

DOCUMENT REVIEW AND TITLE SHEET



CLIENT DOCUMENT/DRAWING NO.:	0775-ENV-GEN-90-010	REV:	01
VALMEC DOCUMENT NO.:	4017-PLA-HS-015	REV:	1
SUBCONTRACTOR DOCUMENT NO.:		REV:	
DOCUMENT/DRAWING TITLE:	BROKEN HILL BESS PROJECT ENVIRONMENTAL MANAGEMENT STRATEGY – STAGE 2 – TRANSMISSION LINE		

PROJECT NO AND TITLE:	4017-BROKEN HILL BATTERY ENERGY STORAGE SYSTEM
CLIENT AND CONTRACT/PO NO.:	AGL ENERGY – 97712982

Valmec Rev	Date	Issue	Author	Reviewed By:	Reviewed & Approved By:
0	27/05/2022	Issued For Use	FYFE	MP	JA
1	13/07/2022	Issued For Use	FYFE	KB	MP

VALMEC DOCUMENT REVIEW - 1			VALMEC DOCUMENT REVIEW - 2		
1	<input checked="" type="checkbox"/>	Approved	1	<input checked="" type="checkbox"/>	Approved
2	<input type="checkbox"/>	Approved as Noted – Revise and Resubmit	2	<input type="checkbox"/>	Approved as Noted – Revise and Resubmit
3	<input type="checkbox"/>	Not Approved – Revise and Resubmit	3	<input type="checkbox"/>	Not Approved – Revise and Resubmit
4	<input type="checkbox"/>	Review Not Required/Information only	4	<input type="checkbox"/>	Review Not Required/Information only
Reviewed by (Name):		Kester Brown	Reviewed by (Name):		Marvin Pacheco
Signature:			Signature:		
Date:		13/07/2022	Date:		13/07/2022

REVIEW COMMENTS						
Line Item	Page	Section Reference	Reviewer	Reviewer Comment	Author Response	Accepted Y/N
1						
2						
3						
4						
5						
6						
7						
8						
9						
10						

**Extend the above comments table as necessary





BROKEN HILL BESS PROJECT

ENVIRONMENTAL MANAGEMENT STRATEGY STAGE 2 – TRANSMISSION LINE

Valmec Document No.: **4017-PLA-HS-015** Rev: **1**

Consortium Document No.: **0775-ENV-GEN-90-010** Rev: **1**

	Name	Title	Signature	Date
Originator:	Eva Montgomery	Consultant (Fyfe Pty Ltd)		13/07/2022
Document Owner:	Marvin Pacheco	Snr Project Manager - Valmec		13/07/2022

VAL Rev	AGL Rev	Date	Revision Status	Author	Review	Approval
0	R00	24/05/2022	Issued for Consultation	FYFE	FYFE	
1	R01	13/07/2022	Issued for Consultation	FYFE	FYFE	

BROKEN HILL BESS PROJECT
ENVIRONMENTAL MANAGEMENT STRATEGY
STAGE 2 – TRANSMISSION LINE



Record of Consultation.

Date	Issues Raised	Addressed	Approved
06/06/2022	Document issued to DPI for consultation (Rev 0)	n/a	
12/07/2022	Consultation not required as confirmed by DPI via phone		

BROKEN HILL BESS PROJECT
ENVIRONMENTAL MANAGEMENT STRATEGY
STAGE 2 – TRANSMISSION LINE



Development Consent Sections	Construction Management Plan References
<p>Unexpected Finds</p> <p>Schedule 3 – Condition 31.</p> <p>31. Prior to the commencement of construction, the Applicant must prepare an unexpected finds procedure to ensure that potentially contaminated material is appropriately managed. The procedure must form part of the Environmental Management Strategy for the development and must ensure any material identified as contaminated is to be disposed of off-site, with the disposal location and results of testing submitted to the Planning Secretary, prior to its removal from the site.</p>	<p>Section 6.5.1 & Appendix E</p>
<p>Environmental Management Strategy</p> <p>Schedule 4 – Condition 1.</p> <p>1) Prior to commencing construction, the Applicant must prepare an Environmental Management Strategy for the development to the satisfaction of the Planning Secretary. The strategy must:</p> <ol style="list-style-type: none"> Provide the strategic framework for environmental management of the development; Identify the statutory approvals that apply to the development; Describe the role, responsibility, authority and accountability of all key personnel involved in the environmental management of the development; Describe the procedures that would be implemented to: <ul style="list-style-type: none"> Keep the local community and relevant agencies informed about the operation and environmental performance of the development; Received, handle, respond to, and record complaints; Resolve any disputes that may arise; Respond to any non-compliance; Respond to emergencies; and Include: <ul style="list-style-type: none"> References to any plans approved under the conditions of this consent; and A clear plan depicting all the monitoring to be carried out in relation to the development. <p>Following the Planning Secretary's approval, the Applicant must implement the Environmental Management Strategy.</p>	<p>Section 4</p> <p>Section 5.2 & Appendix C</p> <p>Section 6</p> <p>Section 6.3.2</p> <p>Section 6.3.3</p> <p>Section 6.3.3</p> <p>Section 6.3.3</p> <p>Section 6.5</p> <p>Section 5.1.1</p> <p>Section 7.1</p>
<p>Revision of Staging of Strategies, Plans or Programs</p> <p>Schedule 4 – Condition 2.</p> <p>2. The Applicant must:</p> <ol style="list-style-type: none"> Update the strategies, plans or programs required under this consent to the satisfaction of the Planning Secretary prior to carrying out any upgrading or decommissioning activities on site; and Review and, if necessary, revise the strategies, plans or programs required under this consent to the satisfaction of the Planning Secretary within 1 month of the: <ul style="list-style-type: none"> Submission of an incident report under condition 7 of Schedule 4; Submission of an audit report under condition 11 of Schedule 4; or Any modification to the conditions of this consent. 	<p>Section 8</p> <p>Section 7.2 & Section 8</p> <p>Section 7.3 & Section 8</p>

BROKEN HILL BESS PROJECT
ENVIRONMENTAL MANAGEMENT STRATEGY
STAGE 2 – TRANSMISSION LINE



	Section 8
<p>Updating and Staging of Strategies, Plans or Programs</p> <p>Schedule 4 – Condition 3.</p> <p>With the approval of the Planning Secretary, the Applicant may submit any strategy, plan or program required by this consent on a progressive basis. To ensure the strategies, plans or programs under the conditions of this consent are updated on a regular basis, the Applicant may at any time submit revised strategies, plans or programs to the Planning Secretary for approval. With the agreement of the Planning Secretary, the Applicant may prepare any revised strategy, plan or program without undertaking consultation with all the parties referred to under the relevant condition of this consent.</p>	Section 8

BROKEN HILL BESS PROJECT
ENVIRONMENTAL MANAGEMENT STRATEGY
STAGE 2 – TRANSMISSION LINE



TABLE OF CONTENTS

1	INTRODUCTION	7
1.1	PROJECT OVERSIGHT	7
1.2	OBLIGATION TO MINIMISE HARM TO THE ENVIRONMENT	7
1.3	CONTRACTOR TO PERFORM	7
1.4	PROJECT DESCRIPTION	8
1.5	DEFINITIONS	8
2	OBJECTIVES	10
3	SCOPE	10
4	ENVIRONMENTAL MANAGEMENT FRAMEWORK	11
4.1	ENVIRONMENTAL PLANNING SYSTEM	11
4.2	HSEQ POLICY AND CORE VALUES	11
5	PLANNING.....	12
5.1	ENVIRONMENTAL ASPECTS AND IMPACTS	12
5.1.1	ENVIRONMENTAL MANAGEMENT PLANS.....	12
5.2	LEGAL AND OTHER REQUIREMENTS.....	12
6	IMPLEMENTATION AND OPERATION	14
6.1	STRUCTURE AND RESPONSIBILITY	14
6.1.1	Senior Management (Directors, General Managers and Operation Managers).....	14
6.1.2	Project Manager.....	14
6.1.3	Immediate Managers and Supervisor(s)	14
6.1.4	HSE Lead.....	15
6.1.5	HSE Advisor	15
6.1.6	All Personnel	16
6.2	ENVIRONMENTAL AWARENESS.....	16
6.3	COMMUNICATION.....	16
6.3.1	INTERNAL COMMUNICATION	16
6.3.2	EXTERNAL COMMUNICATION	17
6.3.3	COMPLAINTS MANAGEMENT	17
6.3.4	DOCUMENTATION, DOCUMENT CONTROL & RECORD MANAGEMENT.....	17
6.4	OPERATIONAL CONTROL	17
6.5	EMERGENCY PREPAREDNESS AND RESPONSE	18
6.5.1	UNEXPECTED FINDS	18
7	CHECKING AND CORRECTIVE ACTIONS	22
7.1	MONITORING AND MEASUREMENT	22
7.2	NON CONFORMANCE, CORRECTIVE AND PREVENTATIVE ACTION.....	22
7.3	HSEQMS INSPECTIONS AND AUDITING.....	23
8	MANAGEMENT REVIEW.....	24
8.1	STRATEGY REVIEW.....	24

BROKEN HILL BESS PROJECT
ENVIRONMENTAL MANAGEMENT STRATEGY
STAGE 2 – TRANSMISSION LINE



APPENDIX LIST

APPENDIX A	HSEQ Policy
APPENDIX B	Project Approval – Development Consent
APPENDIX C	Project Legal Register
APPENDIX D	Projects Impacts and Aspects Register
APPENDIX E	Unexpected Finds Procedure
APPENDIX F	Procedures

BROKEN HILL BESS PROJECT
ENVIRONMENTAL MANAGEMENT STRATEGY
STAGE 2 – TRANSMISSION LINE



1 INTRODUCTION

Valmec Pty Ltd is committed to continually improving our environmental performance through cost-effective solutions that minimise our environmental impact, prevent pollution and support sustainable development.

In line with our Core Value of Respect – People, Environment, Culture, we:

- Adopt environmental management as a key value, requiring staff and subcontractors to work in accordance with our environmental management plans;
- Identify all significant potential environmental impacts relevant to our operations and implement risk controls to mitigate against such impacts;
- Fulfil all of our compliance obligations relating to legislation, standards, government guidelines and environmental approvals;
- Regularly review our performance, making changes as necessary to ensure ongoing improvement; and
- Monitor advances in environmental controls, technology, and regulatory trends relevant to our operations.

1.1 PROJECT OVERSIGHT

The Environmental Management Strategy has been aligned with the Development Consent Approval under Section 4.38 of the *Environmental Planning & Assessment Act 1979* which has been authorised by the Minister for Planning and Public Spaces and is registered as the Broken Hill Battery Storage System (BESS) Project - Application Number SSD-11437498.

The Development Consent was designed against an initial Environmental Impact Statement (EIS) and assesses the environmental impacts of the project against the activities being conducted also under Section 4.12(8) of the *Environmental Planning and Assessment Act 1979*.

The EIS was prepared in accordance with Schedule 2 of the *Environmental Planning and Assessment Regulations 2000*.

This oversight is to ensure all controls established through the Environmental Statutory and Regulatory Conditions have been defined and adequately controlled, supporting sound governance, compliance with environmental practices throughout the project life-cycle. This includes EPC Contract performance measures with biodiversity management for the project.

1.2 OBLIGATION TO MINIMISE HARM TO THE ENVIRONMENT

The Principal Contractor (PC) must implement all reasonable and practicable measures to prevent and/or minimise any material harm to the environment that may result from the development, construction, commissioning and operation of the project.

1.3 CONTRACTOR TO PERFORM

Valmec Australia Pty Ltd (Valmec) and Fluence Energy Pty Ltd (Fluence) have agreed to establish the Consortium for the purpose of entering into the EPC Contract and performing and completing the Works in accordance with the conditions of the EPC Contract.

BROKEN HILL BESS PROJECT
ENVIRONMENTAL MANAGEMENT STRATEGY
STAGE 2 – TRANSMISSION LINE



1.4 PROJECT DESCRIPTION

AGL Macquarie Pty Limited (AGL) will build, own, operate and maintain a Battery Energy Storage System (BESS) with a capacity of approximately 50 megawatts (MW) and 50 megawatt-hour (MWh) (Facility). The Project would provide a range of network services to augment the reliability of energy supply at Broken Hill. The Project would also provide storage and firming capacity to the National Energy Market (NEM) as well as additional services to assist grid stability including frequency control ancillary services.

The proposed location of the BESS (the Site) is on two lots at 74 to 80 Pinnacles Place, Broken Hill, 2880 (Lots 57 and 58 of DP 258288). The Project would also involve the installation of a transmission connection between the Site and the nearby TransGrid Broken Hill substation, which would traverse Lot 7302 DP1181 and Lot 2 DP 1102040.

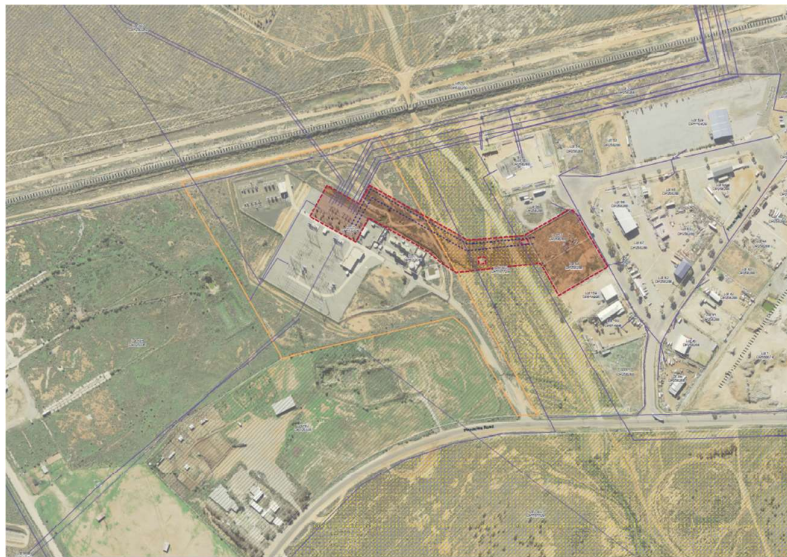


Figure 1: Proposed project boundaries

The Facility shall be constructed and installed by the Consortium within the battery limits defined in the Principal's Requirements (refer Figure 1 above). For more detail on the Project's Scope of Work, refer BHBESS - EPC Contract - Schedule 03 (Principal's Requirements) - Rev 4 FINAL.

The proposed Work of the consortium includes:

- i. AC current at the PCS output will be stepped-up to 22kV level by LV / HV step-up transformers located adjacent to the power conversion units.
- ii. LV and HV electrical systems, including transformers, cables, switchboards/distribution boards and all other necessary equipment to ensure fully functional battery system.
- iii. All civil works related to site clearing (including removal of existing redundant underground/above ground services, if any), soil testing, trenching, site reinstatement and removal of any waste spoil.

1.5 DEFINITIONS

The following definitions apply for the purpose of this plan:

Term	Definition
BMP	Biodiversity Management Plan
CEMP	Construction Environmental Management Plan.

