reused for irrigation of food crops or to be used near food crop or pastures.**

Refer to Figure 6.1 below for a breakdown of the water reuse sources and the reuse options. Further details of the water reuse options are provided in the sections below.

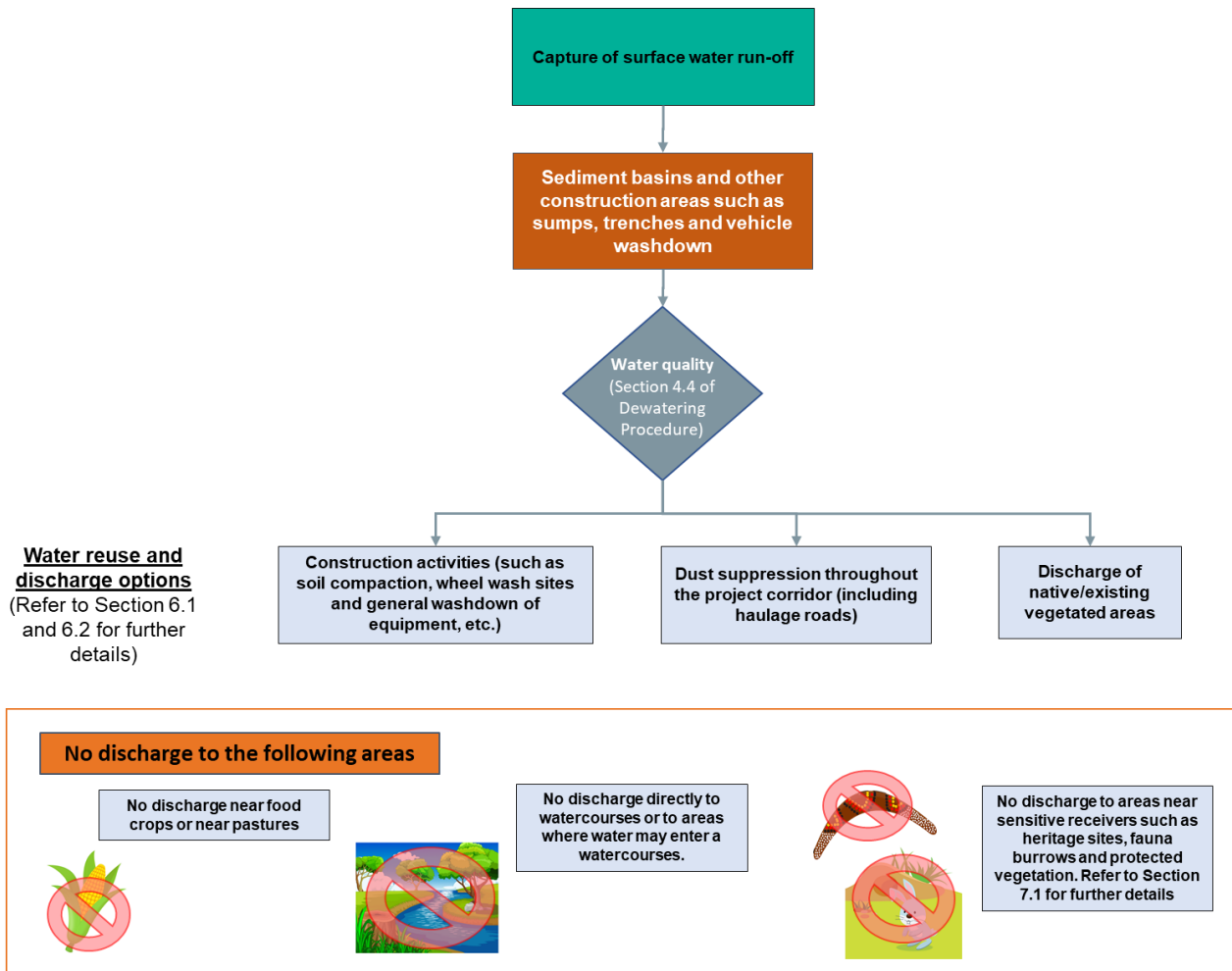


Figure 6.1 - Summary of the water source, reuse and discharge options.

