Akaysha Energy

Environmental Management Strategy

Waratah Super Battery

May 2023





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Environmental Management Strategy Waratah Super Battery

Akaysha Energy

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WSP acknowledges that every project we work on takes place on First Peoples lands.
We recognise Aboriginal and Torres Strait Islander Peoples as the first scientists and engineers and pay our respects to Elders past and present.

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Table of contents

Glossaryii		
1	Introduction1	
1.1	Background1	
1.2	Purpose of this EMS1	
1.3	Project overview2	
1.4	Proponent4	
2	Strategic framework5	
2.1	Objectives5	
2.1.1	Sustainability targets5	
2.2	Framework overview7	
2.3	Management plans9	
2.3.1 2.3.2	Remediation Action Plan	
2.3.2	Operation	
2.3.4	Decommissioning and rehabilitation10	
2.4	Competence and awareness11	
0.5	Continual improvement11	
2.5	Continual Improvement11	
3	Statutory context	
	•	
3	Statutory context12	
3 3.1	Statutory context	
3 3.1 3.2	Statutory context	
3 3.1 3.2 4	Statutory context	
3 3.1 3.2 4 4.1	Statutory context	
3 3.1 3.2 4 4.1 4.2	Statutory context	
3 3.1 3.2 4 4.1 4.2	Statutory context	
3 3.1 3.2 4 4.1 4.2 5 5.1	Statutory context	
3 3.1 3.2 4 4.1 4.2 5 5.1 5.2 5.3 5.3.1	Statutory context	
3 3.1 3.2 4 4.1 4.2 5 5.1 5.2 5.3 5.3.1 5.3.2	Statutory context	
3 3.1 3.2 4 4.1 4.2 5 5.1 5.2 5.3 5.3.1	Statutory context	



6 Incident, emergency and non-compliance		
	response	20
6.1	Non-compliance response	20
6.1.1	Response	20
6.1.2	Notification	20
6.2	Incident response	20
6.2.1	Response	
6.2.2	Notification and reporting	21
6.3	Emergency response	22
7	Monitoring, audits and reviews	23
7.1	Independent audits	23
7.2	Reviews	23
7.3	Monitoring	24
l ist	of tables	
Table		
Table	addressed in the EMS	1
Table	2-1 Sustainability initiatives	5
Table :	2-2 Construction documents requiring approval under the Infrastructure Approval	9
Table :	3 11 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	4.0
T-11-	Infrastructure Approval	
Table		
Table -		
Table	·	
Table		
Table	G	
Table	7 2 Operations Worldownig	20
List	of figures	
Figure	_	3
Figure		

List of appendices

Appendix A EMS approval

Appendix B Construction Environmental Management Plan

Appendix C Unexpected finds procedure

Glossary

BESS Battery Energy Storage System

BMP Biodiversity management plan

CEMP Construction Environmental Management Plan

CPP Consolidated Power Projects

CSSI Critical State Significant Infrastructure

DPE NSW Department of Planning and Environment

EIS Environmental Impact Statement

EMS Environmental Management Strategy (this document)

EP&A Act Environmental Planning and Assessment Act 1979

FRNSW Fire and Rescue NSW

NSW New South Wales

OEMP Operation Environmental Management Plan

Planning Secretary Secretary of the Department Planning and Environment or their nominee

RAP Remediation Action Plan

SIPS System Integrity Protection Scheme

SQE Safety, Quality and Environment

SWMS Safe Work Method Statement

TMP Traffic Management Plan

WHSE Work, Health Safety and Environment

1 Introduction

1.1 Background

The New South Wales (NSW) Government, through the Energy Corporation of NSW (EnergyCo), is developing the 'Waratah Super Battery' (the project) to ensure NSW continues to have reliable, affordable energy supplies following the planned closure of the Eraring Power Station in 2025. EnergyCo was granted Infrastructure Approval on 21 February 2023 to construct and operate a System Integrity Protection Scheme (SIPS) control and standby network battery system on the site of the former Munmorah Power Station at Colongra.

This Environmental Management Strategy (EMS) has been prepared for the project.

1.2 Purpose of this EMS

The purpose of the EMS is to ensure that environmental management measures outlined in the issue-specific environmental management plans are incorporated into a comprehensive framework to facilitate appropriate management throughout the life of the Waratah Super Battery.

The structure and scope of this EMS has been prepared to be meet the requirements of Condition C1 in Part C of the Infrastructure Approval. Table 1-1 identifies where each requirement is addressed in this EMS.

Table 1-1 Condition C1 and where the requirements are addressed in the EMS

Condition requirement	Location in this document
Prior to commencing construction, the Proponent must prepare an Environmental Management Strategy for the development to the satisfaction of the Planning Secretary. This strategy must:	This document
(a) provide the strategic framework for environmental management of the development;	Section 2
(b) identify the statutory approvals that apply to the development;	Section 3
(c) describe the role, responsibility, authority and accountability of all key personnel involved in the environmental management of the development;	Section 4
(d) set out the procedures that would be implemented to:	
 keep the local community and relevant agencies informed about the operation and environmental performance of the development; 	Section 5.2 and 5.3
ii. receive, handle, respond to, and record complaints;	Section 5.4
iii. resolve any disputes that may arise;	Section 5.5
iv. respond to any non-compliance;	Section 6.1
v. respond to emergencies; and	Section 6.3

Condition requirement	Location in this document	
(e) include:		
 references to any strategies, plans and programs approved under the conditions of this approval; and 	Section 2.2	
ii. a clear plan depicting all the monitoring to be carried out in relation to the development, including a table summarising all the monitoring and reporting obligations under the conditions of this approval.	Section 7	
Following the Planning Secretary's approval, the Proponent must implement the Environmental Management Strategy.	Appendix A contains the Planning Secretary's approval of this EMS.	

1.3 Project overview

The project includes the following key features:

- A SIPS system, designed to reserve and deploy battery power to support the NSW electricity grid when triggered by a contingency event.
- Up to 850 megawatts (MW) active power.
- Up to 1,680-megawatt hours (MWh) battery storage capacity.
- Connecting transmission and related infrastructure to connect the SIPS to the existing grid.
- Other infrastructure and services required for the project.

The battery component of the project is part of the SIPS and is designed primarily to provide reserve transmission capacity and stability, rather than additional electricity storage capacity. In this regard, the Waratah Super Battery would allow consumers to access more energy from existing electricity generators while maintaining network security.

Figure 1.1 shows the location of the project site within the boundaries of the former Munmorah power station site on the Central Coast of NSW.

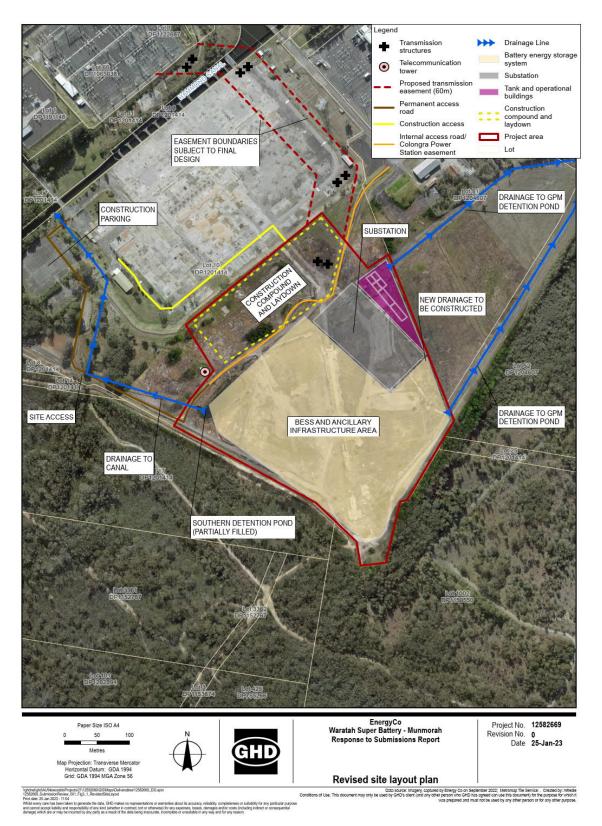


Figure 1.1 Project layout

1.4 Proponent

The proponent as identified in the Infrastructure Approval is EnergyCo and any other person carrying out any part of the development from time to time.

The battery energy storage system (BESS) would be operated by the service provider, Akaysha Energy, and the SIPS component of the project would be operated by the network operator, Transgrid.

2 Strategic framework

2.1 Objectives

The objectives of the environmental management framework are to:

- minimise impacts on the community and the environment.
- ensure that controls are properly implemented, regularly monitored, and audited to assess their effectiveness.
- ensure processes for resourcing and implementing the environmental management strategy are developed to provide certainty of delivery.
- demonstrate compliance with statutory, legislative and Infrastructure Approval requirements.
- ensure timely and efficient response to environmental incidents and complaints.
- monitor, review, and report on environmental impacts of construction, operation, and decommissioning and rehabilitation activities.

2.1.1 Sustainability targets

Incorporation of sustainability initiatives into all phases of the project have been committed to. Whilst a formal sustainability rating is not being proposed for this project there is a commitment to:

- Integrate a number of best practice sustainability features.
- Review additional stretch initiatives to potentially adopt for the project.

The sustainability initiatives that would be implemented to align the project with best practice are outlined in Table 2-1. Additional stretch initiatives would be reviewed and adopted as relevant to the phase of the project.

Table 2-1 Sustainability initiatives

Sustainability category	Industry best practice initiatives to be adopted
Governance and leadership	 Define minimum sustainability targets prior to detailed design and construction phase of the project. This may include informal alignment or targeting formal certification under the Infrastructure Sustainability Rating Tool.
	 Sustainability targets and management practices are to be included as part of the overall EMS.
Climate risk and adaptation	 A high-level climate risk screening using published data (such as NSW Adapt) to be undertaken by the project team in the subsequent phase of the project.
	 The project team communicates the asset's exposure to climate change risks to the proponent (EnergyCo).
Energy use	Design
	 Buildings to adopt passive design and energy efficient building services to minimise energy and carbon emissions and achieve minimum 10% reduction over National Construction Code DTS building.
	 Buildings to be fully electrified to support net zero enabled design.
	 Energy metering of facilities to enable on-going energy management.