BROKEN HILL BESS PROJECT
ENVIRONMENTAL MANAGEMENT STRATEGY
STAGE 2 – TRANSMISSION LINE



Term	Definition
Competent	Ability to apply knowledge and skills to achieve intended results from operational experience and education.
Conformity	Fulfilment of a requirement (ie. EIS, Development Consent, EPCC, and CEMP).
Consortium	Joint venture between Valmec Australia Pty Ltd (Valmec) and Fluence Energy Pty Ltd (Fluence)
DC	Development Consent as required by the Minister for Planning and Public Open Spaces and Section 4.38 of the Environmental Planning & Assessment Act 1979.
DPE	Department of Planning and Environment NSW.
EIS	The Environmental Impact Statement for Broken Hill Battery Storage System
Environment	Surroundings in which an organisation operates, including air, water, land, natural resources, flora, fauna, humans and their interrelationships.
Environmental Aspect	An element of an organisation's activities, products, and services that interact with the environment. These can include discharges to water, emissions to air, waste and use of natural resources and materials.
Environmental Impact	Any change to the environment, whether adverse or beneficial, resulting from a facility's activities, products, or services (the effect that people's actions have on the environment).
EPCC	Engineer Procure Construct Contract.
HSEQMS	Health, Safety, Environment, Quality Management System
Incident	Occurrence arising out of or in the course of work that could or does result in death, injury or ill-health, or equipment or environmental damage. <ul style="list-style-type: none"> • 'Accident' refers to incidents incurring injury, ill health, damage or harm. • 'Near-miss' refers to incidents not incurring injury, ill health, damage or harm but have the potential to do so.
Material harm	Is harm that: <ul style="list-style-type: none"> • involves actual or potential harm to the health or safety of human beings or to ecosystems that is not trivial; • results in actual or potential loss or property damage of an amount, or amounts in aggregate, exceeding \$10,000 (such loss includes the reasonable costs and expenses that would be incurred in taking all reasonable and practicable measures to prevent, mitigate or make good harm to the environment)
Minimise	Implement all reasonable and feasible mitigation measures to reduce the impacts of the development.
Non-compliance	An occurrence, or development that is a breach of this Soil and Water Management Plan but is not an incident.
Non-conformity	Non-fulfilment of a requirement (ie. EIS, Development Consent, EPCC, and CEMP).
POEO Act	Protection of the Environment Operations Act 1997.
Reasonable	Reasonable relates to the application of judgement in arriving at a decision, taking into account: mitigation benefits, cost of mitigation versus benefits provided, community views and the nature and extent of potential improvements.
Rehabilitation	The restoration of land disturbed by the development to a good condition, to ensure it is safe, stable, non-polluting and sustainable.
Significant Environmental Aspect	An Environmental aspect that has significant characteristics in terms of risk impact (ie. Legal requirement, protected species, habit, licence conditions), and if not controlled can cause a significant impact (ie. Pollution, degradation, environmental harm, prosecution, breach, non-compliance and or non-conformity).
Shall	'Shall' indicates a mandatory provision within this Biodiversity Management Plan.
SWMP	Soil and Water Management Plan

BROKEN HILL BESS PROJECT
ENVIRONMENTAL MANAGEMENT STRATEGY
STAGE 2 – TRANSMISSION LINE



2 OBJECTIVES

The objectives of the Strategy are to:

- Provide the overall framework for the management of environmental aspects and impacts associated with the consortium operations in line with the principles of ISO 14001
- Effectively integrate the requirements of the Environmental, Safety and Health Management System (HSEQMS) and relevant legal and other requirements into a site-specific document.

3 SCOPE

This management strategy applies to all activities undertaken by the consortium including project development, construction and maintenance activities.

This Strategy provides the strategic context for environmental management across the site. It is designed to meet the requirements of:

- AS/NZS ISO 14001:2015
- Department of Planning & Environment Project Application Number: SSD-11437498 (Development Consent dated 8 September 2021).

BROKEN HILL BESS PROJECT
ENVIRONMENTAL MANAGEMENT STRATEGY
STAGE 2 – TRANSMISSION LINE



4 ENVIRONMENTAL MANAGEMENT FRAMEWORK

4.1 ENVIRONMENTAL PLANNING SYSTEM

Valmec has demonstrated its commitment to the environment through gaining **ISO 14001: 2015 Environmental Management System** accreditation.

The consortium are committed to pursuing the highest standard of environmental management in all of their operations and strive to continually improve our environmental performance.

As part of the gaining **ISO 14001: 2015 Environmental Management System** accreditation Valmec has adopted the following commitments:

- Adopt environmental management as a key-value, requiring management and employees to conduct operations in accordance with our policies and procedures;
- Comply with, and exceed where possible, all environmental legislation, regulations, standards, codes of practice, and other requirements applicable to our operations;
- Identify all significant potential environmental impacts relevant to our project operations and implement an Environmental Management Plan to mitigate against such impacts;
- Develop environmental awareness within Valmec through effective communication, training, consultation, and interaction; and
- Monitor advances in the environmental controls, technology, and regulatory trends relevant to our operations.

The strategy outlines the minimum standard to ensure that the Consortium will manage this project in alignment with the ISO 14001: 2015 Environmental Management System accreditation through identification of the environmental aspects of this project and the processes that it will implement to minimise their impacts and facilitate continual improvement in its environmental performance.

4.2 HSEQ POLICY AND CORE VALUES

The Consortium and its subcontractors will conduct all work in accordance with the following:

- Valmec HSEQ Policy - VAL-POL-001
- Valmec Core Values - VAL-POL-002

These will be posted on the noticeboard/s on the Project and are freely available to all interested parties via our website www.Consortium.com.au. All personnel are introduced to Consortium policies during their induction.

BROKEN HILL BESS PROJECT
ENVIRONMENTAL MANAGEMENT STRATEGY
STAGE 2 – TRANSMISSION LINE



5 PLANNING

5.1 ENVIRONMENTAL ASPECTS AND IMPACTS

The on-going identification of environmental aspects and impacts is a key component of the HSEQMS and in driving the improvement process.

The risks associated with environmental aspects and impacts of each operational area are identified, assessed and managed in consultation with the project management team. Risk assessment includes consideration of corporate policy, compliance with legal and other requirements, stakeholder/community issues, severity of consequences and the likelihood of occurrence.

The project shall hold a Construction Risk Assessment Workshop (CRAW) and address all Environmental aspects within the project scope and identify required controls. An Environmental Aspects Register is to be developed which shall specify controls for all Environmental aspects, especially those of significance and detail such controls within the Management Plans specified within the Development Consent and EPC Contract. Refer to the projects Environmental Aspects Register.

Environmental aspects and impacts risks are reviewed at least annually and at the planning phase of major projects. The environmental component of the risk register is maintained in business solution is subsequently updated as required.

5.1.1 ENVIRONMENTAL MANAGEMENT PLANS

The environmental aspects will be addressed, and appropriate controls further detailed within the below associated management plans:

As required under Department of Planning & Environment Project Application Number: SSD-11437498 (Development Consent dated 8 September 2021):

- Biodiversity Management Plan (0775-ENV-GEN-90-003);
- Soil and Water Management Plan (0775-ENV-GEN-90-005);
- Traffic Management Plan (0775-HAS-GEN-90-005);
- Heritage Management Plan (0775-ENV-GEN-90-004);
- Fire Safety Study (0775-INF-FLN-67-001); and
- Emergency Management Plan (0775-HAS-GEN-90-003).

As required for EPC contract (not conditioned under the Approval):

- Construction Environmental Management Plan (0775-ENV-GEN-90-001);
 - Construction Noise and vibration (sub-plan under CEMP); and
 - Waste Management (sub-plan under CEMP).

5.2 LEGAL AND OTHER REQUIREMENTS

For the purposes of this plan, the project and subsequently the Consortium's environmental compliance obligations are contained within the following legislation as defined from the EIS, Development Consent and EPC Contract and includes:

BROKEN HILL BESS PROJECT
ENVIRONMENTAL MANAGEMENT STRATEGY
STAGE 2 – TRANSMISSION LINE



- Protection of the Environment Operations (POEO) Act 1997
- Environmental Planning & Assessment Act 1979
- Environmental Planning & Assessment Regulation 2000
- Water Management Act 2000
- Protection of the Environment Operations Act 1997
- Environmental Subordinate Legislation and Guidelines
- Industry and Governmental Approval Bodies
- Australian and International Standards
- Projects Legal Register (see Appendix C)

Actions to address specific compliance requirements have been listed in the relevant sections of this plan inclusive of conditions set by the Development Consent and included in the Projects Legal Register.

Environmental legislation is also accessed through Lawstream via the Consortium intranet, or via the NSW EPA government website. Environmental standards are also through SAI Global via the Consortium intranet, or requested through the Consortium HSEQ team. Other documentation may be requested through the relevant Consortium or AGL representative.

BROKEN HILL BESS PROJECT
ENVIRONMENTAL MANAGEMENT STRATEGY
STAGE 2 – TRANSMISSION LINE



6 IMPLEMENTATION AND OPERATION

6.1 STRUCTURE AND RESPONSIBILITY

All individuals within the project are responsible for following processes and taking all care to control the environmental conditions within their specific duties and overall obligations. All individuals are accountable for achieving their objectives within the area of responsibility, as a minimum and as outlined below:

6.1.1 Senior Management (Directors, General Managers and Operation Managers)

Responsible for the overall environmental performance of the Consortium including (but not limited to):

- Maintain an awareness of environmental matters relevant to Consortium's scope of work.
- Ensure resources are provided and processes established to minimise environmental risks.
- Ensure processes are in place to ensure reported incidents and other environmental issues are addressed appropriately.
- Ensure processes are in place to comply with legal requirements.
- Verify that resources and processes are in place and being used effectively.
- Monitoring and measurement of Environmental conditions are being evaluated and reported upon.

6.1.2 Project Manager

Overall responsibility for establishing any further Consortium Environmental duties within the project, including (but not limited to):

- Ensure that this plan meets workplace and AGL needs and is fully implemented.
- Demonstrate visible leadership and lead by example at all times.
- Report and escalate Environmental incidents in accordance with the agreed timeframes.
- Manage relationships within the Consortium, in liaison with Consortium Management and AGL.
- Liaise with the HSE Lead with all areas of this plan, implementation and performance evaluations.
- Action any risks or opportunities with this plan.

6.1.3 Immediate Managers and Supervisor(s)

Responsible for managing the environmental compliance within the project and their work crew(s) with activities, that interact with the environment and controlled through this plan, including (but not limited to):

- Demonstrate visible leadership at all times with Environmental, activities & associated controls.
- Communicate any risks with construction activities that interact with the Environment to work crews at pre-start meetings and identify adequate controls.
- Review authority to work (ATW), safe work method statements (SWMS), job hazard environmental analysis (JHEA) and ensure the key environmental risks (Environmental Aspects) of the crew's work activities are adequately identified and controlled as required by this plan.
- Ensure that any ATW or permit to work issued is understood and Environmental controls applied with the permit holder and the work crews.
- Ensure any Environmental "Hold Points" are listed and detailed on the JHEA.
- Stop work if conditions change or the required Environmental controls are not fully established or not effective in meeting the conditions of this plan.
- Resolve Environmental hazards or concerns that are reported by the work crew and escalate as required.
- Coordinate any local emergency response within the work area for any actual Environmental impacts.

BROKEN HILL BESS PROJECT
ENVIRONMENTAL MANAGEMENT STRATEGY
STAGE 2 – TRANSMISSION LINE



- Work closely with the HSE Lead and HSE Advisor within the project to ensure compliance obligations with activities are understood and achieved within this plan.
- Liaise with the HSE Lead and HSE Advisor with all areas of this plans implementation and performance evaluations.

6.1.4 HSE Lead

Responsible for ensuring Environmental Management systems and supporting activities meet the conditions of this plan and provides oversight with such conditions within the project with pre-mobilisation, mobilisation, execution, performance evaluation, reporting, incident management, initiatives and improvement activities.

The HSE Lead shall be onsite and will be responsible for operational oversight with assurance audits, Environmental controls and the HSE Advisor for the project, including (but not limited to):

- Assist with the mobilisation and implementation of this plan.
- Demonstrate visible leadership by example at all times within the Environmental function.
- Monitor the implementation of this plan and overall Environmental performance outcomes.
- Assist Line Management to ensure this plan meets the needs of AGL and within the project.
- Ensure that all incidents and non-conformances are investigated according to the level of risk exposure.
- Schedule Environmental assurance audits and inspections to meet project and AGL requirements.
- Assist with reporting on Environmental objectives and performance within the project.
- Monitor the status of corrective actions arising from audits and inspections and evaluate effectiveness.
- Support the Project Team with all Environmental requirements, guidance, and information.

6.1.5 HSE Advisor

The HSE Advisor is responsible for implementing, supporting and monitoring Environmental controls and performance through assisting workplace personnel to meet their Environmental duties within this plan.

The HSE Advisor requirements include (but not limited to):

- Demonstrate visible leadership by example at all times within the Environmental function.
- Assist other workplace personnel in understanding and fulfilling their Environmental responsibilities.
- Maintain Environmental training and awareness to schedule with inductions and onsite activities.
- Facilitate Environmental activities against this plan and monitor effectiveness with operational controls.
- Monitor workplace performance against this plans Environmental objectives.
- Maintain oversite control of all plant, equipment, chemical storage, lay-down and construction areas.
- Coordinate Environmental Emergency Response readiness and activities.
- Conduct Environmental assurance audits and inspections with activities against this plan.
- Maintain Environmental communications relevant to the work scope and project phases.
- Maintaining corrective actions arising from audits and inspections, evaluating effectiveness.
- Liaise with the HSE Lead with all areas of this plan's implementation and performance evaluations.

BROKEN HILL BESS PROJECT
ENVIRONMENTAL MANAGEMENT STRATEGY
STAGE 2 – TRANSMISSION LINE



6.1.6 All Personnel

All personnel are responsible for taking reasonable care to ensure they understand the requirements of this plan within its operational scope of the project, including (but not limited to):

- Understanding the Environmental risks and associated controls with Environmental Management during construction activities.
- Not proceeding if unsure of environmental responsibilities and requirements and seek advice from their immediate Supervisor, HSE Advisor or HSE Lead.
- Comply with the requirements of this plan, authority to work (ATW), safe work method statements (SWMS), job hazard environmental analysis (JHEA) and ensure the key environmental risks with the work activities are adequately identified, understood and controlled as required by this plan.
- Ensure any Environmental “Hold Points” are listed and detailed on the JHEA.
- Report and control any Environmental incidents that occur from construction activities, immediately to their supervisor for response and escalation.
- Support the implementation of this plan and identify any areas of Environmental Improvement.

6.2 ENVIRONMENTAL AWARENESS

The ‘Environmental Induction’ module of the Consortium is an awareness module that introduces employees and subcontractors to:

- The importance of environmental management;
- The Environmental Policy;
- Consortium’s significant environmental aspects and the key risks associated with each aspect;
- The minimum operational controls required for each risk and associated environmental aspect;
- The monitoring and effectiveness of operational controls; and
- The process for reporting environmental incidents.

Project specific environmental requirements shall be focused on within the induction stage with environmental aspects, specifically those of significance, obligations and associated operational controls.

All individuals shall complete the Project Specific Induction before working onsite.

Additional refresher training will be conducted on various environmental matters from time to time during dedicated training sessions, emergency drills or periodic toolbox meetings. Subcontractors will be required to participate if they are at the workplace at the time and the content relates to their scope of work.

Training on the environmental aspects specific to everyone’s individual role will be addressed during other training specific to that specific role. Training in this context refers to a range of methods (e.g. formal in-house work group training, one-on-one coaching and online modules), which will be documented against learning outcomes and required competency.

6.3 COMMUNICATION

Effective communication between all key stakeholders is important for the successful implementation and operation of the HSEQMS. Specific communication mechanisms are outlined below.

6.3.1 INTERNAL COMMUNICATION

Channels are maintained within the consortium for internal communication of environmental aspects and HSEQMS requirements at relevant levels throughout the organisation. These include meetings, regular reporting and training programs.

BROKEN HILL BESS PROJECT
ENVIRONMENTAL MANAGEMENT STRATEGY
STAGE 2 – TRANSMISSION LINE



The consortium will communicate relevant procedures and requirements to suppliers, customers and contractors via contractual agreements, regular meetings and training programs.

6.3.2 EXTERNAL COMMUNICATION

At various times specific information, relevant to environmental aspects and impacts, is communicated to external stakeholders, including the community and government authorities. The consortium will maintain an external communication and complaints system which addresses and records communication from external stakeholders. All external communications are undertaken in accordance with this system. The method upon which external stakeholders, including the community can make complaints will be clearly communicated and detailed on the consortium's website.

AGL will be the proponent to speak to the public on behalf of this project, as detailed within the supporting Environmental Impact Statement. Although it is anticipated that the project will not generate significant stakeholder interest, AGL will continue to maintain its engagement with current neighbours to the project site, local community and key local stakeholders. It is the role of the consortium to maintain its communication with AGL and keep them AGL, as the project owner, fully informed of any issues and/or impacts.

All communication will be kept up to date and available via the website www.Consortium.com.au.