6.1 Dust suppression and for other construction activities

During construction, the project will reuse water for dust suppression throughout the project corridor (including transmission tower pad areas, onto and adjacent to access tracks, unsealed roads, and unsealed areas within construction compounds and accommodation camps (during establishment)) as well as for other construction activities such as soil compaction, wheel wash and vehicle washdown areas and for site restoration activities. The following will be considered when reusing water for dust suppression and construction activities purposes:

- the respective water quality criteria has been met;
- consideration of the existing soil surface condition (and infiltration potential) when determining the application rate per hour;
- the reuse area is 40m clear of sensitive receiving environments such as waterways and farm dams;
- water is not to be discharged near food crops or food crop pastures;
- the upcoming weather forecast, particularly in relation to rainfall; and
- no use of water in close-proximity to sensitive areas (such as fauna burrows, threatened flora and endangered ecological communities) or areas of contamination. Refer to the text below for further details.

Although generally water is not to be used in close proximity to sensitive areas, there may be some instances where this is unavoidable. For example, the use of water may be required for construction

activities (such as the compaction of soils) that are located in areas that are within close proximity to sensitive areas, such as in-situ heritage features.

In the event that water is required to be used in sensitive areas, the Environmental Manager or delegate is to undertake an assessment prior to water use. The assessment will consider the following:

- no application of water to areas where there is potential to impact threatened flora and endangered ecological communities; and
- no application of water to areas outside the construction disturbance areas which has the potential to impact in-situ Aboriginal heritage features.

Where the application of water is essential for construction activities, such as soil compaction within an area that contains or might contain Aboriginal heritage features (i.e. a PAD site, heritage site or heritage item), the management measures of the *Heritage Management Plan* (45860-HSE-PL-D-0009) are to be followed. Indirect impacts to heritage features adjacent to the construction activities should be considered by the Environmental Manager or their delegate (for example for a hearth located adjacent to the work area) with management measures to be applied as required.

6.2 Discharge to native/existing vegetated areas

In the event discharge to native/existing vegetated areas is required, it would be controlled such that it is strictly discharged within and adjacent the project areas and does not cause over saturation, localised erosion or additional uncontrolled runoff. Dewatering to areas of existing vegetation will be undertaken so that it would infiltrate into the ground.

It is important to note that discharge is only permissible for water taken from sediment basins and other construction areas that have captured stormwater, such as open excavations.

The discharge locations will be determined based on visual inspections where the following have been verified:

- the selected areas are well-vegetated or are in sandy areas where soils are relatively undisturbed and the water will be able to infiltrate the ground;
- no discharge of areas which may directly or indirectly impact sensitive receiving environments (heritage features, fauna burrows, threatened flora, endangered ecological communities) or areas of contamination;
- the receiving area is 40m clear of sensitive receptors such as waterways and farm dams; and
- a Dewatering Permit must be approved by Environment Team prior to discharge.

Prior to discharge, the factors that will be considered by the Environment Team in deciding whether to issue a Dewatering Permit include forecast weather conditions (no rainfall imminent), soil surface conditions (infiltration capacity), climatic factors (e.g., drought, prevailing winds direction and wind speed), proximity to sensitive areas and a visual assessment of the proposed discharge area.

The Supervisor (or suitable delegate) undertaking the discharge activity must conduct a visual inspection at one-hour intervals. The visual inspection will include, but not limited to:

- verify that runoff from the discharge area(s) does not extend beyond the allowable area;
- check that spray drift does not extend beyond the allowable area;
- check that discharge does not cause erosion or scouring of localised soils; and
- verify that the soil in the affected area has not become saturated (i.e. no water runoff).

If any of the above-mentioned aspects are observed during monitoring, the pump will be shut off immediately and the discharge point moved to an alternative location before recommencement of dewatering operations. Relevant details will be recorded on the Dewatering Permit.

7 Monitoring

7.1 Pre-rainfall

Sediment basins will be inspected as part of pre-rainfall inspection to determine if adequate design capacity is available for the upcoming predicted rainfall event and if water extraction from the sediment basin is required. The inspection to be undertaken on working days.

7.2 During rainfall

Where access is permitted, and it is safe to do so, sediment basins and secondary containment will be inspected during rainfall events to look for signs of overtopping/spilling.

7.3 Post-rainfall

Sediment basins will be inspected as part of the post-rainfall inspections to assess if there is any evidence of overtopping, including assessing the inlets of the sediment basin for signs of erosion. The inspections will occur within the next working day, if safe to do.

7.4 During dewatering

Prior to dewatering of sediment basins, the water quality will be checked as stipulated in Section 4.4. The Supervisor (or suitable delegate) undertaking the dewatering activity must conduct a visual inspection at one-hour intervals to verify that runoff from the discharge area(s) does not extend beyond the nominated easement/project area, and check that discharge does not cause erosion or localised scouring of the soil.