Sustainability category	Industry best practice initiatives to be adopted
	 Include electrical capacity and connection points in car parking facilities for future provision of electric vehicle charging infrastructure.
	Construction
	— Solar/battery powered construction lighting.
	Temporary lighting should be direction/adjustable.
	 Implement management practices that help to reduce fuel consumption
	Operation
	Implement ongoing energy monitoring and management.
	 Office equipment is to meet the minimum energy performance, as required by NSW GREP.
	Purchase minimum 6% GreenPower as per NSW GREP
Materials	Design
	 Utilise recycled supplementary cementitious materials (SCM) in concrete applications (e.g., fly ash, GGBFS).
	 Utilise recycled aggregates in concrete and asphalt mixes (e.g. recycled concrete aggregate (RCA), recycled asphalt pavement (RAP)). Utilise recycled products for binder replacement in asphalt mixes (e.g., crumb rubber, soft plastics, ink cartridge waste).
	 Increase design life and durability of elements, i.e., thicker pavement, double dip galvanizing to reduce the need for maintenance.
	 Facility to be designed to standard product dimensions, where possible, to reduce contraction wastage.
	Construction
	 Optimise cut and fill volumes to reduce bulk earthworks.
	Operation
	 Maintain facility in accordance with recommended practice to reduce need for replacement or major upgrade.
Water	Design
	 Water fittings and fixtures for facilities to meet minimum NSW GREP requirements.
	 Water sensitive urban design measures to manage stormwater discharge volumes and water quality.
	Construction
	Management practices that help to reduce water consumption.
	Reuse of site collected water
	Operation
	Maintain stormwater system to prevent downstream pollution.

2.2 Framework overview

The environmental management framework for the project is based on a hierarchy of documents. This EMS is the overarching document within the environmental management framework and is supported by a suite of sub-plans, procedures and tools to meet the objectives outlined in Section 2.1. The EMS has been developed to be consistent with Australian Standards (AS)/New Zealand Standards (NZS) 14001:2015 Environmental Management Systems.

This environmental management framework is applicable to all staff and sub-contractors undertaking the construction, operation and decommissioning of the project.

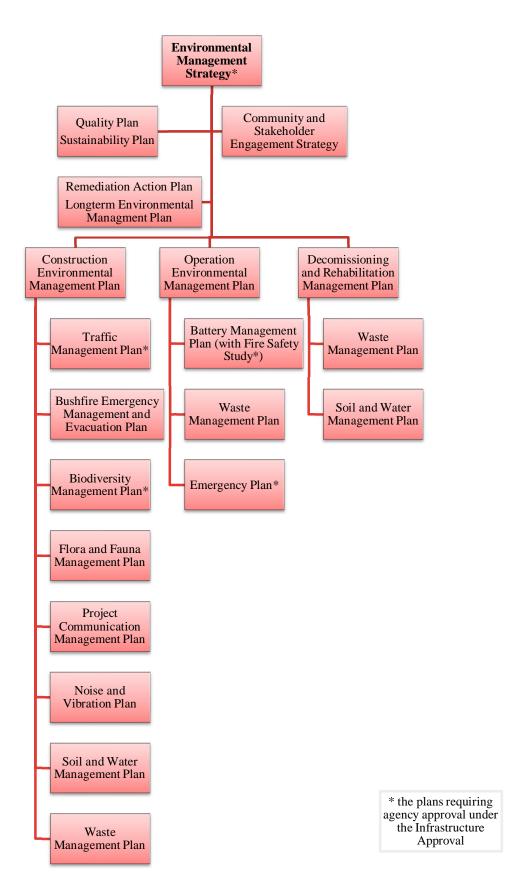


Figure 2.1 Flow chart of environmental management system

2.3 Management plans

2.3.1 Remediation Action Plan

A Remediation Action Plan (RAP) has been developed by GPM to prepare the site for construction of the project. The requirements of the RAP and any site contamination operational environmental management plan applying to site would be implemented and inform ongoing management of the project site. The RAP specifies preparation of a Long-Term Environmental Management Plan to manage ongoing contamination risks for the site. The management plans prepared for construction, operation and decommissioning would consider the Long-Term Environmental Management Plan.

2.3.2 Construction

A construction environmental management plan (CEMP) will be prepared for the planning, construction, commissioning and defects liability phases of the project. The CEMP will describe the environmental methods, controls and requirements to be implemented to meet the requirements of the Infrastructure Approval and the objectives of the environmental strategic framework. The CEMP will be appended to this document as Appendix B.

The CEMP will be supported by issue-specific sub-plans as shown in Figure 2.1. The sub-plans identified in the EIS include:

- Traffic Management Plan
- Bushfire Emergency Management and Evacuation Plan
- Flora and Fauna Management Plan
- Project Communication Management Plan
- Noise and Vibration Plan
- Soil and Water Management Plan
- Waste Management Plan

The sub- plans and protocols requiring preparation and approval under the Infrastructure Approval for the construction phase are outlined in Table 2-2. In accordance with condition B29 an unexpected finds procedure has been developed and is provided in Appendix C.

Table 2-2 Construction documents requiring approval under the Infrastructure Approval

Plan/protocol	Description	Relevant condition	Agency approval status
Traffic Management Plan (TMP)	The TMP identifies strategies to manage the impacts of project-related traffic and was prepared in consultation with Central Coast Council, Transport for NSW and Snowy Hydro Limited.	В7	Approved by the Planning Secretary on XX ¹
Biodiversity Management Plan (BMP)	The BMP identifies strategies and measures to manage the impacts to biodiversity and was prepared in consultation with Biodiversity Conservation and Science Directorate within the Department of Planning and Environment.	B11	Approved by the Planning Secretary on XX ¹

Plan/protocol	Description	Relevant condition	Agency approval status
Chance Finds Protocol	A Chance Finds Protocol was prepared in consultation with Aboriginal Stakeholders to provide a procedure in the event Aboriginal sites, objects or remains are found during project works. This protocol is part of the CEMP.	B17	Approved by the Heritage NSW on XX ¹

⁽¹⁾ These date placeholders will be updated as the approvals for each document are completed.

2.3.3 Operation

An Operational Environmental Management Plan (OEMP) would be developed to manage the ongoing maintenance and operational activities and ensure compliance with the Infrastructure Approval and the objectives of the environmental strategic framework. The OEMP will be supported by issue-specific sub-plans as shown in Figure 2.1. The sub-plans required under the Infrastructure Approval for the construction phase are outlined in Table 2-3.

Table 2-3 Operation documents requiring approval under the Infrastructure Approval

Document	Description	Relevant condition	Agency approval
Fire Safety Study (as part of the Battery Management Plan)	A battery management plan will be developed and implemented to capture the key battery safety requirements. A Fire Safety Study will be developed in accordance with the Infrastructure Approval and incorporated into the Battery Management Plan.	B21	Prior to commencing construction of the battery storage, the proponent must prepare a Fire Safety Study for the project, to the satisfaction of Fire and Rescue NSW and the Planning Secretary in writing.
Emergency Plan	An Emergency Plan with detailed emergency procedures will be developed and implemented during operation.	B24	The plan must include an Emergency Services Information Package in accordance with Emergency services information and tactical fire plan (FRNSW, 2019), and an Emergency Responders Induction Package to the satisfaction of Fire and Rescue NSW and Rural Fire Service.

2.3.4 Decommissioning and rehabilitation

A Decommissioning and Rehabilitation Environmental Management Plan would be developed to ensure compliance with the Infrastructure Approval and the objectives of the environmental strategic framework. The plan will be supported by issue-specific sub-plans as shown in Figure 2.1. No plans require approval under the Infrastructure Approval for the decommissioning and rehabilitation phase of the project.

2.4 Competence and awareness

Training will be implemented throughout the project to ensure personnel are suitably qualified and informed to undertake the relevant works. Records of the relevant training, experience, and qualifications of each personnel engaged on site will be maintained.

All employees, contractor employees and visitors to the site will attend an induction prior to commencing works. Records of all inductions shall be retained for the life of the project and recorded on the site induction register.

The induction content and training requirements will be relevant to the phase of the project and specified in the CEMP, OEMP and Decommissioning and Rehabilitation Environmental Management Plan and any associated sub-plans.

2.5 Continual improvement

The proponent is committed to continual improvement suitability, adequacy and effectiveness of the environmental management framework. Monitoring, audits and review of the environmental management plans which form part of the environmental management framework would be undertaken regularly to identify opportunities for improvement as described in Section 7. The EMS also includes practices for responding to non-compliances incidents and emergencies as described in Section 6.

3 Statutory context

The *Environmental Planning and Assessment Act 1979* (EP&A Act) and the Environmental Planning and Assessment Regulation 2021 (EP&A Regulation) comprise the primary legislation providing the framework for assessing environmental impacts and determining planning approvals for developments and activities in NSW.

The project is declared Critical State Significant Infrastructure (CSSI) under section 5.13 of the EP&A Act as described in Clause 31 of Schedule 5 of State Environmental Planning Policy (Planning Systems) 2021.

3.1 Infrastructure Approval

Infrastructure Approval was granted on 21 February 2023 to construct and operate a System Integrity Protection Scheme (SIPS) control and standby network battery system on the site of the former Munmorah Power Station at Colongra. EnergyCo was responsible for obtaining planning approvals for the project.