Further project information, including current statutory approvals, contact details for complaints submission and project updates / news will also be maintained and available to the public by the project owner, AGL via [Broken Hill Battery Energy Storage System \(agl.com.au\)](http://Broken Hill Battery Energy Storage System (agl.com.au)).

6.3.3 COMPLAINTS MANAGEMENT

The consortium will regularly consult with AGL and stakeholders to avoid disputes arising through the communication mechanisms outlined above.

In the event the Consortium cannot resolve a development consent related dispute that arises between the Consortium and a project stakeholder, such as a government authority or the community, the matter will be referred to AGL. AGL will escalate to government authorities as required and will request the involvement of the Consortium where required.

In addition, for any dispute that occurs between the Consortium and a member of the community that cannot be resolved through direct consultation in conjunction with AGL, the matter will be referred by AGL to the relevant government authority for resolution.

A complaints register will be developed and maintained throughout the project duration.

6.3.4 DOCUMENTATION, DOCUMENT CONTROL & RECORD MANAGEMENT

HSEQMS documentation and records are prepared and maintained in an orderly manner sufficient to implement the system in accordance with the ISO 14001:2015 Standard.

Valmec have established procedures for controlling documents to ensure:

- Periodic review and approval by relevant personnel
- Current versions of documents are easily located and available in identified locations
- Obsolete documents are promptly removed from points of issue and use and archived appropriately
- Documentation is legible, dated (with dates of revision) and readily identifiable

6.4 OPERATIONAL CONTROL

Operational controls are required to be implemented where activities are identified as potentially having environmental impacts and to ensure environmental objectives and targets are met.

BROKEN HILL BESS PROJECT
ENVIRONMENTAL MANAGEMENT STRATEGY
STAGE 2 – TRANSMISSION LINE



A risk assessment process has been established to determine the risk and potential environmental impacts associated with activities. (This will be included as Appendix D to this strategy). These activities, including associated risks and implemented controls, are documented in the Site Risk Register. Environmental operating procedures, management plans and programs are established, documented and maintained for operational activities to minimise risks and reduce the potential environmental impact(s) identified.

Valmec has developed environmental management plans to reduce, minimise or eliminate potential environmental impacts across the operation. The below list details the associated project management plans:

- Biodiversity Management Plan (0775-ENV-GEN-90-003);
- Soil and Water Management Plan (0775-ENV-GEN-90-005);
- Traffic Management Plan (0775-HAS-GEN-90-005);
- Heritage Management Plan (0775-ENV-GEN-90-004);
- Fire Safety Study (0775-INF-FLN-67-001); and
- Emergency Management Plan (0775-HAS-GEN-90-003).

As required for EPC contract (not conditioned under the Approval):

- Construction Environmental Management Plan (0775-ENV-GEN-90-001);
 - Construction Noise and vibration (sub-plan under CEMP); and
 - Waste Management (sub-plan under CEMP).

Operating procedures are reviewed on a regular basis, and revised as appropriate, to ensure all significant aspects of the operation are appropriately controlled. New procedures will be developed on an as needs basis.

All personnel working for or on behalf of the Consortium shall be aware of the relevant operating procedures when undertaking their day to day duties. Responsibility will be delegated to the most effective level of supervision to ensure compliance.

6.5 EMERGENCY PREPAREDNESS AND RESPONSE

Effective plans, procedures (see Appendix E) and trained personnel are in place to identify potential emergency scenarios and to plan an appropriate response for the control and recovery from emergencies. Where appropriate, environmental emergency response procedures are integrated with onsite emergency response plans.

An Emergency Response Team trained to respond to emergency situations and incidents is maintained onsite.

Employees are made aware of the potential emergency situations and their responsibilities should the event occur.

6.5.1 UNEXPECTED FINDS

An unexpected find is defined as potential contaminated land or asbestos that was not previously identified in the EIS or during pre-construction investigations. For the purposes of this plan, contaminated land comprises land within the project area that meets the definition of contamination in Contaminated Land Management Act 1997. This includes asbestos. The Unexpected Finds Procedure has been included as Appendix E.

A summary and description of the types of unexpected finds that may be encountered during construction work in the project area is presented in Table 6.1 below.

BROKEN HILL BESS PROJECT
ENVIRONMENTAL MANAGEMENT STRATEGY
STAGE 2 – TRANSMISSION LINE



Table 1 Unexpected Finds and Characteristics of Contamination

Potential Unexpected Find	Observed Characteristic	Type of Contaminant / Issues
Petroleum hydrocarbons (e.g. fuels, oils and lubricants)	<p>May be identified by either odour and/or visual indications of contamination.</p> <p>Petroleum hydrocarbon contamination may be identified by characteristic petrol, diesel or 'oily' odours (e.g. hydraulic oil) which may vary in strength from weak (just detectable) to very strong (easily detectable at a distance from the source).</p> <p>In soils, the odour may or may not be accompanied by specific areas of dark staining (black-grey) or larger scale discolouration of strata from a previously identified 'natural colour' (e.g. staining of orange and brown clay to dark grey and green.)</p> <p>May also be visible as a distinct coloured sheen on water within an excavation.</p>	TRH, BTEX, PAH, lead
Buried dry waste materials	May include a variety of construction and demolition waste materials including wood, plastic, metal fragments, building rubble (e.g. concrete, brick, asphalt, asbestos containing materials etc.).	Asbestos, heavy metals
Buried or surface bonded ACM, asbestos fines/friable asbestos	<p>Cement-bound asbestos containing material (ACM) (e.g. compressed cement sheeting) may be present in building waste or pipes. Friable forms of asbestos including lagging and insulation. Textured coatings and vinyl floor tiles may also contain asbestos.</p> <p>Asbestos fines and asbestos fibres are not typically visible to the unaided eye. Laboratory analysis is required to identify asbestos in soil.</p>	Asbestos
Buried organic materials	Such materials may be associated with decomposed plant matter found within the natural alluvial soils. Although this process is generally naturally occurring, by-products of the decomposing natural material should be considered if encountered.	Nutrients (ammonia, sulphates, phosphates), gaseous emissions (CH ₄ , CO ₂ , H ₂ S)
Structures or conduits containing possible hazardous materials	<p>Could be identified as follows:</p> <ul style="list-style-type: none"> • A buried storage tank or former pipelines (typically metal, concrete or plastic). • Deeper sand fill sometimes with visual/olfactory indications of contamination. • Presence of small concrete footings surrounding by odorous or visually impacted soils and/or groundwater. 	TPH, BTEX, PAH, lead, asbestos

BROKEN HILL BESS PROJECT
ENVIRONMENTAL MANAGEMENT STRATEGY
STAGE 2 – TRANSMISSION LINE



Potential Unexpected Find	Observed Characteristic	Type of Contaminant / Issues
Ash or slag deposits	Ash materials are typically light weight, grey and white sand and gravel sized particles (1mm to 10mm). Slag materials can be varied in consistency and colour and may comprise pale grey to blue/green/grey and be loose or cemented. Slag gravels can be very angular and appear to have a vesicular (i.e. 'honeycomb') texture.	PAH, heavy Metals, can generate alkaline leachate
Landfill type material	Could include a combination of the other categories detailed in this table along with domestic (e.g. rag, clothing), clinical (e.g. sharps, human tissue or hair, laboratory specimens or culture), and/or putrescible waste (e.g. food scraps, nappies, animal waste).	Heavy metals, acids, ammonia, sulfides
Other unusual odours	Other unusual odours that a different from surrounding soils. For instance, a sweet odour could indicate the presence of chlorinated hydrocarbon contamination.	Various
Per- and polyfluoralkyl substances (PFAS)	Foaming in waters (e.g. in excavations, dewatering sumps or discharge) with little agitation and minimal dissipation.	PFAS
Buried Drums	Metal or plastic drums containing potentially unknown hazardous substances. It is noted that management of drum contents may require specialist hazmat contractors. Drums should not be opened to inspect contents until a qualified hazmat contractor has been engaged to assessed potential risks.	Various

The below objectives outline the purpose and intent of the unexpected finds procedure:

- Prevent exposure of contaminated soil, sediment and groundwater to the human population whilst occupying, working on or using the site.
- Appropriately manage and/or dispose of soil, water and sediment waste disturbed during development activities in accordance with relevant EPA guidelines.
- Removal of potential ongoing sources of environmental contamination (unexpected finds such as historical sub-surface petroleum storage, if encountered);
- Given asbestos in soil has not currently been identified during limited intrusive investigation activities, should asbestos be identified, its occurrence will be assessed and managed via application of the Unexpected Finds Protocol
- In the event that oily materials are encountered, the provisions outlined in the unexpected finds protocol will be implemented, comprising inspection, testing and appropriate action as advised by the Remediation Consultant.
- The sampling frequency of the identified substance/materials shall meet the minimum requirements outlined in EPA (1995) in addition to those outlined in the RAP. In the event of an Unexpected Find, it is anticipated that the suitability of the implemented characterisation assessment and the proposed validation strategy be discussed with the site auditor prior to finalisation of the Unexpected Find works.

BROKEN HILL BESS PROJECT
ENVIRONMENTAL MANAGEMENT STRATEGY
STAGE 2 – TRANSMISSION LINE



- Unexpected finds to be recorded in the material tracking plan, where encountered.

The procedure (Appendix E) itself details the process in the event an unexpected find has occurred and the environmental controls measures and compliance requirements to be completed by all personnel associated with the project.

BROKEN HILL BESS PROJECT
ENVIRONMENTAL MANAGEMENT STRATEGY
STAGE 2 – TRANSMISSION LINE



7 CHECKING AND CORRECTIVE ACTIONS

7.1 MONITORING AND MEASUREMENT

Activities that have the potential to result in significant impacts (such as the release of contaminants) are identified in the risk assessment process. Procedures for monitoring and measuring performance, operational controls and conformance with environmental objectives and targets are documented.

Within the context of Consortium objectives, AGL policy, compliance obligations and community expectations, the following environmental targets have been developed:

Table 2 Environmental Targets

Performance Indicator	Target	Result
<i>General</i>		
Number of major non-conformances identified during audits	0	
Number of environmental incidents notifiable to the regulator	0	
Number of environmental regulator notices, fines or prosecutions	0	
<i>Aspect-specific</i>		
Number of erosion and sediment related complaints	0	
Number of dust related complaints	0	
Number of hazardous substance spills > 20 L	0	
Number of hazardous substance spills not contained or completely cleaned-up	0	
Number of unauthorised water discharges into a waterway (including where/if Dewatering / hydrotesting is required)	0	

The below table details the monitoring requirements of the project as per the Development Consent.

Table 3 Statutory Compliance Monitoring

Performance Indicator	Consent Condition	Frequency
Maintenance requirements (local roads impacted by project)	9(c)	Monthly
Fauna impact register	12(a-c)	weekly
Rehabilitation inspection	12(a-c)	Weekly
Beneficial Reuse register	12(a-c)	Monthly
Noise during the night does not exceed 35 dB(A) LAeq, 15min	14(b)	As required based on works
Air Quality – Dust Deposition	15	Daily
Heritage Management Plan	19(d)	Monthly
Water Pollution	21	As required prior to release

7.2 NON CONFORMANCE, CORRECTIVE AND PREVENTATIVE ACTION

Non-compliances may be identified by a range of mechanisms including:

- Review of monitoring results
- Complaints
- Site inspections

BROKEN HILL BESS PROJECT
ENVIRONMENTAL MANAGEMENT STRATEGY
STAGE 2 – TRANSMISSION LINE



- Audits; and
- Incident reports.

Incidents and near misses at Valmec are reported internally through the internal system which is supported by a database to manage the system.

Incident investigations and corrective actions are conducted and authorised by designated personnel. The degree of involvement of the environmental function depends on the nature and scale of the incident.

At a minimum all environmental incidents obtain recommendations for corrective and preventative actions prior to close out of the incident. All corrective actions for non-conformance findings from audits and inspections are actioned through the internal system. Any non-compliance against Valmec operating licence conditions is reported internally and externally to AGL.

Non-compliance incidents that are reportable to government departments are also reported to AGL as they may have the potential to impact upon the business.

The frequency and severity of incidents and non-conformances are used in the Management Review process for determining the effectiveness of the HSEQMS.

7.3 HSEQMS INSPECTIONS AND AUDITING

Regular environmental inspections of operations are conducted. These inspections determine, in conjunction with the environmental monitoring and incident reporting procedures, onsite compliance with the HSEQMS.

Valmec's internal auditing program is designed to assess whether the HSEQMS is effectively implemented and maintained and conforms to legal and other requirements. An annual schedule specifies the audit team, frequency and scope of internal audits. Audit reports are presented at the HSE Policy meeting for management review and sign off.

An independent environmental audit will be conducted in accordance with the project development consent to the following frequency:

- Within 3 months of commencing construction; and
- Within 3 months of commencing operations.

The auditor will be determined in agreement by writing with the Planning Secretary prior to the commencement of an independent audit. Further audits may be undertaken at different times through the Planning Secretary providing 4 weeks' notice to the applicant of the date upon which the audits are to be commenced.

In accordance with the specific requirements in the Independent Audit Post Approval Requirements (2020), the Applicant must:

- a) review and respond to each Independent Audit Report prepared under condition 11 of Schedule 4 of this consent, or condition 13 of Schedule 4 where notice is given by the Planning Secretary;
- b) submit the response to the Planning Secretary; and
- c) make each Independent Audit Report, and response to it, publicly available within 60 days of submission to the Planning Secretary. unless otherwise agreed by the Planning Secretary

All corrective actions for non-conformance findings from audits and inspections are actioned through the internal system.

BROKEN HILL BESS PROJECT
ENVIRONMENTAL MANAGEMENT STRATEGY
STAGE 2 – TRANSMISSION LINE



8 MANAGEMENT REVIEW

The consortium team is responsible for ongoing review of the effectiveness of the HSEQMS and continuous improvement of the HSEQMS.

The review addresses the possible need for changes to policy, objectives, and other elements of the HSEQMS, in light of system audit results, changing circumstances, inclusive of any changes to the conditions within the project's Development Consent, and the commitment to continual improvement.

The management review ensures that the necessary information is collected to allow management to carry out the review and document findings in the meeting minutes.

8.1 STRATEGY REVIEW

This Strategy will be reviewed and updated on an annual basis.

BROKEN HILL BESS PROJECT
ENVIRONMENTAL MANAGEMENT STRATEGY
STAGE 2 – TRANSMISSION LINE



APPENDIX A - HSEQ POLICY

HSEQ POLICY

VALMEC is an Australian energy services group providing specialised packaged equipment, construction, maintenance, and commissioning and integrity maintenance services to the oil and gas, resources, energy and infrastructure sectors.

Through effective leadership, we will continuously strive to be the industry leaders in Health, Safety, Environment and Quality management and performance.

Our success requires shared dedication and active participation by each of us, and a commitment to our Valmec Core Values:

- ❖ **SAFETY** > We will not compromise
- ❖ **INTEGRITY** > We do what is right
- ❖ **COLLABORATION** > We work better together
- ❖ **ACCOUNTABILITY** > We deliver on our promises
- ❖ **RESPECT** > We value diversity, community & the environment

Valmec is committed to:

- Meeting our client's requirements and striving to exceed service delivery expectations.
- Providing a safe and healthy workplace where employees are supported and are not exposed to harm.
- Preventing pollution and minimising environmental impacts.
- Continual improvement of our people, systems and operational performance.

We will achieve our commitments by:

- Understanding our clients' needs and communicating requirements throughout Valmec.
- Complying with legislation, standard, codes of practice and other applicable requirements.
- Living and working by the standards defined by our Code of Conduct.
- Identifying and managing risk through a systematic risk management framework.
- Providing certified management systems and operating within these.
- Developing achieving measurable and challenging objectives and targets at all levels.
- Delivering quality projects safely, on schedule, and on budget.
- Developing and maintaining personnel competencies to meet current and future needs through training and coaching.
- Leveraging the skills and knowledge of the entire workforce through consultation and delegated authority.
- Assessing and understanding our performance through structured review.
- Empowering our people to make decision to create a safe workplace and authorising them to stop work to make a situation safe when needed.