8 Record keeping

Dewatering activities will generally be recorded in the *Dewatering Permit* (45860-HSE-FO-G-1006).

The Dewatering Permit will include the following information:

- a summary information section which includes the permit ID number, date and location of proposed discharge;
- a checklist of any required control measures;
- the water quality values including the sampling time, date and the name of the person who obtained the sample; and
- quantities of additives, if required, including type of additive, time and date added.

Residue waste from washdown bays and biosecurity washdowns would be reported and tracked in accordance with the project *Waste Management Plan*.

Appendix E - Relevant legislation

Legislation/ Regulations	Aspect	Reference	Requirement	Applicability	Responsibility
New South Wales Legislation					
<i>Environmental Planning and Assessment Act 1979 (EP&A Act)</i>	All	Section 5.5	A determining authority has the duty to fully consider the environmental impact (including Aboriginal or non-Aboriginal heritage) of an activity and is required to 'take into account the fullest extent possible all matters affecting, or likely to affect the environment' arising from the proposal.	The <i>EnergyConnect (NSW - Western Section) - Environmental Impact Statement</i> was submitted to Department of Planning, Industry and Environment in October 2020 and publicly exhibited between 26 September 2019 and 10 December 2020. On 14 April 2021, the response to submissions was finalised in the <i>EnergyConnect (NSW - Western Section) – Submissions Report</i> . A separate <i>EnergyConnect (NSW - Western Section) – Amendment Report</i> , to document design changes and additional environmental assessment undertaken, was also finalised on 14 April 2021. Transgrid prepared and provided a memorandum titled <i>EnergyConnect (NSW – Western Section) Response to DPIE Request for Information – 7 May 2021 and subsequent discussions to DPIE on the 10 August 2021</i> in response to DPIE requested additional information (<i>EnergyConnect (NSW – Western Section)(SSI-10040) Request for Additional Information</i>).	Transgrid
		Section 5.19	Approval of the Minister required to carry out critical State significant infrastructure (CSSI). Comply with the conditions of the Infrastructure Approval and generally in accordance with the revised mitigation measures from the Response to DPIE Request for Information.	The project requires approval from the NSW Minister for Planning and Public Spaces under Division 5.2, Part 5 of the EP&A Act. The project was assessed as above. Approval for EnergyConnect (NSW - Western Section) was granted by the Minister for Planning and Public Spaces.	Transgrid
<i>Protection of the Environment Operations Act 1997 (POEO Act)</i>	Scheduled Activities	Section 47 Section 48	Do not carry out or allow an activity listed in Schedule 1, or carry out work to enable such an activity, unless the premises are licensed by the EPA.	Environment protection licences (EPL) are required for the carrying out of scheduled activities as listed under Schedule 1 of the Act. An EPL is likely to be required for the following scheduled activities: 16 Crushing, grinding or separating An EPL is required if there is a capacity to process more than 150 tonnes of material per day or 30,000 tonnes per year. The	SecureEnergy

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Legislation/ Regulations	Aspect	Reference	Requirement	Applicability	Responsibility
				need for a crushing or screening plant will not be known until further geotechnical investigation works have occurred. Should a crushing or screening plant be required and the capacity needed is more than 150 tonnes per day or 30,000 tonnes per year, then an EPL will be obtained.	
	Harming the environment	Section 115 Section 116 Section 117	Do not risk harming the environment by wilfully or negligently: <ul style="list-style-type: none"> disposing of waste unlawfully. causing any substance to leak, spill or otherwise escape (whether or not from a container); or causing any controlled substance to be emitted into the atmosphere.	Yes, the relevant management measures are included within the Soil and Water Management Plan, Waste Management Plan and Air Quality Management Plan.	SecureEnergy
	Water pollution	Section 120	Do not cause or permit water pollution.	Yes, the relevant management measures have been incorporated within the Soil and Water Management Plan.	SecureEnergy
	Land pollution	Section 142	Do not cause or permit land pollution other than under authority of a licence or regulation (however it is not a land pollution offence to place virgin excavated natural material or lawful pesticides and fertilisers on land, or by placing matter on land that has been notified to the EPA as an unlicensed landfill and which is operated in accordance with the regulations	Yes, the relevant management measures have been incorporated within the Soil and Water Management Plan.	SecureEnergy
	Notification of pollution incidents	Section 148	Notify the EPA immediately of pollution incidents where material harm to the environment is caused or threatened.	Yes, notification requirements are detailed in Section 8 of this CEMP.	SecureEnergy
	Prepare PIRMP if EPL required	Section 153A-F	Requires the holder of an EPL to prepare a pollution incident response management plan (PIRMP)	A PIRMP will be prepared as part of the EPL, if an EPL is required.	SecureEnergy
	Control equipment	Section 167	Properly and efficiently maintain and operate any installed pollution control equipment (including monitoring devices).	Yes, the relevant management measures have been incorporated within the Soil and Water Management Plan.	SecureEnergy