In accordance with the Infrastructure Approval, the project may only be carried out:

- in compliance with the conditions of the Infrastructure Approval;
- in accordance with all written directions of the Planning Secretary;
- generally in accordance with the Environmental Impact Statement (EIS) for Waratah Super Battery Energy Storage System, dated 3 November 2022, the Submissions Report dated 25 January 2022, and the additional information dated 16 February 2023;
- generally in accordance with the Development Layout in Appendix 1 of the Infrastructure Approval.

3.2 Other approvals

The permits and approvals which would be required for the project other than the Infrastructure Approval are outlined Table 3-1.

Table 3-1 Other permits and approvals required for the project

Approval	Legislation	Authority	Project relevance
Development within a mine subsidence district	Coal Mine Subsidence Compensation Act 2017	•	The project site is located within the Swansea North
subsidence district	(NSW)	115 77	Entrance Mine Subsidence
			District.

4 Roles and responsibilities

The proponent and owner of the project, Akaysha Energy, has ultimate responsibility and accountability to ensure it is designed, constructed, operated, upgraded and decommissioned in compliance with the Infrastructure Approval. However, actions to achieve compliance during construction will be undertaken by the contractor and during operation by the operations and maintenance (O&M) contractor.

4.1 Construction

The contractor, Consolidated Power Projects (CPP), has been engaged by Akaysha Energy to construct and commission the project. CPP will be managing compliance and environmental measures during the construction phase of the project. All employees, contractors and subcontractors will receive an environmental induction. A communication plan will be developed to cover how Akaysha, CPP and EnergyCo work together.

The key roles and responsibilities during construction are outlined in Table 4-1.

Table 4-1 Construction roles and responsibilities

Role	Responsibility	Accountability
EnergyCo	 Obtaining planning approvals for the project Procurement of the SIPS service 	Accountable for obtaining the relevant planning approvals for the project
Akaysha Energy	 Engaging suitably qualified contractor(s) to manage and carry out construction of the project 	Accountable for delivery of the project in accordance with the Infrastructure approval.
CPP Project manager	 Ensuring that the CEMP and associated sub-plans are fully implemented. 	Accountable for management of construction of the project.
	 The first point of contact for any issues or discrepancies arising during the project. 	
	 Maintaining the progress and mutual interaction of the associated and interested parties in such a way that reduces the risk of overall failure. 	
CPP Site Manager	 Ensuring that the requirements within the CEMP are fulfilled. 	Accountable for ensuring all works and workers comply with all
	The day-to-day management of the project.	environmental management plans.
	 Managing any problems encountered on-site. 	
	 Managing the quality, health and safety checks and environmental aspects of the project. 	
	 Being responsible for pre-site items. 	
	 Managing the communications between all parties involved in the on-site development of the project. 	

Role	Responsibility	Accountability
CPP Safety Quality Environmental (SQE) Manager	 Ensuring that the Work, Health Safety and Environment (WHSE) System is implemented according to organisational requirements. Maintaining a high level of WHSE compliance and 	Accountable for implementing environmental management plans and reporting.
	 awareness amongst all personnel. Ensuring all staff are familiar with the requirements of the management system. 	
	 Ensuring that an effective system of regular review of environmental documentation and procedures is conducted to ensure legislative compliance and duty of care obligation is upheld. 	
CPP SQE Advisor	 Ensuring that the WHSE Management System is implemented on CPP sites according to organisational requirements. 	Accountable for implementing environmental management plans.
	 Maintaining a high level of WHSE compliance and awareness amongst all personnel. 	
	 Managing all aspects of WHSE, non-conformances, events, hazard identification and event reporting. 	
	 Ensuring site compliance with CPP WHSE System. 	
Employees	 Ensuring that their actions do not negatively impact the environment. 	Undertaking activities in accordance with the environmental management
	 Attending all required WHSE meetings, toolboxes and SWMS reviews as required. 	plans
	 Reporting any hazards or risks. 	
	 Undertaking machinery checks to prevent contamination from machinery being used onsite. 	
	 Participating where necessary in event investigations. 	
Subcontractors	 Ensuring that Contractors Management system meet or exceed CPP standards. 	Undertaking activities in accordance with the environmental management
	 Providing evidence to CPP to show that they have adequate supervision and control of employees and their intended activities on the project site. 	plans
	 Providing records, licenses, tickets and verification of competencies to CPP on request and prior to commencement of work onsite. 	
	 Implement control measures for the risks associated with their tasks as shown in the Project Risk Register. 	
	 Report any changes or improvements that may affect hazard and risk control measures for activities that could be added to the Risk Register for consideration. 	
	Comply with all project requirements.	

4.2 Operation

The O&M Contractor will be managing compliance and environmental measures during the operation of the project. The key roles and responsibilities during operation are outlined in Table 4-2.

Table 4-2 Operational roles and responsibilities

Role	Responsibility	Accountability
Akaysha Energy	 Engage suitably qualified personnel to manage construction of the project Revise any plans/strategies or programs required by the Infrastructure Approval and submit (as required) for approval to the Planning Secretary 	Accountable for operation of the project in accordance with the Infrastructure approval
Transgrid	Initiate the calls for SIPS service	Accountable for ensuring relevant operations comply with the Infrastructure Approval.
Site manager	 Ensure compliance with environmental management framework and associated plans Maintaining complaints register and responding to complaints Notify Akaysha of incidents and non-compliances 	Accountable for ensuring operations and workers comply with all environmental management plans.
O&M employees and subcontractors	 Operating in compliance with the OEMP and Infrastructure Approval Notify site manager of any non-compliance or incidents 	Accountable for undertaking activities in accordance with the environmental management plans

5 Stakeholder and community engagement

5.1 Environmental performance updates

In accordance with condition C20 of the Infrastructure Approval, the following documents, as relevant to the stage of the project, will be published on the project website:

- the EIS
- the final layout plans for the project
- current statutory approvals for the project
- approved strategies, plans or programs required under the conditions of this approval
- the proposed staging plans for the project if the construction, operation and/or decommissioning of the project is to be staged
- a comprehensive summary of the monitoring results of the project, which have been reported in accordance with the various plans and programs approved under the conditions of this approval
- how complaints about the project can be made
- any independent environmental audit, and the Proponent's response to the recommendations in any audit; and
- any other matter required by the Planning Secretary.

This information will be kept up to date on the project website.

5.2 Community engagement

Community engagement will be undertaken in the accordance with project Community and Stakeholder Engagement Strategy and the project communication management plan as relevant to the phase of the project. An overview of the identification of stakeholders and their engagement on the project is set out below.

5.2.1 Identification of Stakeholders

Stakeholders were identified as those that may be interested in, or who may be affected by, the Waratah Super Battery. Stakeholders are listed in Table 5-1 and categorised into three main groups. These were:

- Government and technical stakeholders
- landowners
- the wider community.

Stakeholders will continue to be identified and consulted during all project phases, including the construction, operation, and decommissioning and rehabilitation phases of the Waratah Super Battery.

Table 5-1 Identified stakeholders

Stakeholder Group	Stakeholders		
Government and Technical Stakeholders			
State Government	Department of Planning and Environment (DPE)		
Departments	NSW Rural Fire Service		
	Transport for NSW		
	Heritage NSW		
	DPE Biodiversity Conservation Directorate		
	Fire and Rescue NSW		
	Subsidence Advisory NSW		
Local Government	Central Coast Council		
Electricity Distributors	Transgrid		
Key Energy Market Bodies	АЕМО		
Impacted Landowners			
Landowners	Generator Property Management (GPM)		
	Snowy Hydro		
Wider Community			
Neighbours	Residents in surrounding suburbs		
Indigenous Organisations	Darkinjung Local Aboriginal Land Council		
	Registered Aboriginal Parties		

5.2.2 Engagement with Community Stakeholders

Stakeholders will be engaged using a range of tools and techniques including meetings, phone calls, letters, emails and website updates. These will be supported by community feedback mechanisms, including a project-specific email address regularly monitored by Akaysha Energy. The project-specific email address has been established as: wsb@akayshaenergy.com.au

The project progress, including in relation to operations and environmental performance, may be monitored through regular updates on Akaysha Energy's project-specific website at the link below:

https://www.akayshaenergy.com.au/projects/waratah-super-battery

Stakeholders will be engaged on an issue-specific basis to ensure that there is targeted engagement with the community. Where necessary stakeholders will be provided with targeted, specific updates on the progress of the project in order to progress relevant stakeholder discussions.

5.3 Agency notification and engagement

5.3.1 Department of Planning and Environment

In accordance with condition C7 of the infrastructure Approval, prior to commencing the construction, operations, upgrading or decommissioning of the project or the cessation of operations, the proponent will notify the Department of Planning and Environment (DPE) 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 project are to be staged, then the proponent will notify DPE in writing prior to commencing the relevant stage, and clearly identify the project that would be carried out during the relevant stage.

The proponent will communicate with DPE in accordance with Infrastructure Approval.

5.3.2 Other agencies

The relevant Local Emergency Management Committee will be notified in accordance with condition B23 of the Infrastructure Approval following construction of the development, and prior to commencing operations.

Other agencies and local council will be notified in accordance with the management plans in place during the project phase.

5.4 Complaints handling

A complaints management system will be implemented throughout the duration of the project, including 24-hour, seven days a week phone line, postal and email address for written enquiries, and publication of contact details. The process for making complaints about the project will be published on the project website.

The following actions will be undertaken upon receipt of a complaint

- the details of the complaint will be recorded in a complaints register
- the relevant project management personnel will be notified
- the complaint will be acknowledged by email or phone call within three working days from receipt of the complaint
- all practical measures to modify the activity causing the complaint will be carried out
- for complaints regarding significant matters, a detailed response will be provided to the complainant within 14 working days from receipt of the complaint

The Site Manager will be responsible for maintaining the complaints register. The details to be recorded in the complaints register are:

- the date and time of the complaint
- the channel through which the complaint was made (e.g. via phone or email)
- contact details of the complainant if provided
- the nature of the complaint
- any action taken to address the complaint, including timeframes for carrying out the action.