Steve Dropulich

Managing Director

31st July 2019

BROKEN HILL BESS PROJECT
ENVIRONMENTAL MANAGEMENT STRATEGY
STAGE 2 – TRANSMISSION LINE



APPENDIX B - PROJECT APPROVAL – DEVELOPMENT CONSENT (SSD-11437498)

Development Consent

Section 4.38 of the *Environmental Planning & Assessment Act 1979*

As delegate of the Minister for Planning and Public Spaces, I grant consent to the development application referred to in Schedule 1, subject to the conditions in Schedules 2 to 4.

These conditions are required to:

- prevent, minimise and/or offset any adverse environmental impacts of the development;
- set standards and performance measures for acceptable environmental performance; and
- provide for the ongoing environmental management of the development.



Nicole Brewer
Director
Energy Assessments

8 September 2021

SCHEDULE 1

Application Number:	SSD-11437498
Applicant:	AGL Energy Limited
Consent Authority:	Minister for Planning and Public Spaces
Land:	See Appendix 2
Development:	Broken Hill Battery Energy Storage System

TABLE OF CONTENTS

DEFINITIONS	1
ADMINISTRATIVE CONDITIONS	3
Obligation to Minimise Harm to the Environment	3
Terms of Consent.....	3
Upgrading of Battery Energy Storage Facility and Ancillary Infrastructure	3
Structural Adequacy	3
Demolition	3
Protection of Public Infrastructure	3
Operation of Plant and Equipment	3
ENVIRONMENTAL CONDITIONS – GENERAL.....	5
Batteries	5
Transport.....	5
Biodiversity	6
Amenity	7
Heritage.....	8
Soil and Water.....	8
Hazards	9
Waste	10
Remediation	10
Decommissioning and Rehabilitation	11
ENVIRONMENTAL MANAGEMENT AND REPORTING.....	12
Environmental Management	12
Notifications.....	12
Independent Environmental Audit	13
Access to Information.....	14
APPENDIX 1: GENERAL LAYOUT OF DEVELOPMENT	15
APPENDIX 2: SCHEDULE OF LANDS.....	16
APPENDIX 3: HEAVY VEHICLE ROUTE RESTRICTIONS.....	17
APPENDIX 4: INCIDENT NOTIFICATION AND REPORTING REQUIREMENTS	18

DEFINITIONS

Aboriginal stakeholders	Aboriginal stakeholders registered for cultural heritage consultation for the development
Ancillary infrastructure	All project infrastructure with the exception battery storage, including but not limited to substation, switchyard, permanent offices and site compounds, electricity transmission lines and internal roads.
Applicant	AGL Energy Limited, or any person who seeks to carry out the development approved under this consent
Battery storage	Large scale energy storage system
BCS	Biodiversity Conservation and Science Directorate of the Department
Cessation of operations	Operation of the development has ceased for a continuous period of 12 months
Commissioning	The testing of the components, equipment and systems of the Development completion of construction, prior to operations commencing.
Conditions of this consent	Conditions contained in Schedules 1 to 4 inclusive
Construction	The construction of the development, including but not limited to, the carrying out of any earthworks on site and the construction of battery storage and any ancillary infrastructure (but excludes road upgrades or maintenance works to the public road network, building/road dilapidation surveys, installation of fencing, artefact survey and/or salvage, overhead line safety marking and geotechnical drilling and/or surveying)
Council	Broken Hill City Council
Decommissioning	The removal of the battery storage system and ancillary infrastructure and/or rehabilitation of the site
Department	Department of Planning, Industry and Environment
Development	The development as described in the EIS
Development footprint	The area within the site on which the components of the project will be constructed (shown in Appendix 1)
DPIE Water	Water Group within the Department
EIS	The Environmental Impact Statement for Broken Hill Battery Storage System dated May 2021, the Response to Submissions Report dated July 2021
EP&A Act	<i>Environmental Planning and Assessment Act 1979</i>
EP&A Regulation	<i>Environmental Planning and Assessment Regulation 2000</i>
Feasible	Feasible relates to engineering considerations and what is practical to build or implement
FRNSW	Fire and Rescue NSW
Heavy vehicle	A vehicle that has a combined Gross Vehicle Mass or Aggregate Trailer Mass of more than 4.5 tonnes
Heritage NSW	Heritage NSW division within Department of Premier and Cabinet
Heritage item	An item as defined under the <i>Heritage Act 1977</i> and/or an Aboriginal Object or Aboriginal Place as defined under the <i>National Parks and Wildlife Act 1974</i>
Incident	A set of circumstances that causes or threatens to cause material harm to the environment
Material harm	Is harm that: <ul style="list-style-type: none"> involves actual or potential harm to the health or safety of human beings or to ecosystems that is not trivial; or results in actual or potential loss or property damage of an amount, or amounts in aggregate, exceeding \$10,000 (such loss includes the reasonable costs and expenses that would be incurred in taking all reasonable and practicable measures to prevent, mitigate or make good harm to the environment)
Minister	Minister for Planning and Public Spaces, or delegate
Minimise	Implement all reasonable and feasible mitigation measures to reduce the impacts of the development
Non-compliance	An occurrence, set of circumstances or development that is a breach of this consent but is not an incident
Operation	The operation of the development, but does not include commissioning, trials of equipment or the use of temporary facilities
POEO Act	<i>Protection of the Environment Operations Act 1997</i>
Public infrastructure	Linear and related infrastructure that provides services to the general public, such as roads, railways, water supply, drainage, sewerage, gas supply, electricity, telephone, telecommunications, irrigation channels, drainage channels
Reasonable	Reasonable relates to the application of judgement in arriving at a decision, taking into account: mitigation benefits, cost of mitigation versus benefits provided, community views and the nature and extent of potential improvements
Rehabilitation	The restoration of land disturbed by the development to a good condition, to ensure it is safe, stable and non-polluting
RFS	Rural Fire Service

SCHEDULE 2 ADMINISTRATIVE CONDITIONS

OBLIGATION TO MINIMISE HARM TO THE ENVIRONMENT

1. In meeting the specific environmental performance criteria established under this consent, the Applicant must implement all reasonable and feasible measures to prevent and/or minimise any material harm to the environment that may result from the construction, operation, upgrading or decommissioning of the development.

TERMS OF CONSENT

2. The Applicant must carry out the development:
 - (a) generally in accordance with the EIS; and
 - (b) in accordance with the conditions of this consent.

Note: The general layout of the development is shown in Appendix 1.
3. If there is any inconsistency between the above documents, the most recent document must prevail to the extent of the inconsistency. However, the conditions of this consent must prevail to the extent of any inconsistency.
4. The Applicant must comply with any requirement/s of the Planning Secretary arising from the Department's assessment of:
 - (a) any strategies, plans or correspondence that are submitted in accordance with this consent;
 - (b) any reports, reviews or audits commissioned by the Department regarding compliance with this consent; and
 - (c) the implementation of any actions or measures contained in these documents.

UPGRADING OF BATTERY ENERGY STORAGE FACILITY AND ANCILLARY INFRASTRUCTURE

5. The Applicant may upgrade the battery storage and/or ancillary infrastructure on site provided these upgrades remain within the approved development footprint of the site. Prior to carrying out any such upgrades, the Applicant must provide revised layout plans and project details of the development to the Planning Secretary incorporating the proposed upgrades.

STRUCTURAL ADEQUACY

6. The Applicant must ensure that all new buildings and structures, and any alterations or additions to existing buildings and structures, are constructed in accordance with the relevant requirements of the *Building Code of Australia*.

Notes:

- *Under Part 6 of the EP&A Act, the Applicant is required to obtain construction and occupation certificates for the development.*
- *Part 8 of the EP&A Regulation sets out the requirements for the certification of the development.*

DEMOLITION

7. The Applicant must ensure that all demolition work on site is carried out in accordance with *Australian Standard AS 2601-2001: The Demolition of Structures*, or its latest version.

PROTECTION OF PUBLIC INFRASTRUCTURE

8. Unless the Applicant and the applicable authority agree otherwise, the Applicant must:
 - (a) repair, or pay the full costs associated with repairing, any public infrastructure that is damaged by the development; and
 - (b) relocate, or pay the full costs associated with relocating, any public infrastructure that needs to be relocated as a result of the development.

This condition does not apply to the upgrade and maintenance of the road network, which is expressly provided for in the conditions of this consent.

OPERATION OF PLANT AND EQUIPMENT

9. The Applicant must ensure that all plant and equipment used on Noted, or in connection with the development, is:
- (a) maintained in a proper and efficient condition; and
 - (b) operated in a proper and efficient manner.

SCHEDULE 3 ENVIRONMENTAL CONDITIONS – GENERAL

BATTERIES

Battery Storage Restriction

1. The battery storage facility or system associated with the development must not exceed a total delivery capacity of 50 MW or a storage capacity of 100 MWh.

Note: This condition does not prevent the Applicant from seeking to lodge a separate development application or modify this consent to increase the capacity of the battery storage facility or system in the future.

TRANSPORT

Over-Dimensional and Heavy Vehicle Restrictions

2. The Applicant must ensure that the:
 - (a) development does not generate:
 - more than 20 heavy vehicle movements a day on the public road network during construction, upgrading and decommissioning;
 - over-dimensional vehicle movements during construction, upgrading and decommissioning; on the public road network; and
 - (b) length of any vehicles (excluding over-dimensional vehicles) used for the development does not exceed 26 metres,unless the Planning Secretary agrees otherwise.
3. The Applicant must keep accurate records of the number of over-dimensional and heavy vehicles entering or leaving the site each day for the duration of the project.

Access Route

4. All heavy vehicles associated with the development must travel to and from the site via Pinnacles Place via Pinnacles Road, Kanandah Road, Creedon Street and the Barrier Highway as identified in Appendix 3.

Site Access

5. All vehicles associated with the development must enter and exit the site via the preferred site access point on Pinnacles Place, except for vehicles associated with works at the TransGrid substation which may be accessed from the site access point on Pinnacles Road, as identified in Appendix 3.

Road Upgrades

6. Unless the Planning Secretary agrees otherwise, prior to commencing construction the Applicant must upgrade the site access point on Pinnacles Place as identified in Appendix 1, to the satisfaction of Council.

Road Maintenance

7. The Applicant must:
 - (c) undertake an independent dilapidation survey to assess the:
 - existing condition of Pinnacles Place, Pinnacles Road, Kanandah Road and Creedon Street along the transport route, prior to construction, upgrading or decommissioning works; and
 - condition of Pinnacles Place, Pinnacles Road, Kanandah Road and Creedon along the transport route, following construction, upgrading or decommissioning works;
 - (d) repair Pinnacles Place, Pinnacles Road, Kanandah Road and Creedon along the transport route if dilapidation surveys identify that the road has been damaged as a result of vehicle movements related to the project during construction, upgrading or decommissioning works;

in consultation with the relevant roads authority, to the satisfaction of the Planning Secretary.

If there is a dispute about the repair of Pinnacles Place, Pinnacles Road, Kanandah Road and Creedon between the applicant and the relevant roads authority, then either party may refer the matter to the Planning Secretary for resolution. The Planning Secretary's decision on the matter must be final and binding on both parties.

Operating Conditions

8. The Applicant must ensure:
- (a) the internal roads are constructed as all-weather roads;
 - (b) the capacity of the existing roadside drainage network is not reduced;
 - (c) all vehicles are loaded and unloaded on site, and enter and leave the site in a forward direction wherever practicable; and
 - (d) vehicles leaving the site are in a clean condition, with loads appropriately covered or contained, to minimise dirt being tracked onto the sealed public road network.

Traffic Management Plan

9. Prior to commencing site access works, the Applicant must prepare a Traffic Management Plan for the development in consultation with TfNSW and Council and to the satisfaction of the Planning Secretary. This plan must include:
- (a) details of the transport route to be used for all development-related traffic;
 - (b) details of the temporary on-site construction car park;
 - (c) details of the measures that would be implemented to minimise traffic impacts during construction, upgrading or decommissioning works, including:
 - details of the dilapidation surveys required by condition 6 of Schedule 3 of this consent;
 - temporary traffic controls, including detours and signage);
 - notifying the local community about development-related traffic impacts;
 - procedures for receiving and addressing complaints from the community about development-related traffic;
 - minimising potential cumulative traffic impacts with other projects in the area, including during construction, upgrading or decommissioning works;
 - minimising potential for conflict with school buses and other road users as far as practicable, including preventing queuing on the public road network (measures also required during operation of the project);
 - minimising dirt tracked onto the public road network from development-related traffic;
 - scheduling of haulage vehicle movements to minimise convoy length or platoons;
 - responding to local climate conditions that may affect road safety such as fog, dust, wet weather and flooding;
 - monthly monitoring for, and responding to, any emergency repair and/or maintenance requirements; and
 - (d) a driver's code of conduct that addresses:
 - travelling speeds;
 - driver fatigue;
 - procedures to ensure that drivers adhere to the designated transport routes and speed limits; and
 - procedures to ensure that drivers implement safe driving practices;
 - (e) a program to ensure drivers working on the development receive suitable training on the code of conduct and any other relevant obligations under the Traffic Management Plan.

Following the Planning Secretary's approval, the Applicant must implement the Traffic Management Plan.

BIODIVERSITY

Vegetation Clearance

10. The Applicant must not clear any native vegetation or fauna habitat located outside the approved disturbance areas described in the EIS.

Biodiversity Offsets

11. Prior to carrying out any development that could directly or indirectly impact the biodiversity values requiring offset, the Applicant must retire biodiversity credits of a number and class specified in Table 1 and Table 2 below, unless the Planning Secretary agrees otherwise. The retirement of these credits must be carried out in accordance with the *NSW Biodiversity Offsets Scheme* and can be achieved by:
- (a) acquiring or retiring 'biodiversity credits' within the meaning of the *Biodiversity Conservation Act 2016*;
 - (b) making payments into an offset fund that has been developed by the NSW Government; or
 - (c) funding a biodiversity conservation action that benefits the entity impacted and is listed in the ancillary rules of the biodiversity offset scheme.

Table 1: Ecosystem Credit Requirements

Vegetation Community	PCT ID	Credits Required
Bluebush shrubland on stony rises and downs in the arid and semi-arid zones	155	8

Table 2: Species Credit Requirements

Species Credit Species	PCT ID	Credits Required
Australian Bustard (<i>Ardeotis australis</i>)	155	9

Biodiversity Management Plan

12. Prior to commencing construction, the Applicant must prepare a Biodiversity Management Plan for the development in consultation with BCS, and to the satisfaction of the Planning Secretary. This plan must:
- (a) include a description of the measures and timeframes that would be implemented for:
 - protecting vegetation and fauna habitat outside the approved disturbance areas;
 - minimising clearing and avoiding unnecessary disturbance of vegetation that is associated with the construction and operation of the development;
 - minimising the impacts to fauna on site and implementing fauna management protocols;
 - rehabilitating and revegetating disturbance areas with species that are endemic to the area;
 - maximising the salvage of vegetative and soil resources within the approved disturbance area for beneficial reuse in the enhancement or the rehabilitation of the site; and
 - controlling weeds, feral pests and pathogens;
 - (b) include a program to monitor and report on the effectiveness of mitigation measures; and
 - (c) include details of who would be responsible for monitoring, reviewing and implementing the plan.

Following the Planning Secretary's approval, the Applicant must implement the Biodiversity Management Plan.

Note: If the biodiversity credits are retired via a Biodiversity Stewardship Agreement, then the Biodiversity Management Plan does not need to include any of the matters that are covered under the Biodiversity Stewardship Agreement.

AMENITY

Construction, Upgrading and Decommissioning Hours

13. Unless the Planning Secretary agrees otherwise, the Applicant may only undertake road upgrades, construction, upgrading or decommissioning activities between:
- (a) 7 am to 6 pm Monday to Friday;
 - (b) 8 am to 1 pm Saturdays; and
 - (c) at no time on Sundays and NSW public holidays.

The following construction, upgrading or decommissioning activities may be undertaken outside these hours without the approval of the Planning Secretary:

- the delivery of materials as requested by the NSW Police Force or other authorities for safety reasons; or
- emergency work to avoid the loss of life, property and/or material harm to the environment.