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Legislation/Regulations	Aspect	Reference	Requirement	Applicability	Responsibility
<i>Contaminated Land Management Act 1997</i>	Reporting contamination	Section 60	Duty to report contamination.	Yes, if project activities have caused land contamination, or a landowner becomes aware of land that is contaminated, there is a legal duty under section 60 of the <i>Contaminated Land Management Act 1997</i> to notify the EPA.	SecureEnergy
<i>Water Management Act 2000 (WM Act)</i>	Water access licence	Section 60A	Do not take water from a water source (a lake, river or estuary or place where water occurs naturally on or below the surface of the ground and includes coastal waters) without an access licence.	<p>Yes, the WM Act applies to areas of New South Wales that have a water sharing plan. The project area is subject to the following water sharing plans:</p> <ul style="list-style-type: none"> • NSW Murray Darling Basin Fractured Rock Groundwater Sources 2011, Lachlan Fold Belt Murray Darling Basin Groundwater Source; and • Darling Alluvial Groundwater Sources – including unconfined aquifers with high connectivity to the Darling River • NSW Murray Darling Porous Rock Groundwater Sources – including remaining unconfined, semiconfined and confined aquifers. <p>Section 60A of the WM Act requires that a water access licence (WAL) be obtained to extract water from a water source.</p> <p>Section 21 and Schedule 4 of the <i>Water Management (General) Regulation 2018</i> does however provide exemptions for the requirement to obtain water access licences. Relevant exemptions from Part 1 of Schedule 4 are detailed below:</p> <ul style="list-style-type: none"> • clause 7 provides an exemption for water taken in the course of certain aquifer interference activities (in relation to taking up to 3 ML of groundwater from a groundwater source); and • clause 17A provides exemption for the taking of groundwater for excavation works where they are a holder of a water supply work authority in relation to taking of more than 3 ML of groundwater. <p>Any other water required for construction purposes would however require a water access licence. This includes extraction for:</p> <ul style="list-style-type: none"> • interception activities (i.e. intercepted groundwater during piling); and • potable uses for human consumption associated with the accommodation camp. 	SecureEnergy

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Legislation/ Regulations	Aspect	Reference	Requirement	Applicability	Responsibility
	Impacts to water supply work and water use Activity approvals	Section 89 Section 90 Section 91	<p>Under Section 89, a water use approval confers a right on its holder to use water for a particular purpose at a particular location.</p> <p>Under Section 90, approval is required for the authorisation to construct and use a specified water supply work such as pumps, bores, spear points or wells at a specified location, drainage work or flood work.</p> <p>Under Section 91, there are two kinds of activity approvals, controlled activity approvals and aquifer interference approvals.</p> <p>A controlled activity approval is required for carrying out a specified controlled activity at a specified location in, on or under waterfront land.</p> <p>An aquifer interference approval is required for carrying out one or more specified aquifer interference activities at a specified location, or in a specified area.</p>	<p>Section 5.23 of the EP&A Act provides that water use approval under section 89, a water management work approval under section 90 or an activity approval (other than an aquifer interference approval) under section 91 of the Water Management Act do not apply to state significant infrastructure.</p> <p>An activity approval is therefore not required, however an aquifer interference licence may be required when an activity involves any of the following:</p> <ol style="list-style-type: none"> the penetration of an aquifer, the interference with water in an aquifer, the obstruction of the flow of water in an aquifer, the taking of water from an aquifer in the course of carrying out mining, or any other activity prescribed by the regulations, the disposal of water taken from an aquifer as referred to in paragraph (d). <p>However, an aquifer interference licence is not required if an activity ensures that no more than minimal harm will be done.</p> <p>Stated under Section 3.3 of the NSW Aquifer Interference Policy, there are a number of activities that are considered as having a minimal impact on water dependent assets which includes monitoring bores and wells that are required by a development consent under Part 4 or an approval under Part 5.1, of the EP&A Act, or required or undertaken as a result of an environmental assessment under Part 5 of EP&A Act. Since the environmental assessment for the project requires the confirmation of groundwater level. An aquifer interference licence is not required.</p>	SecureEnergy

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