5.5 Dispute resolution

In the event that a complaint cannot be resolved through the complaints management system and a dispute arises, the proponent will review the available information relevant to the complaint and if applicable and feasible offer alternative mitigation measures.

Should the dispute escalate, the proponent will engage in mediation with an independent arbiter agreed by both parties. If an agreement on an independent arbiter cannot be reached, proponent will inform DPE of the dispute and seek input.

6 Incident, emergency and noncompliance response

6.1 Non-compliance response

A non-compliance is defined as an occurrence, set of circumstances or development that is a breach of the Infrastructure Approval but is not an incident.

6.1.1 Response

Immediately after a non-compliance has been identified, the following actions will be undertaken:

- Stop work, if applicable
- Notify site manager (and SQE manager during construction)
- Identify corrective action(s) to be undertaken
- Record details of non-compliance and actions taken
- Review the cause of the non-compliance and implement any identified improvements in environmental management.

6.1.2 Notification

6.1.2.1 Within 24 hours

The site manager will notify Akaysha Energy upon becoming aware of an incident.

6.1.2.2 Within seven days

The proponent will notify the DPE in accordance with condition C11 to C13 of the Infrastructure Approval. The DPE will be notified in writing via the Major Projects website within seven days after the proponent becomes aware of any non-compliance.

The non-compliance notification will identify the project and the project approval number for it, set out the condition of approval that the project 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.

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

6.2 Incident response

An incident is a set of circumstances that causes or threatens to cause material harm to the environment. Material harm is harm that:

- 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).

6.2.1 Response

Immediately after identification of an incident, the following actions are to be followed:

- Remove people from harm and isolate the area around the incident to restrict access
- Stop works in the vicinity of the incident and ensure personnel safety
- Implement containment measures to prevent the impact of the incident spreading and restrict access
- Notify the Site Manager
- Implement the emergency procedures as relevant to the incident
- Estimate the significance of the incident.

6.2.2 Notification and reporting

6.2.2.1 Immediate

The site manager will notify Akaysha Energy upon becoming aware of an incident. In accordance with condition C10 of the project's infrastructure approval, the Planning Secretary must be notified in writing via the Major Projects website immediately after the proponent becomes aware of an incident.

The notification must identify the project (including the project approval number and the name of the project 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 of the Infrastructure Approval.

6.2.2.2 Within seven days

A written incident notification addressing the requirements set out below must be submitted to DPE via the Major Projects website within seven days after the Proponent becomes aware of an incident. Notification is required to be given under this condition even if the Proponent fails to give the notification required under condition C7 of Schedule 2 or, having given such notification, subsequently forms the view that an incident has not occurred.

Written notification of an incident must:

- identify the project and application number;
- provide details of the incident (date, time, location, a brief description of what occurred and why it is classified as an incident);
- identify how the incident was detected;
- identify when the Proponent became aware of the incident;
- identify any actual or potential non-compliance with conditions of approval;
- describe what immediate steps were taken in relation to the incident;
- identify further action(s) that will be taken in relation to the incident; and
- identify a project contact for further communication regarding the incident.

6.2.2.3 Within 30 days

Within 30 days of the date on which the incident occurred or as otherwise agreed to by the Planning Secretary, the Proponent must provide DPE 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.

The Incident Report must include:

- a summary of the incident;
- outcomes of an incident investigation, including identification of the cause of the incident;
- details of the corrective and preventative actions that have been, or will be, implemented to address the incident and prevent recurrence; and
- details of any communication with other stakeholders regarding the incident.

6.3 Emergency response

Emergency procedures for the construction phase including evacuation protocols would be detailed the Bushfire Emergency Management and Evacuation Plan as part of the CEMP.

An Emergency Plan describing emergency procedures for operation of the project will be prepared and implemented in accordance with condition B24 of the Infrastructure Approval. The Emergency Plan will be provided to Fire and Rescue NSW and the local Fire Control Centre. Two copies of the Emergency Plan and Emergency Services Information Package will be kept on-site in a prominent position adjacent to the site entry points at all times.

7 Monitoring, audits and reviews

Environmental monitoring, audits and reviews of management plans will be carried out regularly for the duration of the project to ensure high environmental performance and compliance with the Infrastructure Approval.

7.1 Independent audits

Independent audits will be undertaken in accordance with condition C14 to C19 in the Infrastructure approval. Proposed independent auditors will be agreed to in writing by the Planning Secretary prior to the commencement of an Independent Audit.

Independent Audits of the project will be conducted in accordance with the Independent Audit Post Approval Requirements (2020):

- within 3 months of commencing construction; and
- within 3 months of commencement of operations

The Planning Secretary may require the initial and subsequent Independent Audits to be undertaken at different times to those specified in Infrastructure Approval. At least 4 weeks' notice must be given by the Planning secretary.

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

- review and respond to each Independent Audit Report prepared under condition C14 of the Infrastructure Approval, or condition C16 of the Infrastructure Approval where notice is given by the Planning Secretary
- submit the response to DPE within 2 months of undertaking the independent audit site inspection unless otherwise agreed by the Planning Secretary
- make each Independent Audit Report, and response to it, publicly available within 60 days of submission to DPE,
 unless otherwise agreed by the Planning Secretary.

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.

7.2 Reviews

The review and if relevant the updating of the management strategies and plans in the environmental management framework will be undertaken regularly to ensure they are up to date with current and improved project practices. The proponent will:

- update the strategies, plans or programs required under the Infrastructure Approval to the satisfaction of the Planning Secretary prior to carrying out any upgrading or decommissioning activities on site
- review and, if necessary, revise the strategies, plans or programs required under the Infrastructure Approval to the satisfaction of the Planning Secretary within one month of the:
 - submission of an incident report under condition C10 of Schedule 2
 - submission of an audit report under condition C14 of Schedule 2
 - any modification to the conditions of the Infrastructure Approval.

7.3 Monitoring

Environmental monitoring will be undertaken in accordance with the monitoring plans for construction (see Table 7-1) and operation (see Table 7-2). Monitoring protocols and outcomes are provided in further detail in the relevant plans and strategies. The findings from monitoring activities will be reported and evaluated to identify opportunities for improvement in environmental management.

Any non-compliances and incidents identified during monitoring would be notified and reported as described in Chapter 5 of this document.

Table 7-1 Construction monitoring

Category	Frequency	Actions and requirements	Relevant plans or strategies	Reported to
General site inspection	Weekly	 Assess the site for unsafe or environmentally unacceptable work conditions; Any identified concerns or issues shall be raised at the daily pre-start meeting; Ensure any actions identified during an inspection are assigned to a person for completion and monitored for close out using the project issues tracking register; Ensure any relevant identified issues are discussed at daily pre-starts; Wherever possible the site manager shall utilise a subcontractor to participate in the inspection as a "second person". 	CEMP and all supporting plans	— SQE Manager
Internal audits	Regularly inlcuding: — Mobilisation audit within 8 weeks of project commencing on site — Environmental Management Plan Audit within 60 days of the project commencing then as required	 To verify implementation and compliance with the CPP certified system. CPP will undertake at the same time audits on subcontractors on site. This CEMP plan will be regularly audited. Audit reports will be completed and issued in a timely manner. All findings will be recorded for tracking and trending purposes. Corrective actions will be closed within the stipulated timeframe. Once the Internal Audit Report is completed, reviewed and agreed with the Responsible Manager, the Responsible Manager or their delegate shall track and record the close out and follow up of all opportunities for improvement. 	— CEMP and all supporting plans	— SQE Manager
Independent audit	Within 3 months of commencing construction or as directed by the Planning Secretary.	 Conduct audit in accordance with the Independent Audit Post Approval Requirements (2020) Review evidence of compliance with the Infrastructure Approval Review evidence of compliance with environmental management framework and associated plans Reporting in accordance with section 7.1 of this document. 	 This EMS RAP and any associated contamination plans CEMP and all supporting plans 	— Project Manager— Akaysha Energy— DPE

Category	Frequency	Actions and requirements	Relevant plans or strategies	Reported to
Traffic (Road conditions)	Continuously and directly in response to ccomplaints	 Continued monitoring of the road conditions shall be made of the roads utilised by construction vehicles. A log of photographic evidence shall be used as a reference in determining the extent of road dilapidation 	— ТМР	— SQE Manager
Traffic (road tracking)	Continuously and directly in response to ccomplaints	 Monitor sealed roads leading to and from the project site and take necessary steps to rectify any dirt, mud or other road deposits caused by site vehicles, to maintain the safety of road users. 	— CEMP — TMP	— SQE Manager
Noise	As relevant to the plant and equipment on site	 Regularly inspect and maintain equipment to ensure it is in good working order. Also check the condition of mufflers. Check equipment is not be operated until it is maintained or repaired, where maintenance or repair would address the annoying character of noise identified. 	CEMPTMPConstruction Noise and Vibration Plan	— SQE Manager
Air quality (dust)	Continuously and directly in response to ccomplaints	 Site will be visually monitored for excessive dust generation Works will cease where sufficient controls are not implemented and excessive dust creation is present. In dry and windy conditions specific attention shall be taken to the monitoring of excessive dust generation. Following any nuisance dust complaint, a visual inspection of the area shall be undertaken and investigated. As required, air quality monitoring may be undertaken to investigate any ongoing complaints relating to environmental nuisance caused by construction dust and/or particulate matter. Monitoring may be carried out at a place(s) relevant to the potentially affected dust sensitive receptor. 	— СЕМР	— SQE Manager