Noise

14. The Applicant must:
- (a) minimise the noise generated by any construction, upgrading or decommissioning activities on site in accordance with the best practice requirements outlined in the *Interim Construction Noise Guideline* (DECC, 2009), or its latest version; and
 - (b) ensure that the noise generated by the operation of the development during the night does not exceed 35 dB(A) LAeq,15min to be determined in accordance with the procedures in the NSW Noise Policy for Industry (EPA, 2017) at any non-associated residence.

Dust

15. The Applicant must minimise the dust generated by the development.

Visual

16. The Applicant must:

- (a) minimise the off-site visual impacts of the development, including the potential for any glare or reflection;
- (b) ensure the visual appearance of all ancillary infrastructure (including paint colours) blends in as far as possible with the surrounding landscape; and
- (c) not mount any advertising signs or logos on site, except where this is required for identification or safety purposes.

Lighting

17. The Applicant must:

- (d) minimise the off-site lighting impacts of the development; and
- (e) ensure that any external lighting associated with the development:
 - is installed as low intensity lighting (except where required for safety or emergency purposes);
 - does not shine above the horizontal; and
 - complies with *Australian/New Zealand Standard AS/NZS 4282:2019 – Control of Obtrusive Effects of Outdoor Lighting*, and the *Dark Sky Planning Guidelines* (DPE 2018) or its latest versions.

HERITAGE

Protection of Heritage Items

18. The Applicant must ensure the development does not cause any direct or indirect impacts on the Aboriginal heritage items located outside the approved development footprint.

Heritage Management Plan

19. Prior to carrying out any development the Applicant must prepare a Heritage Management Plan for the development to the satisfaction of the Planning Secretary. This plan must:
- (a) be prepared by suitably qualified and experienced persons whose appointment has been endorsed by the Planning Secretary;
 - (b) be prepared in consultation with Heritage NSW and Aboriginal Stakeholders;
 - (c) include a description of the measures that would be implemented for:
 - a contingency plan and reporting procedure if:
 - previously unidentified heritage items are found; or
 - Aboriginal skeletal material is discovered;
 - ensuring workers on site receive suitable heritage inductions prior to carrying out any development on site, and that records are kept of these inductions; and
 - ongoing consultation with Aboriginal stakeholders during the implementation of the plan; and
 - (d) include a program to monitor and report on the effectiveness of these measures and any heritage impacts of the project.

Following the Planning Secretary's approval, the Applicant must implement the Heritage Management Plan.

SOIL AND WATER

Water Supply

20. 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.

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.

Water Pollution

21. The Applicant must ensure that the development does not cause any water pollution, as defined under Section 120 of the POEO Act.

Operating Conditions

22. The Applicant must:

- (a) minimise erosion and control sediment generation;
- (b) ensure the battery storage and ancillary infrastructure and any other land disturbance associated with the construction, upgrading or decommissioning of the development have appropriate drainage and erosion and sediment controls designed, installed and maintained in accordance with Managing Urban Stormwater: Soils and Construction (Landcom, 2004) manual, or its latest version;
- (c) ensure the battery storage and ancillary infrastructure (including security fencing) are designed, constructed and maintained to reduce impacts on surface water, localised flooding and groundwater at the site;
- (d) ensure all works are undertaken in accordance with Guidelines for Controlled Activities on Waterfront Land (NRAR, 2018), unless DPIE Water agrees otherwise.

Soil and Water Management Plan

23. Prior to commencing construction, the Applicant must prepare a Soil and Water Management Plan for the development in consultation with DPIE Water. This plan must:

- (a) demonstrate how the project will meet conditions 21 and 22(a) to (d); and
- (b) include details of the soil erosion control measures including sediment basins.

The Applicant must implement the Soil and Water Management Plan for construction upgrading, operation and/or decommissioning of the development.

HAZARDS

Fire Safety Study

24. Prior to commencing construction, unless the Planning Secretary agrees otherwise, the Applicant must prepare a Fire Safety Study for the development, to the satisfaction of FRNSW and the Planning Secretary. The study must:

- (a) be consistent with the Department's *Hazardous Industry Planning Advisory Paper No. 2 'Fire Safety Study' guideline* and relevant Australian Standards and International Guidelines; and
- (b) describe the final design of the battery storage facility.

Following completion of the Study, the Applicant must implement the measures described in the Fire Safety Study.

Storage and Handling of Dangerous Goods

25. The Applicant must store and handle all chemicals, fuels and oils used on-site in accordance with:

- (a) the requirements of all relevant Australian Standards; and
- (b) the NSW EPA's Storing and Handling of Liquids: Environmental Protection – Participants Handbook if the chemicals are liquids.

In the event of an inconsistency between the requirements (a) and (b) above, the most stringent requirement must prevail to the extent of the inconsistency.

Operating Conditions

26. The Applicant must:

- (a) minimise the fire risks of the development, including managing vegetation fuel loads on-site;
- (b) ensure that the development:
 - includes defensible space as outlined in the EIS and as shown in Appendix 1, permitting unobstructed vehicle access to the site;
 - manages the defensible space as an Asset Protection Zone;
 - complies with the relevant asset protection requirements in the RFS's *Planning for Bushfire Protection 2019 (or equivalent)* and *Standards for Asset Protection Zones* (including provision of water, electricity and gas, ancillary equipment, transmission lines and management of vegetation) as otherwise approved by the Rural Fire Service;
- (c) assist the RFS and emergency services as much as practicable if there is a fire in the vicinity of the site; and
- (d) notify the relevant local emergency management committee following construction of the development, and prior to commencing operations.

Emergency Plan

27. Prior to commencing construction, the Applicant must develop and implement a comprehensive Emergency Plan and detailed emergency procedures for the development in consultation with FRNSW and the NSW RFS. The Applicant must keep two copies of the plan on-site in a prominent position adjacent to the site entry point at all times. The plan must:
- (a) be consistent with the Department's *Hazardous Industry Planning Advisory Paper No. 1, 'Emergency Planning'* and RFS's *Planning for Bushfire Protection 2019* (or equivalent);
 - (b) identify the fire risks and hazards and detailed measures for the development to prevent or mitigate fires igniting;
 - (c) include procedures that would be implemented if there is a fire on-site or in the vicinity of the site;
 - (d) list works that should not be carried out during a total fire ban;
 - (e) include availability of fire suppression equipment, access and water;
 - (f) include procedures for the storage and maintenance of any flammable materials;
 - (g) notification of the local RFS Fire Control Centre for any works that have the potential to ignite surrounding vegetation proposed to be carried out during a bushfire danger period to ensure whether conditions are appropriate;
 - (h) detail access provisions for emergency vehicles and contact details for both a primary and alternative site contact who may be reached 24/7 in the event of an emergency;
 - (i) include a figure showing site infrastructure, Asset Protection Zone and any on-site water supply tank;
 - (j) include location of hazards (physical, chemical and electrical) that may impact on fire fighting operations and procedures to manage identified hazards during fire fighting operations;
 - (k) include details of the location, management and maintenance of the Asset Protection Zone and who is responsible for the maintenance and management of the Asset Protection Zone;
 - (l) include bushfire emergency management planning; and
 - (m) include details of the how RFS would be notified, and procedures that would be implemented, in the event that:
 - there is a fire on-site or in the vicinity of the site;
 - there are any activities on site that would have the potential to ignite surrounding vegetation; or
 - there are any proposed activities to be carried out during a bushfire danger period; and
 - (n) include details on how the battery storage facility and sub-systems can be safely isolated in an emergency.

The Applicant must implement the Emergency Plan for the duration of the development.

WASTE

28. The Applicant must:
- (a) minimise the waste generated by the development;
 - (b) classify all waste generated on site in accordance with the EPA's *Waste Classification Guidelines 2014* (or its latest version);
 - (c) store and handle all waste on site in accordance with its classification;
 - (d) not receive or dispose of any waste on site; and
 - (e) remove all waste from the site as soon as practicable, and ensure it is reused, recycled or sent to an appropriately licensed waste facility for disposal.

REMEDIATION

Remedial Works

29. Prior to carrying out any development, the Applicant must develop and implement a Remedial Action Plan prepared in accordance with the relevant guidelines produced or approved under the *Contaminated Lands Management Act 1997*. Remediation works must be undertaken by a suitably qualified and experienced consultant(s).

Validation Report

30. Within one month of the completion of the remediation works, the Applicant must submit a copy of a validation report/letter to the Planning Secretary, which has been prepared, or reviewed and approved, by a consultant certified under either the Environment Institute of Australia and New Zealand's Certified Environmental Practitioner (Site Contamination) Scheme (CEnvP(SC)) or the Soil Science Australia Certified Professional Soil Scientist Contaminated Site Assessment and Management (CPSS CSAM) scheme.

Unexpected Finds

31. Prior to the commencement of construction, the Applicant must prepare an unexpected finds procedure to ensure that potentially contaminated material is appropriately managed. The procedure must form part of the Environmental Management Strategy for the development and must ensure any material identified as contaminated is be disposed off-site, with the disposal location and results of testing submitted to the Planning Secretary, prior to its removal from the site.

DECOMMISSIONING AND REHABILITATION

32. Within 18 months of the cessation of operations, unless the Planning Secretary agrees otherwise, the Applicant must rehabilitate the site to the satisfaction of the Planning Secretary. This rehabilitation must comply with the objectives in Table 3.

Table 3: *Rehabilitation Objectives*

Feature	Objective
Site	<ul style="list-style-type: none">• Safe, stable and non-polluting
Battery storage infrastructure	<ul style="list-style-type: none">• To be decommissioned and removed, unless the Planning Secretary agrees otherwise
Land use	<ul style="list-style-type: none">• Restore land capability to pre-existing use
Community	<ul style="list-style-type: none">• Ensure public safety at all times

SCHEDULE 4 ENVIRONMENTAL MANAGEMENT AND REPORTING

ENVIRONMENTAL MANAGEMENT

Environmental Management Strategy

1. Prior to commencing construction, the Applicant must prepare an Environmental Management Strategy for the development to the satisfaction of the Planning Secretary. This strategy must:
 - (a) provide the strategic framework for environmental management of the development;
 - (b) identify the statutory approvals that apply to the development;
 - (c) describe the role, responsibility, authority and accountability of all key personnel involved in the environmental management of the development;
 - (d) describe the procedures that would be implemented to:
 - keep the local community and relevant agencies informed about the operation and environmental performance of the development;
 - receive, handle, respond to, and record complaints;
 - resolve any disputes that may arise;
 - respond to any non-compliance;
 - respond to emergencies; and
 - (e) include:
 - references to any plans approved under the conditions of this consent; and
 - a clear plan depicting all the monitoring to be carried out in relation to the development.

Following the Planning Secretary's approval, the Applicant must implement the Environmental Management Strategy.

Revision of Strategies, Plans and Programs

2. The Applicant must:
 - (a) update the strategies, plans or programs required under this consent to the satisfaction of the Planning Secretary prior to carrying out any upgrading or decommissioning activities on site; and
 - (b) review and, if necessary, revise the strategies, plans or programs required under this consent to the satisfaction of the Planning Secretary within 1 month of the:
 - submission of an incident report under condition 7 of Schedule 4;
 - submission of an audit report under condition 11 of Schedule 4; or
 - any modification to the conditions of this consent.

Updating and Staging of Strategies, Plans or Programs

3. With the approval of the Planning Secretary, the Applicant may submit any strategy, plan or program required by this consent on a progressive basis. To ensure the strategies, plans or programs under the conditions of this consent are updated on a regular basis, the Applicant may at any time submit revised strategies, plans or programs to the Planning Secretary for approval. With the agreement of the Planning Secretary, the Applicant may prepare any revised strategy, plan or program without undertaking consultation with all the parties referred to under the relevant condition of this consent.

Notes:

- *While any strategy, plan or program may be submitted on a progressive basis, the Applicant must ensure that all development being carried out on site is covered by suitable strategies, plans or programs at all times.*
- *If the submission of any strategy, plan or program is to be staged, then the relevant strategy, plan or program must clearly describe the specific stage to which the strategy, plan or program applies, the relationship of this stage to any future stages, and the trigger for updating the strategy, plan or program.*

NOTIFICATIONS

Notification of Department

4. Prior to commencing the construction, operations, upgrading or decommissioning of the development or the cessation of operations, the Applicant must notify the Department in writing via the Major Projects website portal of the date of commencement, or cessation, of the relevant phase. If any of these phases of the development are to be staged, then the Applicant must notify the Department in writing prior to commencing the relevant stage, and clearly identify the development that would be carried out during the relevant stage.

Final Layout Plans

5. Prior to commencing construction, the Applicant must submit detailed plans of the final layout of the development to the Department via the Major Projects website, showing comparison to the approved layout and including details on the siting of the battery storage and ancillary infrastructure, via the Major Projects website.

Work as Executed Plans

6. Prior to commencing operations or following the upgrades of any battery storage infrastructure or ancillary infrastructure, the Applicant must submit work as executed plans of the development showing comparison to the approved final layout plans to the Department via the Major Projects website.

Incident Notification

7. The Planning Secretary must be notified in writing via the Major Projects website immediately after the Applicant becomes aware of an incident. The notification must identify the development (including the development application number and the name of the development if it has one) and set out the location and nature of the incident. Subsequent notification requirements must be given, and reports submitted in accordance with the requirements set out in Appendix 4.

Non-Compliance Notification

8. The Planning Secretary must be notified in writing via the Major Projects website within seven days after the Applicant becomes aware of any non-compliance.
9. A non-compliance notification must identify the development and the application number for it, set out the condition of consent that the development is non-compliant with, the way in which it does not comply and the reasons for the non-compliance (if known) and what actions have been, or will be, undertaken to address the non-compliance.
10. A non-compliance which has been notified as an incident does not need to also be notified as a non-compliance.

INDEPENDENT ENVIRONMENTAL AUDIT

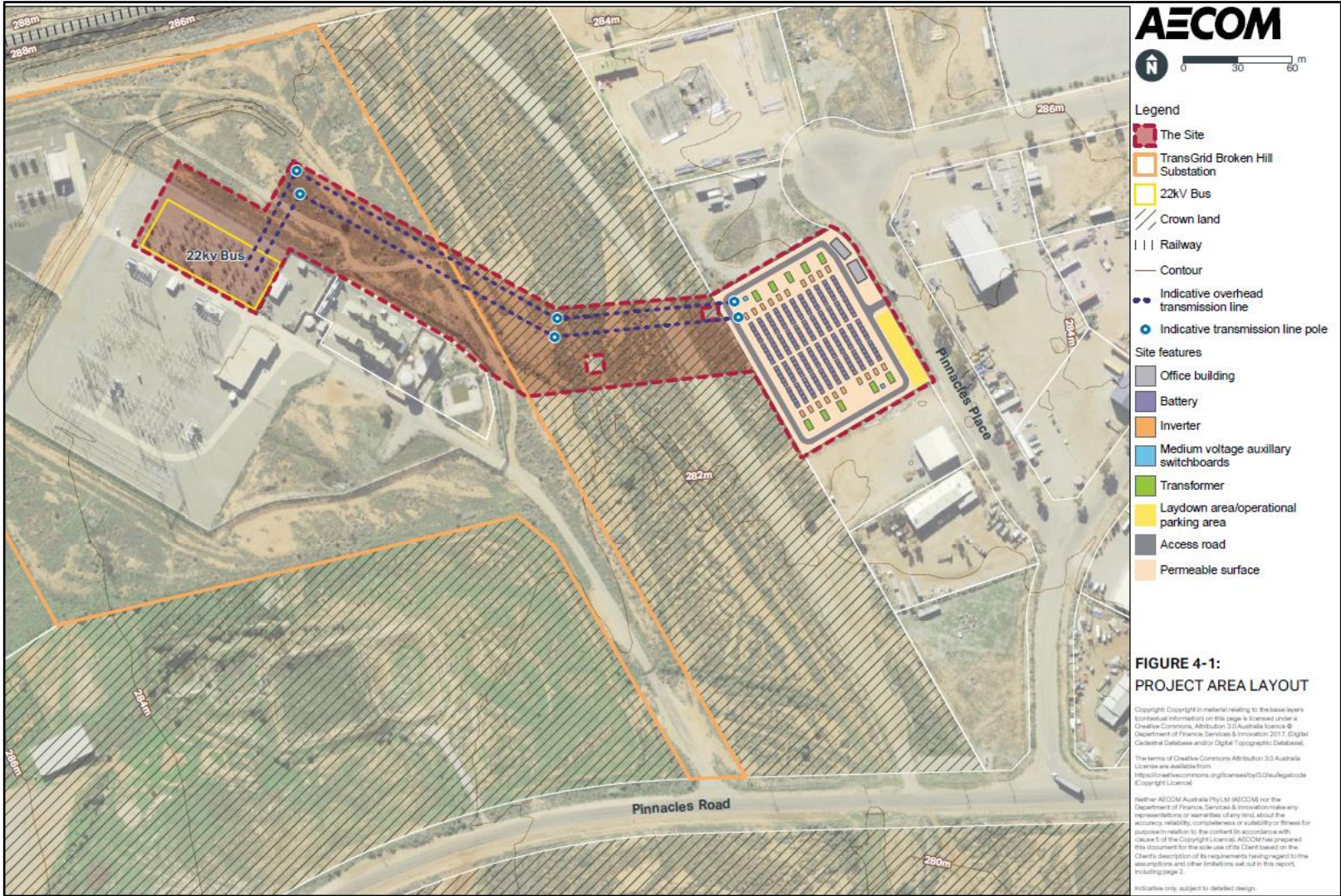
11. Independent Audits of the development must be conducted and carried out in accordance with the *Independent Audit Post Approval Requirements (2020)* to the following frequency:
 - (a) within 3 months of commencing construction; and
 - (b) within 3 months of commencement of operations.
12. Proposed independent auditors must be agreed to in writing by the Planning Secretary prior to the commencement of an Independent Audit.
13. The Planning Secretary may require the initial and subsequent Independent Audits to be undertaken at different times to those specified in condition 11 of Schedule 4 upon giving at least 4 weeks' notice to the Applicant of the date upon which the audit must be commenced.
14. In accordance with the specific requirements in the *Independent Audit Post Approval Requirements (2020)*, the Applicant must:
 - (a) review and respond to each Independent Audit Report prepared under condition 11 of Schedule 4 of this consent, or condition 13 of Schedule 4 where notice is given by the Planning Secretary;
 - (b) submit the response to the Planning Secretary; and
 - (c) make each Independent Audit Report, and response to it, publicly available within 60 days of submission to the Planning Secretary, unless otherwise agreed by the Planning Secretary.
15. Independent Audit Reports and the Applicant's response to audit findings must be submitted to the Planning Secretary within 2 months of undertaking the independent audit site inspection as outlined in the *Independent Audit Post Approvals Requirements (2020)* unless otherwise agreed by the Planning Secretary.
16. Notwithstanding the requirements of the *Independent Audit Post Approvals Requirements (2020)*, the Planning Secretary may approve a request for ongoing independent operational audits to be ceased, where it has been demonstrated to the Planning Secretary's satisfaction that independent operational audits have demonstrated operational compliance.

ACCESS TO INFORMATION

17. The Applicant must:

- (a) make the following information publicly available on its website as relevant to the stage of the development:
 - the EIS;
 - the final layout plans for the development;
 - current statutory approvals for the development;
 - approved strategies, plans or programs required under the conditions of this consent;
 - the proposed staging plans for the development if the construction, operation or decommissioning of the development is to be staged;
 - how complaints about the development can be made;
 - a complaints register;
 - any independent environmental audit, and the Applicant's response to the recommendations in any audit; and
 - any other matter required by the Planning Secretary; and
- (b) keep this information up to date.

APPENDIX 1: GENERAL LAYOUT OF DEVELOPMENT

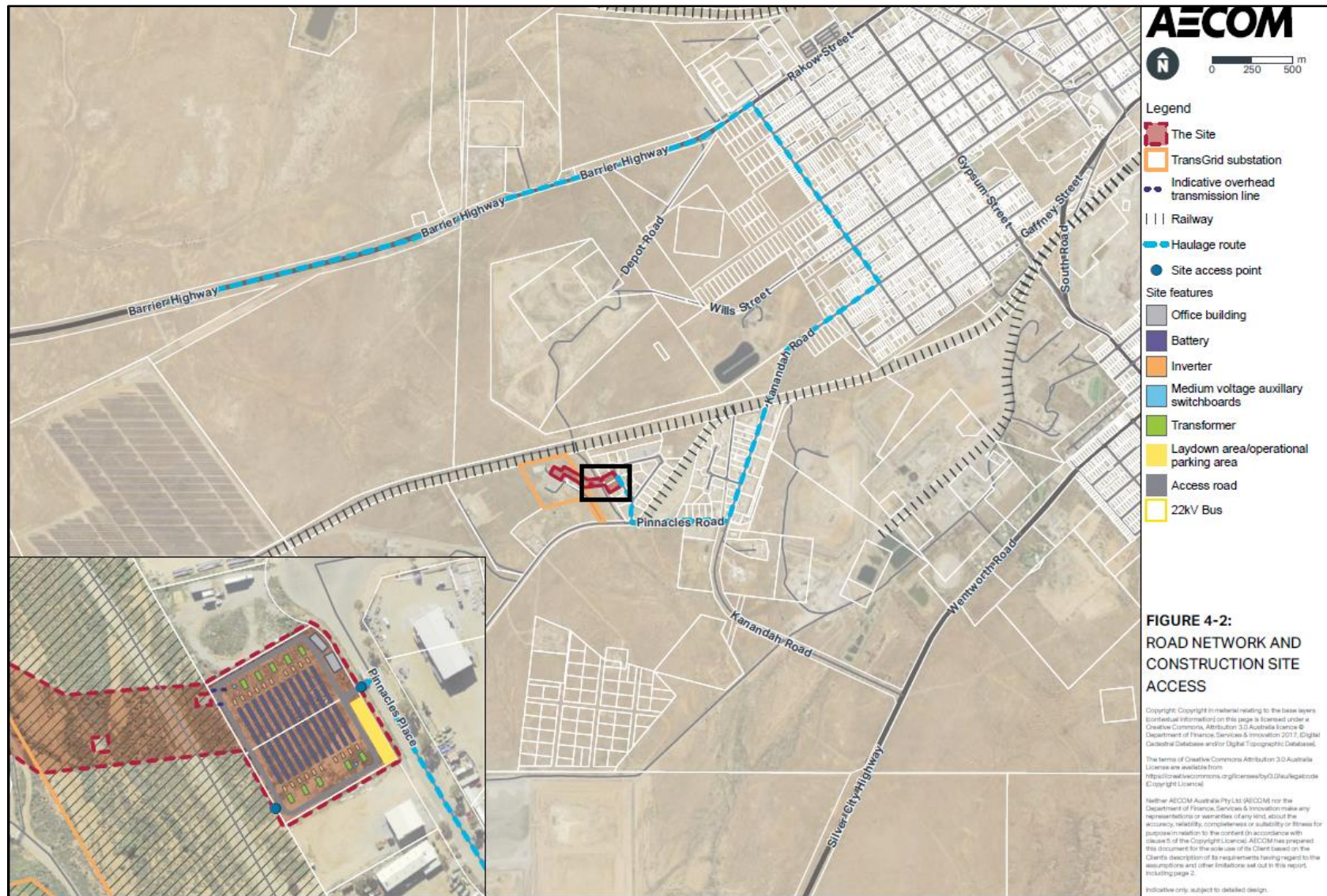


**APPENDIX 2:
SCHEDULE OF LANDS**

<i>Lot Number</i>	<i>Deposit Plan (DP)</i>
7302	1181129
2	1102040
57	258288
58	

Note: The project site will also be taken to include any crown land and road reserves contained within the project site.

APPENDIX 3: HEAVY VEHICLE ROUTE RESTRICTIONS



**APPENDIX 4:
INCIDENT NOTIFICATION AND REPORTING REQUIREMENTS**

WRITTEN INCIDENT NOTIFICATION REQUIREMENTS

1. A written incident notification addressing the requirements set out below must be submitted to the Planning Secretary via the Major Projects website within seven days after the Applicant becomes aware of an incident. Notification is required to be given under this condition even if the Applicant fails to give the notification required under condition 7 of Schedule 4 or, having given such notification, subsequently forms the view that an incident has not occurred.
2. Written notification of an incident must:
 - (a) identify the development and application number;
 - (b) provide details of the incident (date, time, location, a brief description of what occurred and why it is classified as an incident);
 - (c) identify how the incident was detected;
 - (d) identify when the applicant became aware of the incident;
 - (e) identify any actual or potential non-compliance with conditions of consent;
 - (f) describe what immediate steps were taken in relation to the incident;
 - (g) identify further action(s) that will be taken in relation to the incident; and
 - (h) identify a project contact for further communication regarding the incident.
3. Within 30 days of the date on which the incident occurred or as otherwise agreed to by the Planning Secretary, the Applicant must provide the Planning Secretary and any relevant public authorities (as determined by the Planning Secretary) with a detailed report on the incident addressing all requirements below, and such further reports as may be requested.
4. The Incident Report must include:
 - (a) a summary of the incident;
 - (b) outcomes of an incident investigation, including identification of the cause of the incident;
 - (c) details of the corrective and preventative actions that have been, or will be, implemented to address the incident and prevent recurrence; and
 - (d) details of any communication with other stakeholders regarding the incident.

**BROKEN HILL BESS PROJECT
ENVIRONMENTAL MANAGEMENT STRATEGY
STAGE 2 – TRANSMISSION LINE**



APPENDIX C - PROJECT LEGAL REGISTER

BROKEN HILL BESS PROJECT

LEGAL REGISTER



Aspect	Legislation	Key Requirements	Relevance / Controls	Compliance
Air	Protection of the Environment Operations (Clean Air) Regulation 2002	The Regulation deals with the sale of domestic solid fuel heaters and requires the heaters to be certified as complying with emission limits set out in the relevant Australian Standard. It also prohibits tampering with such heaters. In relation to motor vehicles, the Regulation deals with the following matters: <ul style="list-style-type: none"> • the emission of air impurities, including excessive smoke from motor vehicles; • the compulsory fitting and maintenance of anti-pollution devices, and exemptions from these requirements; and • the method of transfer of petrol into a vehicle's fuel tank. 	CEMP	
Noise	Protection of the Environment Operations (Noise Control) Regulation 2000	This Regulation: <ul style="list-style-type: none"> • sets out the offences under the Protection of the Environment Operations Act 1997 and related Acts and regulations for which on-the-spot fines ('penalty notices') may be issued, and the amount of such fines; • specifies the organisations who can authorise their officers to issue penalty notices for particular offences; and • authorises the service of a penalty notice relating to an offence, applying to an owner of a motor vehicle or vessel, on the owner without naming the address of the owner and by leaving the penalty notice on that vehicle or vessel. 	CEMP	
Water	Water Management Act 2000	The NSW Water Management Act is administered by the Office of Water. An Act to provide for the protection, conservation and ecologically sustainable development of the water sources of the State, and for other purposes.	CEMP SWMP	
Erosion & Sediment Control	Soil Conservation Act 1938	An Act to make provision for the conservation of soil resources and farm water resources and for the mitigation of erosion; for these and other purposes to amend the Crown Lands Consolidation Act 1913 and certain other Acts; and for purposes connected therewith.	CEMP SWMP	
Waste Management	Protection of the Environment Operations (Waste) Regulation 2005 No.96	Sets out a number of requirements relating to non-licensed landfill sites, non-licensed waste activities and non-licensed waste transporting, for eg the way in which waste must be stored or transported, reporting and record-keeping requirements; <ul style="list-style-type: none"> • sets out certain reporting and record-keeping requirements in relation to scheduled waste facilities and scheduled landfill sites; • exempts certain waste streams from the full waste tracking and record keeping requirements; • sets out special requirements relating to asbestos and clinical waste. 	CEMP	
Waste Management	Waste Avoidance and Resource Recovery Act 2001	This Act: <ul style="list-style-type: none"> • promotes waste avoidance and resource recovery; • repeals and replaces the Waste Minimisation and Management Act 1995; • establishes a scheme to promote extended producer responsibility in place of industry waste reduction plans; and • continues the Waste Fund for the purposes of funding relevant programs. 	CEMP	
Native Title	Aboriginal Land Rights Act 1983	The Native Title Act 1993 (NSW) (NT Act) provides for the recognition and protection of native title for Aboriginal peoples and Torres Strait Islanders. The NT Act recognises native title for land over which native title has not been extinguished and where persons are able to establish native title are able to provide continuous use, occupation or other classes of behaviour and actions consistent with a traditional cultural possession of those lands. It also makes provision for Indigenous Land Use Agreements (ILUA) to be formed, as well as a framework for notifying of native title stakeholders for certain future acts on land where native title has not been extinguished.	EIS - It is noted that Lots 57 and 58 in DP258288 (i.e. the Site) are freehold, whilst Lot 7302 in DP1181129 is freehold land that is administered by Broken Hill City Council and is classified as Commons under the Commons Management Act 1989	
Native Title	Aboriginal Land Rights Act 1983	The Aboriginal Land Rights Act 1983 (ALR Act) was established to provide land rights to Aboriginal persons, as well as provide for representative Aboriginal Land Councils to vest land in those Councils. The ALR Act, is administered by the NSW Department of Aboriginal Affairs and establishes a compensatory regime, which	EIS - The parcel (Lot 7302 of DP1181129), where only the transmission line is proposed, is subject	

BROKEN HILL BESS PROJECT

LEGAL REGISTER



Aspect	Legislation	Key Requirements	Relevance / Controls	Compliance
		<p>recognises that land is of spiritual, social, cultural and economic importance to Aboriginal people. The ALR Act established the NSW Aboriginal Land Council (NSWALC) and a network of over 120 Local Aboriginal Land Councils (LALCs) and requires these bodies to:</p> <ul style="list-style-type: none"> • Take action to protect the culture and heritage of Aboriginal persons in the LALC's area, subject to any other law • Promote awareness in the community of the culture and heritage of Aboriginal persons in the LALC's area. <p>LALCs constituted under the ALR Act can make claims. The Registrar of the ALR Act must maintain the Register of Aboriginal Land Claims under section 166 of the ALR Act. All land claims that have been made under the Act are recorded in the Register.</p>	to an undetermined Aboriginal Land Claim number 40469 lodged by the NSWALC under the ALR Act. AGL has undertaken consultation with BHLALC and the NSWALC over the land claim	
Cultural Heritage (including indigenous heritage)	Heritage Act 1977	<p>An Act to conserve the environmental heritage of the State Heritage significance interpretation. In this Act:</p> <ul style="list-style-type: none"> • State heritage significance, in relation to a place, building, work, relic, moveable object or precinct, means significance to the State in relation to the historical, scientific, cultural, social, archaeological, architectural, natural or aesthetic value of the item. • Local heritage significance, in relation to a place, building, work, relic, moveable object or precinct, means significance to an area in relation to the historical, scientific, cultural, social, archaeological, architectural, natural or aesthetic value of the item. • An item can be both of State heritage significance and local heritage significance. An item that is of local heritage significance may or may not be of State heritage significance. • Aboriginal heritage items and places are also covered by this act. 	CHMP	
Biodiversity / Flora / Fauna	Environment Protection and Biodiversity Conservation Act 1999	<p>The Commonwealth Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act) requires the approval of the Commonwealth Minister for the Environment for actions that may have a significant impact on Matters of National Environmental Significance (MNES). Approval from the Commonwealth Minister is in addition to any approvals under NSW legislation. The EPBC Act lists nine MNES that must be considered when assessing the environmental impacts of a project. These matters are:</p> <ul style="list-style-type: none"> • World heritage properties • National heritage places • Ramsar wetlands of international significance • Threatened species and ecological communities • Migratory species • Nuclear actions (including uranium mining) • Commonwealth marine areas • Great Barrier Reef Marine Park • A water resource, in relation to coal seam gas development and large coal mining development 	BMP CEMP	
Biodiversity / Flora	Biodiversity Conservation Act 2016	<p>The purpose of the Biodiversity Conservation Act 2016 (BC Act) is to maintain a healthy, productive and resilient environment for the greatest well-being of the community, now and into the future, consistent with the principles of ecologically sustainable development (described in section 6(2) of the Protection of the Environment Administration Act 1991). Section 7.9(2) of the BC Act states that a development application for SSD is to be accompanied by a biodiversity development assessment report (BDAR) (as defined under section 7.1 of the BC Act), unless the Planning Agency Head and the Environment Agency Head determine that the proposed development is not likely to have any significant impact on biodiversity values.</p>	BMP	
Biodiversity / Flora	Native Vegetation Act 2003 Native Vegetation Conservation Act 1997	<p>The objects of this Act are:</p> <ul style="list-style-type: none"> • to provide for, encourage and promote the management of native vegetation on a regional basis in the social, economic and environmental interests of the State, • to prevent broadscale clearing unless it improves or maintains environmental outcomes, • to protect native vegetation of high conservation value having regard to its contribution to such matters as water quality, biodiversity, or the prevention of salinity or land degradation, 	BMP	