Category	Frequency	Actions and requirements	Relevant plans or strategies	Reported to
Biodiversity (clearing)	Prior to each clearing event	 Undertaking a pre-clearing survey of underlying groundcover, shrubs, woody debris and relocate any identified fauna 	— ВМР	SQEManager
		 Identification and marking of hollow-bearing trees, nests or other habitat features that are to be retained during the stage 1 clearing of non-habitat trees 		
		 Identification and marking of woody debris or other salvageable material that may be beneficial in rehabilitation areas 		
		 Surveys for roosting microbats for any man-made structures to be removed 		
		 Identifying suitable relocation sites for rescued fauna outside the subject land 		
		 Identification of any pest animal species 		
		 Identification of areas of significance in relation to weed management. 		
Biodiversity	Monthly	Undertake visual assessments of weeds	— ВМР	— СРР
(weeds)		— The presence of weeds and their extent will be noted		Project Manager
	Biennally (Spring and Autumn)	Walk-over inspection by bush regerneration contractor	— ВМР	— СРР
		Check weed control methodologies		Site manager
Biodiversity	As required	Check frog-proof fencing	— ВМР	— SQE
(other)		 Protection of vegetation outside disturbance boundary, including appropriate signage 	ge	Advisor

Table 7-2 Operations Monitoring

Category	Frequency	Actions and requirements	Relevant plans or strategies	Reported to
General site inspection	Monthly	 Inspect environmental controls in place Inspect fire protection measures Inspect security/boundary fencing Inspect storage of fuels, chemicals and hazardous substances 	OEMP	— Site Manager
Independent audit	Within 3 months of commencement of operations or as directed by the Planning Secretary	 Conduct audit in accordance with the Independent Audit Post Approval Requirements (2020) Review evidence of compliance with Infrastructure Approval Review evidence of compliance with environmental management framework and associated plans 	OEMP	— Site Manager— Akaysha Energy— DPE
Operational noise	At commissioning and/or following the commencement of operations, inclusive of any staging of operations. Also following any major changes to battery configuration/supplier or maintenance activities which is likely to have an impact on noise emissions.	 Ensure project noise trigger levels outlined in Appendix G of the EIS would not be exceeded at any sensitive receivers. All attended noise monitoring is to be carried out by a suitably qualified noise specialist. Records of routine equipment calibration and testing are to be maintained by the qualified noise specialist undertaking the monitoring. 	OEMP	— Site Manager

Appendix A

EMS approval



[DRAFTING NOTE: TO BE REPLACED BY EMS LETTER APPROVAL]

Appendix B

Construction Environmental Management Plan





Waratah Super Battery Energy Storage System

(State Significant Infrastructure SSI-48492458)



CPP Project No: 12590

Document Number: 12590-GE-PL-30001			
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Task:	Responsibility:	Date:	Signature:
Developed by:	Luke Baker (Niche) / Peter Martin (CPP)	28/04/2023	
SQE Review:	Brandon Stewart / Aaron Beaven	28/04/2023	
Review by Responsible Site Manager:	Jason Smith	28/04/2023	
Approved by Accountable Project Manager:	Stephen Brannigan	28/04/2023	



Waratah Super Battery Energy Storage System

CPP Project No:12590

(State Significant Infrastructure SSI-48492458)

TABLE OF CONTENTS

1	INTRODUCTION	7
2	SCOPE	8
3	PURPOSE	10
3.1	Plan Development	10
3.2	Environmental Management Plan Revisions	10
3.3	Consolidated Power Projects (CPP) Commitment	11
3.4	Environment Essentials	11
4	PROJECT SPECIFIC DETAILS	12
4.1	Project Details	12
4.2	Project Scope of Works	12
4.2.1	Site preparation	13
4.2.2	Construction	13
4.2.3	Commissioning	14
4.2.4	Demobilisation	14
4.3	Map of Project	15
4.4	Construction Activities Zone	17
5	COMMUNITY AND ENVIRONMENT POLICY	18
6	PLANNING	18
6.1	Environmental Planning	18
6.1.1	Environmental Assessment Requirements	18
6.2	Traffic Management Plan	31
6.2.1	CPP's Standard Management and Mitigation Measures	31
6.2.2	EIS Management and Mitigation Measures	31
6.3	Soil Management	32
6.3.1	Soil Identification and Reuse	32
6.3.1.	.1 CPP's Standard Management and Mitigation Measures	32
6.3.1.	2 EIS Management and Mitigation Measures	32
6.3.1.	.3 Unexpected Finds Protocol	33
6.3.2	Soil Reuse	34
6.3.2.	3	
6.3.2.	2 EIS Management and Mitigation Measures	35
6.3.3	Soil and Stockpile Management	35
6.3.3.	c c	
6.3.3.	5	
	Spoil Transport	
6.3.4.	.1 CPP's Standard Management and Mitigation Measures	36

A QUANTA SERVICES COMPANY

Construction Environmental Management Plan

Waratah Super Battery Energy Storage System

CPP Project No:12590

6.3.4.	.2 EIS Management and Mitigation Measures	36
6.3.5	Erosion and Sediment Control Plans	36
6.3.5.	.1 CPP's Standard Management and Mitigation Measures	36
6.3.6	Erosion and Sediment Control	37
6.3.6.	.1 CPP's Standard Management and Mitigation Measures	37
6.3.6.	2 EIS Management and Mitigation Measures	37
6.4	Flora and Fauna Management	37
6.4.1	CPP's Standard Management and Mitigation Measures	37
6.4.2	EIS Management and Mitigation Measures	40
6.5	Waste Management and Minimisation	40
6.5.1	CPP's Standard Management and Mitigation Measures	40
6.5.1.	.1 Waste Tracking	41
6.5.2	EIS Management and Mitigation Measures	41
6.5.3	Contaminated Materials and Wastes	42
6.5.3.	.1 CPP's Standard Management and Mitigation Measures	42
6.6	Weed Management	42
6.6.1	CPP's Standard Management and Mitigation Measures	42
6.6.1.	.1 Mobile Plant	43
6.6.1.	2 On site Wash Down Area Selection	43
6.6.1.	.3 Equipment	43
6.6.1.	4 Cleaning of Vehicles	43
6.6.2	EIS Management and Mitigation Measures	44
6.7	Air Quality Management	44
6.7.1	CPP's Standard Management and Mitigation Measures	44
6.7.1.	.1 Mobile Plant	44
6.7.1.	2 Dust Suppression	45
6.7.2	EIS Management and Mitigation Measures	46
6.7.3	Monitoring	46
6.7.4	Reporting	46
6.8	Dewatering	47
6.8.1	CPP's Standard Management and Mitigation Measures	47
6.8.1.	.1 Water Treatment – pH Levels	47
6.8.1.	.2 Water Treatment – Suspended Solids	47
6.8.1.	.3 Water Treatment – Hydrocarbons	48
6.8.1.	4 Laboratory Testing	48
6.8.1.		
6.8.1.		
6.9	Chemicals and Hazardous Materials	
6.9.1	CPP's Standard Management and Mitigation Measures	49

NSOLIDATED WER

A QUANTA SERVICES COMPANY

Construction Environmental Management Plan

Waratah Super Battery Energy Storage System

CPP Project No:12590

6.9.1	1 Hazardous substances (chemicals)	49
6.9.1	2 Safety Data Sheets (SDS)	49
6.9.1	3 Labelling	50
6.9.1	4 Transport	50
6.9.1	5 Storage	50
6.10	Fuel	51
6.10.	.1 Disposal	51
6.11	Spill Management	51
6.11.	CPP's Standard Management and Mitigation Measures	51
6.11.	.1 Spill Response	51
6.12	Noise and Vibration Management	54
6.12.	Modelled Noise Impacts at Sensitive Receivers	54
6.12.	Modelled Vibration Impacts at Sensitive Receivers	56
6.12.	SCPP's Standard Management and Mitigation Measures	56
6.12.	Notification of Residents	57
6.12.	EIS Management and Mitigation Measures	57
6.12.	.1 Operating Hours	57
6.13	Cultural Heritage Management	
6.13.	CPP's Standard Management and Mitigation Measures	57
6.13.	.1 Cultural Heritage Monitoring	58
6.13.	CPP's Standard Management and Mitigation Measures	58
6.13.	2.1 Discovery of Cultural Heritage Items	58
6.13.		
6.13.	2.3 Discovery of Potential Human Skeletal Remains	61
6.13.	BEIS Management and Mitigation Measures	62
6.14	Site Rehabilitation Management	62
6.14.	CPP's Standard Management and Mitigation Measures	62
	Plant and Equipment Management	
	Visual Impact Management	
6.16.		
6.16.		
6.17	Bushfire Management	64
6.17.	EIS Management and Mitigation Measures	64
6.17.		
6.17.		
6.17.		
7	LEGAL AND OTHER REQUIREMENTS	
8	OBJECTIVES AND TARGETS	66
8.1	Key Performance Indicators (KPIs) and Performance Reporting	66

CONSOLIDATED POWER PROJECTS

A QUANTA SERVICES COMPANY

Construction Environmental Management Plan

Waratah Super Battery Energy Storage System

CPP Project No:12590

8.2	Lead Indicators	66
8.3	Lag Indicators	67
9	IMPLEMENTATION & OPERATION	67
9.1	Organisation Structure	67
10	RESOURCES, ROLES, RESPONSIBILITIES AND AUTHORITY - SPECIFIC ENVIRONMENTAL DUTIES	67
10.1	Project Manager	70
10.2	Site Manager	70
10.3	SQE Manager	70
10.4	Site Safety Quality Environmental (SQE) Advisor	70
10.5	Employees	71
10.6	Subcontractors	71
10.6.	1Subcontractors Reporting Requirements	71
11	COMMUNICATION	72
11.1	Consultation	72
11.2	Internal Communication	72
11.3	External Communication	73
11.4	External Interactions	73
11.5	Landowner Communication	73
11.6	Incident Investigation	74
11.6.	1 Inductions	75
11.6.2	2Site Attendance	75
11.6.	3Management of Visitors	75
11.6.4	4Management of Delivery Drivers	76
11.6.	5Working in Sub-Stations and Switchyards	76
11.7	Project Kick-Off Meetings	77
11.8	Daily Pre-Start Meetings	77
11.9	Toolbox Meetings	77
11.10) Dispute Resolution	78
11.11	Work Health Safety and Environmental Representatives	78
11.12	2 Complaints	78
12	DOCUMENT AND DATA CONTROL	79
12.1	Project-Specific Documentation	80
13	EMERGENCY PREPAREDNESS	81
14	FIRE PROTECTION	82
15	MONITORING & MEASUREMENT	84
15.1	Workplace Inspections	84
15.2	Documentation	85