BROKEN HILL BESS PROJECT

LEGAL REGISTER



Aspect	Legislation	Key Requirements	Relevance / Controls	Compliance
		<ul style="list-style-type: none"> • to improve the condition of existing native vegetation, particularly where it has high conservation value, • to encourage the revegetation of land, and the rehabilitation of land, with appropriate native vegetation, and • in accordance with the principles of ecologically sustainable development. 		
Biodiversity / Flora / Fauna	National Parks and Wildlife Act 1974	An Act to consolidate and amend the law relating to the establishment, preservation and management of national parks, historic sites and certain other areas and the protection of certain fauna, native plants and Aboriginal objects; to repeal the Wild Flowers and Native Plants Protection Act 1927, the Fauna Protection Act 1948, the National Parks and Wildlife Act 1967 and certain other enactments; to amend the Local Government Act 1919 and certain other Acts in certain respects; and for purposes connected therewith. The act also makes provision for the protection of Aboriginal places of significance.	BMP CHMP	
Biodiversity / Flora / Fauna	Threatened Species Conservation Act 1995	<p>The objects of this Act are as follows:</p> <ul style="list-style-type: none"> • to conserve biological diversity and promote ecologically sustainable development, • to prevent the extinction and promote the recovery of threatened species, populations and ecological communities, • to protect the critical habitat of those threatened species, populations and ecological communities that are endangered, • to eliminate or manage certain processes that threaten the survival or evolutionary development of threatened species, populations and ecological communities, • to ensure that the impact of any action affecting threatened species, populations and ecological communities is properly assessed, and • to encourage the conservation of threatened species, populations and ecological communities by the adoption of measures involving co-operative management. 	BMP CEMP	
Dangerous Goods	Dangerous Goods Act 1975	Act relates to the storage, conveyance, possession and licensing of dangerous goods.	A Dangerous Goods register will be established for the project and will detail the regular audit intervals for compliance with the act and regulation.	
Contaminated Land	Contaminated Land Management Act 1997	<p>The general object of this Act is to establish a process for investigating and (where appropriate) remediating land areas where contamination presents a significant risk of harm to human health or some other aspect of the environment.</p> <p>Section 60 of the CLM Act also includes a 'duty to notify' where significant contamination is identified. This section would be relevant if any previously unidentified contamination is encountered that exceeds notification thresholds.</p>	EIS - A search of the NSW EPA contaminated land database (undertaken on 8 April 2021) confirmed that the site is not listed as a contaminated site under the CLM Act. As a result, no further attention is afforded to the CLM Act for the purpose of this SSDA. CEMP – Process to provide Notification where contaminated land is uncovered.	
Chemical Use	Environmentally Hazardous Chemicals Act 1985	The Act sets up the Hazardous Chemicals Advisory Committee. Its functions include advising the EPA in relation to the assessment and control of chemicals that are environmentally hazardous. The EPA may assess chemicals under the Act. The EPA may declare substances to be chemical wastes for the purposes of the Act. Examples of substances that have been so declared include dioxin contaminated waste materials and PCB (polychlorinated biphenyl) wastes.	The project has chemicals on site for use in cleaning, etc, which may be the subject of a chemical control order (s10(1)) from the EPA including the manner in which the chemicals are stored, used and disposed.	
National environment protection matters	National Environment Protection Council (New South Wales) Act 1995	This Act provides for the establishment of a National Environment Protection Council (NEPC) that has power to make national environment protection measures. The New South Wales government will implement national environment protection measures (NEPMs) in New South Wales in a variety of ways, including via	CEMP	

BROKEN HILL BESS PROJECT

LEGAL REGISTER



Aspect	Legislation	Key Requirements	Relevance / Controls	Compliance
		<p>legislation. The Department of Environment and Conservation (NSW) is one agency that will administer the implementation of national environment protection measures in New South Wales. NEPMs implemented using EPA legislation include those relating to:</p> <ul style="list-style-type: none"> • assessment of site contamination; • used packaging materials; • movement of controlled waste; • national pollutant inventory. 		
Ozone	Ozone Protection Act 1989	<p>This Act provides a broad power to make regulations to control or prohibit the production and use of:</p> <ul style="list-style-type: none"> • substances that deplete stratospheric ozone when emitted into the atmosphere and • articles that contain or use those substances in their operation. 	CEMP	
Weed Management	Pesticides Act 1999	<p>This Act controls and regulates the use of pesticides in New South Wales. It is an offence under the Act:</p> <ul style="list-style-type: none"> • to use a pesticide in a manner that injures or is likely to injure another person (section 10); • to use a pesticide in a manner that damages or is likely to damage any property of another person (section 10); • to use a pesticide in a manner that harms any non-target animal or plant, or harms any animal or plant if there is no approved label or permit for the pesticide (section 11); • to willfully or negligently use a pesticide in a manner that causes material harm to threatened species or protected animals (section 9); • to possess or use an unregistered pesticide without a permit (sections 12 and 13); • to fail to read an approved label or permit before using a registered pesticide (section 14); • to use a registered pesticide contrary to the approved label (section 15); • to keep registered pesticides in a container without an approved label (section 16); • to possess or use a restricted pesticide without being authorised by a certificate of competency or a pesticide control order (section 17). 	CEMP - Engage a suitably qualified (licenced) personnel to manage weed control	
Weed Management	Biosecurity Act 2014	<p>The aim of the act is to introduce controls to manage:</p> <ul style="list-style-type: none"> • Animal and plant pests, diseases, weeds and contaminants that are economically significant for primary producing industries; • Threats to terrestrial and aquatic environments arising from animal and plant pest and diseases; • Public health and safety risks from contaminants, non-indigenous animals, nuisance bees and weed species known to contribute to public health problems; • Animal and plant pests and diseases and contaminants that may have an adverse effect on community activities, infrastructure, health and wellbeing. 	CEMP	
Approvals to conduct activities	Protection of the Environment Operations Act 1997 (POEO Act)	<p>There is a broad allocation of responsibilities under the Act between the EPA, local councils and other public authorities. The EPA is made the regulatory authority for:</p> <ul style="list-style-type: none"> • activities listed in Schedule 1 to the Act and the premises where they are carried on; • activities carried on by a State or public authority; and • other activities in relation to which a license regulating water pollution is issued. • In nearly all other cases, the regulatory authority is the relevant local council. 	EIS Development Consent - SSD-11437498	
Approvals to conduct activities	Environmental Planning and Assessment Act 1979	<p>The objects of this Act are:</p> <ul style="list-style-type: none"> • to encourage: <ul style="list-style-type: none"> o the proper management, development and conservation of natural and artificial resources, including agricultural land, natural areas, forests, minerals, water, cities, towns and villages for the purpose of promoting the social and economic welfare of the community and a better environment, o the promotion and co-ordination of the orderly and economic use and development of land, o the 	EIS Development Consent - SSD-11437498	

Aspect	Legislation	Key Requirements	Relevance / Controls	Compliance
		<p>protection, provision and co-ordination of communication and utility services,</p> <p>o the provision of land for public purposes,</p> <p>o the provision and co-ordination of community services and facilities,</p> <p>o the protection of the environment, including the protection and conservation of native animals and plants, including threatened species, populations and ecological communities, and their habitats, and</p> <p>o ecologically sustainable development, and o the provision and maintenance of affordable housing,</p> <ul style="list-style-type: none"> • to promote the sharing of the responsibility for environmental planning between the different levels of government in the State, and • to provide increased opportunity for public involvement and participation in environmental planning and assessment. 		

**BROKEN HILL BESS PROJECT
ENVIRONMENTAL MANAGEMENT STRATEGY
STAGE 2 – TRANSMISSION LINE**



APPENDIX D - PROJECT IMPACTS AND ASPECTS REGISTER

Valmec Environmental Aspects and Impact Risk Register - BESS Project



Item	Aspects	Impacts	Consequences	Inherent Risk Assessment			Controls (So Far As Is Reasonably Practicable)	Procedures	Residual Risk Assessment			ALARP	Action Items	Responsibility	Due Date	Status	
				Likelihood	Consequence	Risk			Likelihood	Consequence	Risk						
1	CLEARING, EXCAVATIONS AND BULK EARTHWORKS	Loss of Vegetation	Clearing activities directly remove vegetation from the area, and earthworks that disturb topsoil have the potential to restrict or inhibit future vegetation regrowth.	Unlikely	Minor	Low (5)	<ul style="list-style-type: none">Clearing will only be conducted in accordance with any formal land clearing permits. These permits will be available on site in hard copy prior to any clearing commencing and the personnel involved will review the documentation prior to starting work.An Excavation / Clearing / Penetration Permit (VAL-F-007) will be raised by the Valmec supervisor prior to starting works to ensure that all necessary controls specified in the approved clearing documentation are implemented throughout the works (e.g. barricading protected areas).Wherever practical, removed topsoil will be stockpiled for re-use, such as for rehabilitation or remediation.Only vegetation to the extent necessary for construction and for safety (e.g. maintaining road corridors) will be removed. All other vegetation will not be disturbed.	4017-PLA-HS-002_0_AGL Broken Hill BESS Project Environmental Management Plan 4017-PLA-HS-008 Biodiversity Management Plan	Rare	Minor	Low (3)						
2		Aboriginal Heritage and Historical Sites	Clearing and earthworks have the potential to disturb places of traditional significance to Aboriginal people, or uncover objects related to the traditional cultural life of Aboriginal people or other historical land users, particularly in 'greenfields' areas that have not been subjected to historical clearing and remain in their natural state.	Unlikely	Moderate	Medium (9)	<ul style="list-style-type: none">Clearing will only be conducted in accordance with any formal land clearing permits. These permits will be available on site in hard copy prior to any clearing commencing and the personnel involved will review the documentation prior to starting work.Each specific object or location known to be significant for Aboriginal heritage or historical reasons will be barricaded and signposted to prevent accidental damage or disturbance. This barricading will also include a significant exclusion zone where possible.All persons at the workplace will be informed of the existence of heritage-related locations as part of their workplace induction.Heritage-related locations will be detailed on workplace layouts, drawings and other similar documentation. <p>If an item or location of potential significance is found, the following actions will be taken:</p> <ul style="list-style-type: none">Work will stop in the immediate and surrounding areas.The area will be barricaded and secured as appropriate to prevent further disturbance.Any previously uncovered items will be covered if there is a potential for wet weather.The Client will be contacted to agree on further direction (e.g. professional assessment, specialist removal, notifications to the landowner, relevant government department or Aboriginal representative groups).The event will be reported as an environmental incident.	4017-PLA-HS-002_0_AGL Broken Hill BESS Project Environmental Management Plan 4017-PLA-HS-009 Aboriginal and Cultural Heritage Management Plan	Rare	Moderate	Medium (6)						
3		Dust Management	Disturbed land has the potential to generate large amounts of dust that is blown to adjacent properties. Generated dust can cause nuisance and inconvenience to other land users, and high levels can damage crops and other plant life or cause adverse health effects.	Possible	Minor	Medium (8)	<ul style="list-style-type: none">Quantity of land disturbed at any one time will be kept to the minimum required by the works schedule, and various work schedules will be coordinated to minimise the time that disturbed land remains exposed.Water carts, or similar suitable devices, will be used to water designated traffic ways and other dust-generating areas to minimise the levels of dust generated.Plant and vehicles will stick to designated traffic ways wherever possible to avoid disturbing stabilised cleared land, and their speed will be limited to reduce dust generated on unsealed roadways.Large areas of cleared land may be ripped/scarified, hydro mulched or chemically stabilised to minimise soil exposure to wind. Chemical stabilisers must have no adverse environmental impacts (e.g. Dustex).If planned works contain a significant risk of nuisance dust (e.g. extensive clearing), a Site Dust Risk Assessment (VAL-F-050) will be completed in line with "A" guideline for managing the impacts of dust and associated contaminants from land development sites, contaminated sites remediation and other related activities, and prevention / control measures implemented accordingly.	4017-PLA-HS-002_0_AGL Broken Hill BESS Project Environmental Management Plan 4017-PLA-HA-010 Soil and Water Management Plan_A	Unlikely	Minor	Low (5)						
4		Erosion Control	Disturbed land and soil stockpiles have the potential for significant erosion and sediment run-off, particularly when large areas of land have been exposed, and this can lead to public nuisance, impeded drainage and damage to aquatic ecosystems through high turbidity.	Possible	Minor	Medium (8)	<ul style="list-style-type: none">Quantity of land disturbed at any one time will be kept to the minimum required by the works schedule, and various work schedules will be coordinated to minimise the time that disturbed land remains exposed.Large areas of cleared land will be ripped / scarified or hydro mulched to minimise wind speed and run-off water speed, when required.Plant and vehicles will stick to designated traffic ways wherever possible to avoid disturbing stabilised cleared land.Loose soils, steep slopes and riparian vegetation (river banks) will not be cleared wherever possible.Excavations on slopes will have leading edges barricaded or similar (e.g. using sandbags) to prevent large quantities of water flowing in and eroding sides of excavations.Long-term soil stockpiles will be located away from natural waterways and other sloped areas.	4017-PLA-HS-002_0_AGL Broken Hill BESS Project Environmental Management Plan 4017-PLA-HA-010 Soil and Water Management Plan_A	Unlikely	Minor	Low (5)						
7		Acid Sulphate Soils (Not anticipated)	Acid sulphate soils (ASS) are not considered a credible risk for this project if, however, symptoms of acid-sulphate soils are identified in an area not previously considered at-risk, Valmec will consult its Client for further direction; at the direction of the Client, Valmec will support soil testing programs.	Unlikely	Minor	Low (5)	<ul style="list-style-type: none">Soil investigation reports will be assessed or requested from customers during the tendering phase of a project to confirm the presence of known acid-sulphate soils, allowing for the appropriate strategies to be established during the planning phase.Planned earthworks extending below 5 m AHD (Australian Height Datum) will be assessed for the potential for acid-sulfate soils against government-provided risk maps (typically coastal areas). Earthworks above this level will not be considered at significant risk of acid-sulfate soils.Where planned works have been identified to be within risk areas, a field investigation will be conducted to consider soil and subsurface water characteristics (in consultation with the Client – this may have already been completed for the workplace).Where field inspection indicates significant potential for acid-sulfate soils, an acid-sulfate soils management plan will be developed for the workplace.If symptoms of acid-sulfate soils are identified in an area not previously considered at-risk, Valmec will consult its Client for further direction.	4017-PLA-HS-002_0_AGL Broken Hill BESS Project Environmental Management Plan 4017-PLA-HA-010 Soil and Water Management Plan_A	Rare	Minor	Low (3)						
8	WORKPLACE LAYOUT AND SETUP	Chemical Storage	The primary environmental risk related to chemical storage is uncontained release of hydrocarbons or hazardous substances. This has the direct risk of localised soil contamination and the indirect risk of aquatic contamination through rainfall run-off into drains and waterways.	Possible	Minor	Medium (8)	<ul style="list-style-type: none">A register of chemicals and their SDS will be maintained readily available for each workplace. SDS will have Australian emergency numbers and be less than five years old, or the most recent version.Chemicals will be the least hazardous practical alternative and in the least hazardous practical form.A bunded chemical storage area (e.g. cabinet) will be provided to store small quantities of hazardous substances.Hazardous substances will be stored in their designated storage area when not in use.Designated chemical storage areas must be away from any drains, waterways or other similar features posing a direct risk of aquatic contamination.Chemical handling equipment and drip trays will be provided where appropriate.Chemical containers will be maintained in good condition, and decanted containers will be labelled with the product name and any significant safety information.Appropriate fire extinguishers, spill kits and PPE will be provided in case of an incident. These will be of a type, quantity and rating suitable to the nature and volume of chemicals at the workplace.Spill kits, fire extinguishers and other emergency equipment (e.g. emergency showers) must be repaired / replenished / replaced and their readiness confirmed following their use in an emergency incident or drill. These must also be checked at regular intervals to confirm readiness, these checks must be documented (i.e. via a sticker, tag or inspection checklist).	4017-PLA-HS-002_0_AGL Broken Hill BESS Project Environmental Management Plan 0775-HAS-GEN-90-001-R0A-IFR Broken Hill BESS Project Health and Safety Management Plan	Unlikely	Minor	Low (5)						
9		Housekeeping and Public Amenity	The condition of workplaces, laydown and storage areas has the potential to cause public nuisance, littering and public safety risks if not properly maintained.	Possible	Minor	Medium (8)	<ul style="list-style-type: none">Work materials and other items will be neatly stored, and sufficient space, fixtures and furnishings will be provided to facilitate this.Loose items stored in areas where they may be transported by the wind will be secured or removed.Work areas will be left in an appropriately clean and tidy condition at the end of each shift.Complaints and concerns from members of the public will be addressed promptly, including documenting the event (VAL-F-076) and reporting the occurrence to Valmec's Client(s) as required.	4017-PLA-HS-002_0_AGL Broken Hill BESS Project Environmental Management Plan 0775-HAS-GEN-90-001-R0A-IFR Broken Hill BESS Project Health and Safety Management Plan	Unlikely	Minor	Low (5)						
10		Terrestrial Fauna	Native, feral and other animals may enter the workplace during or after-hours, placing themselves and site personnel at significant risk of harm.	Possible	Minor	Medium (8)	<ul style="list-style-type: none">Workplaces will be securely fenced to deter entry by personnel and larger animals. Typically 'rabbit-proof' fencing will be used at fixed facilities.Food scraps will be securely stored in lidded bins and regularly removed from site to deter scavengers.Pets will not be permitted on site.Feeding and / or capture of native or feral animals will not be permitted (except by a specialist handler engaged to remove the animal).Excavations deeper than 0.5 m will be installed with 'fauna ramps' if left open at the end of a shift.Excavations deeper than 0.5 m will be inspected for the presence of fauna at the start of each shift.Pipe lengths longer than 30 m will be capped to prevent fauna entry.If fauna is located within the workplace (other than snakes), it will be encouraged to leave. For snakes and other fauna that remain in the workplace, a specialist handler will be engaged to assist with its removal. In these cases, personnel will monitor the animal's location at a distance to avoid aggravation until the handler arrives.Fauna removals by a third-party handler will be reported as an incident (refer to section 4.3).	4017-PLA-HS-002_0_AGL Broken Hill BESS Project Environmental Management Plan 4017-PLA-HS-008 Biodiversity Management Plan	Unlikely	Minor	Low (5)						

11	PLANT AND EQUIPMENT USE	Hot Work & Fire Prevention	Hot work such as welding (including welding stub management), grinding, mechanical cutting or oxy-cutting pose a risk of unintentionally starting a small-scale on-site fire with minor safety risks or a large-scale bushfire with significant environmental impact and public safety risks.	Possible	Moderate	High (13)	<ul style="list-style-type: none"> Hot work will be conducted only in designated hot works areas, unless under the control of a Hot Work permit (VAL-F-004) detailing the applicable safety and other fire prevention requirements. No hot works permits will be issued on days of total fire ban, unless an exemption has been granted, in which case the work will be conducted only in accordance with the terms of the exemption. Fire extinguishers will be readily available during hot works, and will be of a class and size appropriate to the risks involved in the work. Vegetation within 5 m of planned hot works will be protected by 'humpy' (or similar enclosure), fire blankets (or similar barrier), or thorough 'wetting-down' of vegetation. If 'wetting-down' is the sole method used to protect vegetation, this will be completed both prior to works commencing and following completion of works, and a person will be assigned for 'fire-watch' for 30 mins following completion of works. <p>In addition, the following controls will be implemented to minimise the risk of fires more generally:</p> <ul style="list-style-type: none"> Fire extinguishers will be provided at various locations around site in case of a fire; including at flammable liquid storage and with construction vehicles. Plant and vehicles may only travel on designated roads and work areas. Smoking is permitted only in the designated areas and butts must be placed into the provided bins. Burning-off of refuse, vegetation and other waste will not be permitted. 	4017-PLA-HS-002_Q_AGL Broken Hill BESS Project Environmental Management Plan Fire Safety Study	Rare	Moderate	Medium (6)					
12		Noise	Mobile plant, generators and other machinery (such as air compressors) may generate significant levels of noise that proves a nuisance to adjacent land users.	Unlikely	Major	High (14)	<ul style="list-style-type: none"> Stationary items of equipment with the potential to generate significant noise levels (e.g. generators) will be enclosed, screened or otherwise located to minimise noise levels. Exhaust mufflers, machine guarding, screens and other silencing devices will be fitted wherever appropriate and maintained in serviceable condition. Plant and equipment will be shut off or 'throttled down' while not in active use, and shut down outside of working hours. Particularly noisy activities (e.g. jackhammering) will be restricted to between 9 am and 6 pm weekdays wherever practical (in residential areas). 	4017-PLA-HS-002_Q_AGL Broken Hill BESS Project Environmental Management Plan	Rare	Moderate	Medium (6)					
		Wash-Down Facilities	Plant and vehicle wash-down facilities generate waste water that is often contaminated with significant levels of detergents, hydrocarbons and suspended soils, and as such cannot be simply discharged to drains or the surrounding environment.	Possible	Moderate	High (13)	<ul style="list-style-type: none"> Wash-down facilities will be contained on an impervious pad (such as lined and reinforced concrete) to prevent contaminated run-off leaching into groundwater. Wash-down facilities will have bund walls, intercept drains or an alternative method of preventing run-off from flowing into stormwater drainage systems or the surrounding environment. Water run-off from wash-down facilities should be treated to remove hydrocarbons (e.g. oily water separator unit) and to remove suspended solids (e.g. sediment traps and de-emulsification basin) prior to discharge to sewer systems. If both of these items are not implemented, then water run-off will be captured and periodically removed (using a licensed waste contractor as applicable). Oily-water separator units, where installed, must be regularly serviced and maintained in good condition, and rated for the peak wastewater flow expected through the system. Waste water will only be discharged to sewer systems in accordance with the requirements of the local water authority (as specified in a water discharge authorisation, trade waste permit or similar). 	4017-PLA-HS-002_Q_AGL Broken Hill BESS Project Environmental Management Plan 4017-PLA-HA-010 Soil and Water Management Plan_A	Rare	Moderate	Medium (6)					
17	WASTE STORAGE AND DISPOSAL	WASTE STORAGE AND DISPOSAL	Valmec's scope of work generates a range of solid and liquid wastes, both hazardous and non-hazardous to human health and the environment. Valmec's overarching waste management objective is to prevent contamination or environmental harm due to inappropriate disposal of waste.	Possible	Minor	Medium (8)	<ul style="list-style-type: none"> Impacts of waste will be minimised by using the hierarchy of controls: Avoid, Reduce, Reuse, Recycle, and Dispose. Different containers will be provided to segregate the collection of different waste streams (e.g. food waste, solid inert waste, oils & greases, recyclable paper & cardboard, scrap metal). Waste collection facilities will be regularly emptied to prevent overflows or mixing different kinds of waste. Bins will be provided at various locations around the workplace to minimise waste build-up and prevent littering. Work areas will be made clean and tidy at the end of each shift, and kept as clean and tidy as practical throughout works. Bins will be covered if they contain domestic / food waste, or if their contents are likely to be picked up by the wind and cause litter. Controlled waste will be removed from the workplace only by licensed contractors, in accordance with the terms and conditions of their licence. 	4017-PLA-HS-002_Q_AGL Broken Hill BESS Project Environmental Management Plan	Unlikely	Minor	Low (5)					

**BROKEN HILL BESS PROJECT
ENVIRONMENTAL MANAGEMENT STRATEGY
STAGE 2 – TRANSMISSION LINE**



APPENDIX E - UNEXPECTED FINDS PROCEDURE

BROKEN HILL BESS PROJECT
ENVIRONMENTAL MANAGEMENT STRATEGY
 STAGE 2 – TRANSMISSION LINE



UNEXPECTED FINDS PROCEDURE

The Consortium Project Manager will retain the overall responsibility for implementing the unexpected finds procedure for all construction works undertaken within, or near, the project area.

1.1 MANAGEMENT OF UNEXPECTED FINDS

Where unexpected contamination is identified or suspected by personnel involved in construction works within or near the project area, works will be temporarily suspended in the affected area. This area will be isolated to minimise the potential for disturbance of the affected material, soil and/or water. Field personnel are to notify the Project Manager who will then contact the AGL to inform of the impact to the intended works. The Project Manager, with guidance from the HSE Officer, will be responsible for organising the evaluation of the nature of the unexpected find.

1.2 UNEXPECTED FINDS PROCEDURE

In the event that a person on-site identifies an unexpected find, the Consortium will undertake the actions presented in Table 1.1 below.

Table 1.1 Unexpected Finds Procedure

Step No.	Description	Action
1	Potential contaminated soil, groundwater or surface water, or ACM, is encountered during construction activities.	<p>Cease work in the potentially impacted area as soon as it is safe to do so and move away from the area.</p> <p>Assess the potential immediate risk to worker health and surrounding environment posed by the unexpected find and assess if evacuation or assistance of emergency services is required.</p>
2	Environmental management and work health safety management	<p>Delineate an exclusion zone around the impacted area using fencing and/or appropriate barriers and signage.</p> <p>Additional control measures may be required for:</p> <ul style="list-style-type: none"> • Odours and/or volatile compounds: odours suppression and no flames/sparks signage. • Potential asbestos containing materials: if area is small cover with weighted plastic sheeting or geofabric. For larger areas, use regular dust suppression as conditions require – refer to the Work Health and Safety Plan for required controls. • Install environmental controls around the site to contain the contaminated material including diversion of water to minimise potential spread via surface water runoff in accordance with the Soil & Water Management Plan (SWMP). • Personal Protective Equipment (PPE) will be worn if conditions have changed as per the relevant Safety Data Sheet (SDS) and worker safety requirements.
3	Assess the unexpected find	A Contaminated Land Consultant should assess the unexpected find and provide:

BROKEN HILL BESS PROJECT

ENVIRONMENTAL MANAGEMENT STRATEGY

STAGE 2 – TRANSMISSION LINE



Step No.	Description	Action
		<ul style="list-style-type: none"> Preliminary assessment of the nature of suspected contamination and immediate management controls if needed. Advise what further assessment and/or remediation works are required and how such works are to be undertaken in accordance with contaminated site regulations and guidelines – refer to the CEMP. The assessment may include a requirement to undertake a targeted site investigation to sample and analyse contaminated media. <p>Suspected or identified contamination will be characterised with consideration of ASC NEPM (NEPC, 2013) and soil material will be classified in accordance with the Waste Classification Guidelines (NSW EPA, 2014).</p>
4	Management or mitigation action and reporting	<p>Based on advice of the Contaminated Land Consultant, implement necessary management or mitigation actions to minimise risk to human health and the environment and to allow the construction activities to recommence.</p> <p>Record details of the unexpected find and the actions undertaken, including the following, and notify the auditor, landowner; local council and/or NSW EPA:</p> <ul style="list-style-type: none"> Location, nature and extent of unexpected find Scope, methodology and results of any investigation. Scope, methodology and outcomes from any remedial activities completed. Results of any validation sampling or clearance certificates (i.e. for asbestos). Implemented changes to risk control measures.
5	Recommence works	<p>The Contaminated Land Consultant will provide relevant information and recommendations to the Consortium Project Manager, particularly for considering any changes to existing site management plans.</p> <p>Recommence construction works once mitigation or remediation works have been implemented, sampling has validated that the remediation strategy has been successful and if it is then deemed safe to do so by the AGL, the Consortium Project Manager & HSE Officer and the auditor.</p>

BROKEN HILL BESS PROJECT
ENVIRONMENTAL MANAGEMENT STRATEGY
STAGE 2 – TRANSMISSION LINE



2.0 ENVIRONMENTAL CONTROL MEASURES AND COMPLIANCE

2.1 ROLES AND RESPONSIBILITIES

In addition to those detailed in the EMS & CEMP, the roles and responsibilities presented in Table 5.1 are relevant to the Unexpected Finds Procedure.

Table 2.1 Roles and Responsibilities

Role	Responsibility
HSE Officer	Provide training at commencement of project of potential of Unexpected Finds and the requirements under this procedure.
Foreman	Communicate discovery and nature of unexpected finds to contamination consultant.
Project Manager	Stop Works, ensure area is isolated and Unexpected Finds Procedure is implemented.

2.2 TRAINING

Personnel involved in construction works in the project area will be made aware of, and trained, in the recognition of potential unexpected finds. Training will be undertaken as a part of general site induction and refreshed periodically at toolbox meetings.

Training will provide general awareness for recognition of potential contamination and hazardous materials, so that works can be suspended temporarily to allow evaluation by an appropriately qualified person. Project workers will be trained in identifying the following:

- Soil that appears to be contaminated based on visual and olfactory indicators;
- Asbestos (i.e. either bonded or friable);
- Groundwater or surface water that appears to be contaminated based on visual and olfactory observations (including potential hydrocarbon sheens on the water surface, free phase liquids such as petroleum fuel, discolouration etc.);
- Drums or USTs;
- Fill containing waste (e.g. ash, slag, refuse, demolition materials).

2.3 MONITORING AND INSPECTION

Monitoring and inspection will be conducted in accordance with sections 7.1 and 7.3 of the Broken Hill Battery Energy Storage System Project EMS. Results and actions of monitoring and inspection are to be recorded as specified within the CEMP.

BROKEN HILL BESS PROJECT
ENVIRONMENTAL MANAGEMENT STRATEGY
STAGE 2 – TRANSMISSION LINE



2.4 AUDITING

Internal and external audit requirements will be conducted as outlined within section 7.3 of the Broken Hill Battery Energy Storage System Project EMS.

BROKEN HILL BESS PROJECT
ENVIRONMENTAL MANAGEMENT STRATEGY
STAGE 2 – TRANSMISSION LINE



APPENDIX F PROCEDURES

Reference	Title
Consortium Documents	
VAL-POL-001	HSEQ Policy
VAL-POL-002	Consortium Core Values
VAL-PLA-002	Consortium Health and Safety Management Plan
VAL-MAN-005	Consortium Emergency Management Manual
VAL-PRO-002	Project Start-up procedure
VAL-PRO-020	Legal and Other Requirements procedure
VAL-PRO-036	HSE Risk Management procedure
VAL-PRO-054	Incident Reporting and Investigation procedure
VAL-PRO-147	Subcontractor Management procedure
VAL-F-001	Consortium Risk Matrix
VAL-F-004	Hot Work Permit form
VAL-F-007	Excavation / Clearing / Penetration Permit form
VAL-F-017	Workplace Induction Checklist
VAL-F-025	Incident Notification Report form
VAL-F-050	Site Dust Risk Assessment form
VAL-F-052	Fuel-Oil Facility Inspection Checklist
VAL-F-067	Subcontractor Prequalification form
VAL-F-076	Complaint Report form
VAL-F-129	Project Kick-Off Checklist
VAL-F-348	Vehicle and Mobile Plant Weed Hygiene form
VAL-F-405	Subcontractor Performance Review form
VAL-F-408	Dilapidation Survey Report form