POWER

A QUANTA SERVICES COMPANY

Construction Environmental Management Plan

Waratah Super Battery Energy Storage System

CPP Project No:12590

15.3	Records		85
15.4	Internal a	audits	85
15.5	Independ	dent Environmental Audit	86
16	REPORT	TING AND RECORDING	88
16.1.1	1 Notifiable	e Event Reporting	89
16.1.2	2Event No	otification Process	90
16.1.3	BEvent Inv	vestigation Process	90
APPE	NDIX A	ENVIRONMENTAL MANAGEMENT STRATEGY	91
APPE	ENDIX B	TRAFFIC MANAGEMENT PLAN	93
APPE	NDIX C	BIODIVERSITY MANAGEMENT PLAN	94
APPE	NDIX D	FLORA AND FAUNA MANAGEMENT PLAN	96
APPE	NDIX E	CONTAMINATION MANAGEMENT PLAN/UNEXPECTED FINDS PROCEDURE	97
APPE	NDIX F	EROSION AND SEDIMENT CONTROL PLAN	100
APPE	NDIX G	REMEDIATION ACTION PLAN	103
APPE	NDIX H	BUSHFIRE EMERGENCY AND EVACUATION PLAN	105
APPE	NDIX I	COMMUNITY & ENVIRONMENT POLICY	106
APPE	ENDIX J	ENVIRONMENT ESSENTIALS	107
APPE	NDIX K	VALIDATION REPORT/LETTER	108
APPE	ENDIX L	SITE AUDIT REPORT & SITE AUDIT STATEMENT	109
APPE	ENDIX M	ENVIRONMENTAL MANAGEMENT PLAN REVISIONS	110

Construction Environmental Management Plan

Waratah Super Battery Energy Storage System

CPP Project No:12590

(State Significant Infrastructure SSI-48492458)

1 INTRODUCTION

Consolidated Power Projects (CPP) specializes in providing full turnkey high voltage solutions for power utility, industrial, resource and renewable energy sectors.

We offer specialist design, construction, commissioning, and maintenance of high voltage infrastructure. As a trusted partner to Australia's largest renewable and power transmission utility companies, we continue to deliver successful, large-scale projects including battery infrastructure, solar and wind farms, and high voltage transmission substations.

This Construction Environmental Management Plan (CEMP) describes the Environmental strategy, methods, controls and requirements for the execution of CPP Projects including project specific requirements. A copy of this plan, together with the relevant appendices, shall be made available to all CPP staff and supplied to all subcontractors prior to commencing work on any project.

Staff and subcontractors shall conform to the requirements of this CEMP.

A copy of the plan and or any revisions to the plan shall be retained for the duration of the project.

This plan shall be amended following any significant events as described in Schedule C, Condition C2 of the Infrastructure Approval, or if there are significant changes to project scope, methodology, risk profile or legislation and ensure that each relevant person affected by the amendment is advised of the details of the amendment or given a copy of the amendment.

Implementation of this plan shall be monitored via the internal audit process and site inspections.

The Project Manager is the owner responsible for the implementation of this plan.

As a company, CPP strives for continuous improvement daily, both as individuals as well as an organisation. Our core values reflect who we are and define our approach to doing business.

Consolidated Power Projects core values are:

Team Work - One team, together we achieve;

Integrity - Doing the right thing / doing what's right;

Innovation - Always learning, creating, adapting; and

Sustainability - Ensuring our future.

"Strive for Quality Excellence"

"Strive for Safety Excellence"

"Strive for Environmental Excellence"

12590-GE-PL-30001 1.2 Page **7** of **110**



Waratah Super Battery Energy Storage System

CPP Project No:12590

(State Significant Infrastructure SSI-48492458)

2 SCOPE

The NSW Government, through the Energy Corporation of NSW (EnergyCo), has been granted Infrastructure Approval to construct and operate the Waratah Super Battery Energy Storage System (Waratah BESS). The Waratah BESS ensures NSW continues to have reliable, affordable energy supplies following the planned closure of the Eraring Power Station in 2025. The Waratah BESS is designed to be a System Integrity Protection Scheme (SIPS) control and standby network battery system, dedicated to supporting the transmission grid. The battery component of the project is part of the SIPS and is designed primarily to provide reserve transmission capacity and stability, rather than additional electricity storage capacity.

Energy Co has awarded Akaysha Energy the Engineering, Procurement and Construction contract for the project which is connected to the 330kV bus of TransGrid's Munmorah Substation. Consolidated Power Projects (CPP) is the principal contractor for Akaysha.

The Waratah BESS is the largest standby network battery in the Southern Hemisphere and together with other minor transmission upgrades, allows Sydney, Newcastle, and Wollongong consumers to access more energy from existing and emerging electricity generation.

The Waratah BESS project includes:

- A SIPS system, designed to reserve and deploy battery power to support the NSW electricity grid when triggered by a contingency event.
- Up to 850 megawatts (MW) active power.
- Up to 1,680-megawatt hours (MWh) battery storage capacity.
- Connecting transmission and related infrastructure to connect the SIPS to the existing grid.
- Other infrastructure and services required for the project.

Further details regarding the key project components and functionality can be found in Section 3.1 of the Environmental Impact Statement via the following link

(https://majorprojects.planningportal.nsw.gov.au/prweb/PRRestService/mp/01/getContent?AttachRef=SSI-48492458%2120221110T051224.318%20GMT)

This CEMP applies to the planning, construction, commissioning, and defects liability phases of all works to be undertaken as part of the Project.

It applies to all workers, contractors, labour hire and suppliers working on the project.

This CEMP should be read in conjunction with other project plans and documents including:

Project Plans:

- Environmental Management Strategy required under Schedule C, Condition C1 of the Infrastructure Approval (see Appendix A).
- Traffic Management Plan required under Schedule B, Condition B7 of the Infrastructure Approval (see Appendix B).
- Biodiversity Management Plan required under Schedule B, Condition B11 of the Development Consent (see Appendix C).
- Unexpected/Chance Finds Protocol Aboriginal required under Schedule B, Condition B17 of the Infrastructure Approval (see Section 6.13).
- Flora and Fauna Management Plan (see Appendix D) (EIS Table 6.8 Item B1).
- Contamination Management Plan (see Appendix E).
- Unexpected Finds Procedure Contamination required under Schedule B, Condition B29 of the Infrastructure Approval (see Appendix E).

12590-GE-PL-30001 1.2 Page 8 of 110



Waratah Super Battery Energy Storage System

CPP Project No:12590

(State Significant Infrastructure SSI-48492458)

- Erosion and Sediment Control Plan (see Appendix F).
- Remediation Action Plan required under Schedule B, Condition B26 of the Infrastructure Approval (see Appendix G).
- Bushfire Emergency and Evacuation Plan (see Appendix H)

Project Documents:

- Project Management Plan.
- Project Risk Register.
- Work Health and Safety Management Plan (WHSMP).
- Quality Management Plan.
- Associated Sub-Plans.

The relationship of the CEMP to the Environmental Management System and the various environmental management plans and documents is shown in **Figure 1**.

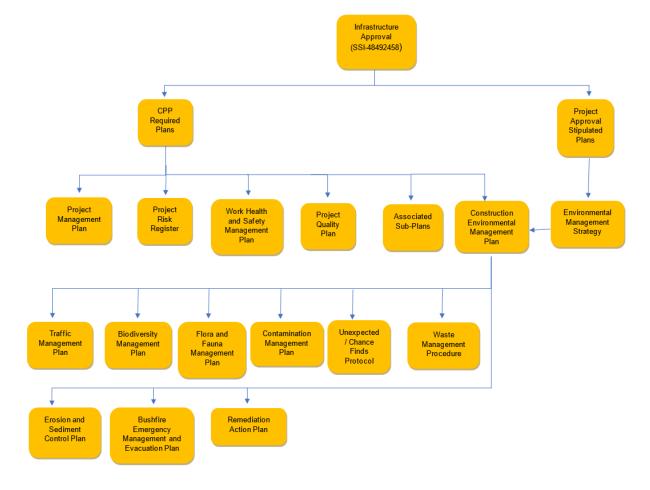


Figure 1 Hierarchy of Project Environmental Management Documents During Construction

12590-GE-PL-30001 1.2 Page **9** of **110**



Waratah Super Battery Energy Storage System

CPP Project No:12590

(State Significant Infrastructure SSI-48492458)

3 PURPOSE

The CEMP provides the environmental management and monitoring measures to be followed by CPP and its subcontractors and consultants in carrying out the scope of works for this Project during construction. This CEMP and the associated management plans together with the EMS fulfil construction related environmental management conditions of the Infrastructure Approval. It is noted however that the CEMP is not a requirement of the Infrastructure Approval and does not require submission or approval of the Planning Secretary or any other government agency.

As such CPP has developed the CEMP for the purpose of:

- Identifying and implementing relevant environmental, legal/regulatory requirements applicable to the construction works.
- State objectives and targets for the environmental performance of the Project.
- Identifying the environmental management measures to minimise and manage the Project's impacts on the environment and community during construction.
- Outline how CPP will comply with the Infrastructure Approval, licences and permits, during the construction of the Project.
- Assigning roles and responsibilities for the implementation, management and review process.
- Providing a consistent and uniform approach to environmental management.
- Providing all personnel working on the Project with sufficient information to undertake their works in accordance with the Infrastructure Approval, legal and other relevant environmental requirements.
- Enabling the commitments within the Infrastructure Approval documents to be captured and implemented.

3.1 Plan Development

This CEMP has been developed in accordance with the requirements of:

- Environmental Legislation, Regulatory and Other Requirements listed in Table 6
- Relevant Client and CPP guidelines and procedures
- Response to Submission Report.
- Relevant Client project documentation including:
 - Infrastructure Approval (SSI-48492458)
 - Waratah Super Battery Munmorah Environmental Impact Statement EnergyCo November 2022.

3.2 Environmental Management Plan Revisions

Management plan updates will be managed via a revision table found in Appendix K.. Electronic word versions and the hardcopies will have the updates highlighted and added to the Appendix.

All updates are to be included when either:

- A major update is released; or
- Every 3 months

Major revisions (1.0, 2.0, 3.0):

12590-GE-PL-30001 1.2 Page **10** of **110**



Waratah Super Battery Energy Storage System

CPP Project No:12590

(State Significant Infrastructure SSI-48492458)

- are where there is a significant change to environmental requirements or project management methodology;
- major revisions will be required to be resubmitted to the client and authorised by the Project Manager.

Minor revisions (2.1, 2.2, 2.3):

- are likely to include items such as changes of a minor nature following a management review of the CEMP or referenced documents, any change in the name or numbering of a referenced document, changes to names or contact numbers of key personnel contacts;
- minor revisions require approval by the Project Manager but do not require submission to the client.

It is also noted that the Infrastructure Approval (Schedule C, Condition C2) describes various triggers (i.e. incident report, audit report and modification of the Infrastructure Approval) associated with the review and revision of strategies, plans and programs. While the Planning Secretary's approval of the CEMP is not required, CPP will review the CEMP in line with these triggers as a minimum.

3.3 Consolidated Power Projects (CPP) Commitment

Our Project CEMP encompasses policy and reflects our commitment to ensuring all works have minimal impact on our environment and community. Our commitment extends to all associated with our works including our employees, subcontractors, clients and members of the community.

3.4 Environment Essentials

- CPP's Environment Essentials represent some of the high-risk tasks undertaken on our sites and
 require special attention to ensure the land and environment upon which these tasks are undertaken
 remain free from impact.
- The Environment Essentials set down the expectations that we have for all employees, visitors, subcontractors and third-party workers whilst working at our sites.
- The Environment Essentials should be remembered by all our staff and adhered to at all times.

Non-compliance to these rules exposes the environment to potential significant impact resulting in removal from the site.

- It is CPP's aim to ensure everyone conducting work related to the Environment Essentials, will **STRIVE** for environmental excellence and do everything they can to comply with the required controls and keep environment free from impact.
- Environment Essentials can be located in Appendix J.

12590-GE-PL-30001 1.2 Page 11 of 110

Construction Environmental Management Plan

Waratah Super Battery Energy Storage System

CPP Project No:12590

(State Significant Infrastructure SSI-48492458)

4 PROJECT SPECIFIC DETAILS

4.1 Project Details

Project Specific Details	
Client:	Akaysha Energy
Principal Contractor:	Consolidated Power Projects Australia Pty Ltd
Project Name:	Waratah Super Batter
Project Number:	12590
Project Address:	Station Road, Colongra, NSW 2262
Project Manager:	Stephen Brannigan
Construction Manager:	Peter Martin
Site Manager:	Jason Smith
Site SQE Advisor	Aaron Beaven

Table 1 Project Specific Details

4.2 Project Scope of Works

The construction of the Waratah BESS will be undertaken in four phases. These phases and the associated activities are described in Sections 4.2.1 to 4.2.4.

CPP's scope of work for the project includes the design, construction, and commissioning of the BESS, associated 330kV/33kV Substation and overhead connection cable to TransGrid's Munmorah Substation via a 330kV overhead circuit which include the following components:

- Civil and structural balance of plant
- Installation of Powin BESS.
- Electrical balance of plant including:
 - MV transformers.
 - Switchgear complete with all auxiliary plants.
 - o All AC and DC cabling including connectors & cable management systems.
 - o DC, uninterruptible power supply, emergency power system complete with auxiliary plants.
 - Earthing system.
 - Lightning and surge protection system.
 - Ancillary power and lighting systems.

Secondary system and SCADA interface.

12590-GE-PL-30001 1.2 Page **12** of **110**



Waratah Super Battery Energy Storage System

CPP Project No:12590

(State Significant Infrastructure SSI-48492458)

4.2.1 Site preparation

Site preparation works would involve:

- Formalising the construction access road from the existing internal access road into the project site.

 Access from the old power station site to the project site would need to be graded and compacted.
- Establishment of areas for laydown of materials and equipment. Temporary laydown areas would be established for the storage of materials and equipment on the project site.
- Establishment of temporary site offices and crib facilities. A number of buildings would be required to support the construction works. Temporary buildings would typically be transportable and demountable structures and would be removed once no longer needed.
- Removal of existing earthing on site will be undertaken by others prior to CPP taking possession of the site. Should any unknown services and earthing be encountered during the construction phase by CPP they will be removed using safety procedures associated with live conductors.
- Clearing and grubbing activities undertaken by CPP are limited to the site compound and laydown area. Where vegetation is removed, suitable native timber felled from the development footprint will be retained for use as habitat for ground dwelling reptiles and mammals within the residual land. Where not suitable, felled timber would be stockpiled and stored on site, and may be chipped for use in erosion and sediment control. Subsurface vegetation would be grubbed to a depth suitable to facilitate construction of the proposed infrastructure.
- Earthworks and grading activities undertaken by CPP are limited to the construction compound and laydown area. Earthworks and grading would be necessary to provide a flat surface for construction and to provide adequate drainage. Topsoil and subsoil would be stripped and stockpiled separately. Topsoil would be stockpiled and maintained for redistribution at the surface. Subsoil, if suitable, would be stockpiled for use as road subbase or as backfill at the project site.
- Earthworks design would balance any cut and fill to minimise excess spoil. However, where excess spoil is required to be removed this will be disposed of lawfully in accordance with its waste classification. Further, CPP will seek approval from Akaysha prior to undertaking any off-site spoil disposal.
- Installation (or relocation if necessary) of utilities and services. Utilities and services would be
 established progressively during site preparation and construction (extending to facility components as
 they are established). These services would include power, water, communications, waste collection,
 water management, and lighting.
- Installation of asset protection zones will be established in accordance with the Waratah BESS Fire Safety Study (Omnii, 2023). Establishment of asset protection zones would be required to protect the project site from bushfires.
- Installation of site security facilities and infrastructure. Installation of security infrastructure would be required to secure the project site. Security measures would include perimeter fencing, internal fencing at key infrastructure, lighting and surveillance equipment, and security gating at the site entry road.

4.2.2 Construction

Construction would involve:

- Construction/installation of the battery energy storage system, including:
 - Detailed grading of the site to create level platforms for the installation of the battery foundations. The platforms would be designed with a minimum one per cent gradient for drainage purposes.

12590-GE-PL-30001 1.2 Page **13** of **110**



Waratah Super Battery Energy Storage System

CPP Project No:12590

(State Significant Infrastructure SSI-48492458)

- Installation of concrete slabs or foundations to support the battery containers/modules, power conversion systems, and transformers.
- Installation and electrical fit out of the battery modules, power conversion systems, and transformers.
- o Installation of new earthing system. The design of the earthing system and the connection requirements to the earthing system would be determined based on the expected maximum fault levels.
- Construction/installation of connecting transmission and related infrastructure, including:
 - Installation of a switchyard adjacent to the battery energy storage system.
 - Installation of an overhead transmission line from the switchyard to the existing Munmorah Substation.
- Construction/installation of ancillary infrastructure, including:
 - Upgraded permanent access road.
 - Site drainage infrastructure.
 - Site services, including water, sewage (via an on-site sewage management system), and communications (noting power would be supplied through the proposed switchyard connection).
 - Operation and maintenance building, light vehicle parking and heavy vehicle parking.
 - Signage and security.

4.2.3 Commissioning

Commissioning and testing would include final inspection and testing of all proposed facilities to ensure they operate as intended. This would include, but not be limited to, inspection and testing of the battery energy storage system, all communications and control systems, transformers, switchgear and switchyard equipment, power and water supply infrastructure, stormwater management infrastructure, waste management facilities, and relevant ancillary components such as fire detection systems.

4.2.4 Demobilisation

This phase involves the removal of all construction related components that are not required for the operation of the Waratah BESS.

12590-GE-PL-30001 1.2 Page **14** of **110**



Waratah Super Battery Energy Storage System

(State Significant Infrastructure SSI-48492458)

CPP Project No:12590

4.3 Map of Project

The general location of the Waratah BESS site is shown on Figure 2, with the general arrangement of the main project components and construction areas shown on Figure 3.



Figure 2 General Site Location

12590-GE-PL-30001 1.2 Page **15** of **110**

POWER PROJECTS A QUANTA SERVICES COMPANY

Construction Environmental Management Plan

Waratah Super Battery Energy Storage System

CPP Project No:12590

(State Significant Infrastructure SSI-48492458)



Figure 3 General Construction Arrangement

12590-GE-PL-30001 1.2 Page **16** of **110**





Waratah Super Battery Energy Storage System

CPP Project No:12590

(State Significant Infrastructure SSI-48492458)

4.4 Construction Activities Zone

CAZMAP will be provided once CPP mobilises to site and will be a standalone document.



12590-GE-PL-30001_1.2 Page **17** of **110**



Waratah Super Battery Energy Storage System

CPP Project No:12590

(State Significant Infrastructure SSI-48492458)

5 COMMUNITY AND ENVIRONMENT POLICY

The *Community and Environment Policy* communicates CPP's commitment toward avoiding, reducing, or controlling environmental impact and will be communicated during the Site Induction and displayed in visible locations on sites and in offices. Refer Appendix I.

Referenced Documents:

POL-S002 Community and Environment Policy

6 PLANNING

6.1 Environmental Planning

6.1.1 Environmental Assessment Requirements

- Relevant legislation was examined and addressed along with the review of the *Development Application SSI-48492458 incl. Appendices* and the Response to Submissions report.
- A copy of the Development Application incl. Appendices will be retained at the site during the project.
- The conditions relevant to CPP in the *Development Application SSI-48492458 incl. Appendices* with the requirements or mitigation measures and the section in which they appear in this management plan are summarized below.
- If during the project, supplementary environmental assessments are determined, any new or additional or changed mitigation measures will be updated and added to this section.

Relevant Schedule / Clause No.	Requirement/Mitigation Measure	Reference Section in this Plan
Infrastructure Approval (SSI-48492458)		
Part A / A1.	In meeting the specific performance measures and criteria in this approval, all reasonable and feasible measures must be implemented to prevent, and if prevention is not reasonable and feasible, minimise, any material harm to the environment that may result from the construction, operation, rehabilitation or decommissioning of the development.	This CEMP sets out reasonable and feasible measures to carry out the construction to best align with the conditions set out in the Infrastructure Approval SSI-48492458 and EIS.
Part A / A2.	The development may only be carried out: (a) in compliance with the conditions of this consent; (b) in accordance with all written directions of the Planning Secretary; (c) generally in accordance with the EIS; and (d) generally in accordance with the Development Layout in Appendix 1	This CEMP sets out reasonable and feasible measures to carry out the construction to best align with the conditions set out in the Infrastructure Approval SSI-48492458 and EIS.
Part A / A3.	The Proponent must comply with any requirement/s of the Planning Secretary arising from the Department's assessment of:	Noted.
	 (a) any strategies, plans or correspondence that are submitted in accordance with this approval; 	

12590-GE-PL-30001 1.2 Page **18** of **110**

Construction Environmental Management Plan

Waratah Super Battery Energy Storage System

CPP Project No:12590

(State Significant Infrastructure SSI-48492458)

Relevant Schedule Clause No.	/ Requirement/Mitigation Measure	Reference Section in this Plan
	 (b) any reports, reviews or audits commissioned by the Department regarding compliance with this approval; and (c) the implementation of any actions or measures contained in these documents. 	
Part A / A4.	The conditions of this approval and directions of the Planning Secretary prevail to the extent of any inconsistency, ambiguity or conflict between them and a document listed in condition A2(c) or A2(d). In the event of an inconsistency, ambiguity or conflict between any of the documents listed in condition A2(c) or A2(d), the most recent document prevails to the extent of the inconsistency, ambiguity or conflict.	Noted.
Part A / A5.	Any document that must be submitted within a timeframe specified in or under the terms of this approval may be submitted within a later timeframe agreed with the Planning Secretary. This condition does not apply to the immediate written notification required in respect of an incident under condition D6.	Noted.
Part A / A7.	The battery storage associated with the development must not exceed a total delivery capacity of 850 MW. Note: This condition does not prevent the Proponent from seeking to lodge a separate request to modify this approval to increase the capacity of the battery storage in the future.	Noted.
Part A / A8.	The Proponent may upgrade the battery storage and ancillary infrastructure on site provided these upgrades remain within the approved development footprint of the site. Prior to conducting any such upgrades, the Proponent must provide revised layout plans and project details of the project to the Planning Secretary incorporating the proposed upgrades.	Noted
Part A / A9.	The Proponent 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 <i>Building Code of Australia</i> .	CPP will nominate a Certifier for the Project when necessary to make sure building work is compliant with the provisions of the BCA.
Part A / A12.	All plant and equipment used on site, or in connection with the development, must be: (a) maintained in a proper and efficient condition; and (b) operated in a proper and efficient manner.	Refer to Section 6.15.
Part A / A13.	References in the conditions of this approval to any guideline, protocol, Australian Standard or policy are to such guidelines, protocols, Standards or policies in the form they are in as at the date of this approval. However, consistent with the conditions of this approval and without altering any limits or criteria in this approval, the Planning Secretary may, when issuing directions under this approval in respect of ongoing monitoring and management obligations, require compliance with an updated or revised version of such a guideline, protocol, Standard or policy, or a replacement of them.	Noted.

12590-GE-PL-30001_1.2 Page **19** of **110**

POWER PROJECTS A QUANTA SERVICES COMPANY

Construction Environmental Management Plan

Waratah Super Battery Energy Storage System

CPP Project No:12590

(State Significant Infrastructure SSI-48492458)

Relevant Schedule / Clause No.	Requirement/Mitigation Measure	Reference Section in this Plan
Part A / A14.	The Proponent must ensure that all of its employees, contractors (and their sub-contractors) are made aware of, and are instructed to comply with, the conditions of this approval relevant to activities they carry out in respect of the development.	Issue specific induction requirements are noted in Sections 6.2 to 6.17. Section 11.6.1 notes all employees, contractor employees and visitors to the site attend an induction prior to commencing works.
Part B / B1.	The Proponent must ensure that the: (a) development does not generate more than: (i) 65 heavy vehicle movements a day during construction, upgrading and decommissioning; (ii) 12 movements of heavy vehicles requiring escort during construction, upgrading and decommissioning; and (b) length of any vehicles (excluding heavy vehicles requiring escort) used for the development does not exceed 26 metres unless the Planning Secretary agrees otherwise.	Refer to Appendix B - Traffic Management Plan
Part B / B2.	The Proponent must keep accurate records of the number of heavy vehicles requiring escort and heavy vehicles entering or leaving the site each day for the duration of the development.	Refer to Appendix B - Traffic Management Plan
Part B / B3.	All heavy vehicles requiring escort and heavy vehicles associated with the development must travel to and from the site via the Pacific Highway, Scenic Drive and Station Road. Note: The Applicant is required to obtain relevant permits under the Heavy Vehicle National Law (NSW) for the use of heavy vehicles requiring escort on the road network.	Refer to Appendix B - Traffic Management Plan
Part B / B4.	All vehicles associated with the development must enter and exit the site via the access point off Station Road, as identified in Appendix 1.	Refer to Appendix B - Traffic Management Plan
Part B / B7.	Prior to commencing construction, the Proponent 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 measures that would be implemented to minimise traffic impacts during construction, upgrading or decommissioning works, including: (i) temporary traffic controls, including detours and signage; (ii) notifying the local community about development-related traffic impacts; (iii) procedures for receiving and addressing complaints from the community about development-related traffic; (iv) minimising potential cumulative traffic impacts with other State significant development and State significant infrastructure projects in the area;	Refer to Appendix B - Traffic Management Plan

12590-GE-PL-30001_1.2 Page **20** of **110**

POWER PROJECTS A QUANTA SERVICES COMPANY

Construction Environmental Management Plan

Waratah Super Battery Energy Storage System

CPP Project No:12590

(State Significant Infrastructure SSI-48492458)

Relevant Schedule / Clause No.	Requirement/Mitigation Measure	Reference Section in this Plan
	 (v) minimising dirt tracked onto the public road network from development-related traffic; (vi) scheduling of heavy vehicle movements to minimise convoy length or platoons; (vii) responding to local climate conditions that may affect road safety such as fog, dust, wet weather and flooding; (viii) responding to any emergency repair or maintenance requirements; and (ix) a traffic management system for managing heavy vehicles requiring escort; (c) a driver's code of conduct that addresses: (i) driver fatigue; (ii) procedures to ensure that drivers adhere to the designated transport routes and speed limits; and (iii) procedures to ensure that drivers implement safe driving practices. (d) a program to ensure drivers working on the project 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 Proponent must implement the Traffic Management Plan.	
Part B / B8.	The Proponent must not clear any native vegetation or fauna habitat located outside the approved disturbance areas described in the EIS.	Refer to Section 6.4.
Part B / B11.	Prior to commencing construction, the Proponent must prepare a Biodiversity Management Plan for the project 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: (i) protecting vegetation and fauna habitat outside the approved disturbance areas; (ii) minimising clearing and avoiding unnecessary disturbance of vegetation that is associated with the construction and operation of the development; (iii) minimising the impacts to fauna on site and implementing fauna management protocols; (iv) rehabilitating and revegetating temporary disturbance areas with species that are endemic to the area; (v) 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 (vi) controlling weeds, feral pests and pathogens; (b) include a program to monitor and report on the effectiveness of mitigation measures;	Refer to Appendix C - Biodiversity Management Plan

12590-GE-PL-30001_1.2 Page **21** of **110**

Construction Environmental Management Plan

Waratah Super Battery Energy Storage System

CPP Project No:12590

(State Significant Infrastructure SSI-48492458)

Relevant Schedule / Clause No.	Requirement/Mitigation Measure	Reference Section in this Plan
	 (c) include an incidental threatened species finds protocol to identify the avoid and/or minimise and/or offset options to be implemented if additional threatened species are discovered on site; (d) include details of who would be responsible for monitoring, reviewing and implementing the plan. 	
	Following the Planning Secretary's approval, the Proponent 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	
Part B / B12.	Unless the Planning Secretary agrees otherwise, the Proponent may only undertake construction, upgrading or decommissioning activities between:	Refer to Section 6.12.4.1.
	 (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.	
Part B / B13.	The Proponent 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; (b) ensure that the noise generated by the operation of the development does not exceed the noise limits at the times and locations in Table 3 below (or alternative limits as permitted by the applicable EPL) to be determined in accordance with the procedures in the NSW Noise Policy for Industry (EPA, 2017) at any non-associated residence. Table 3: Noise Limit Requirements Noise Limits in dB(A)	Refer to Section 6.12. (NB Clause 13B is associated with the operation of the Waratah BESS and is outside the scope of this document).
	Location Day Evening Night	
Part B / B14.	The Proponent must minimise the dust generated by the development.	Refer to Section 6.7.

12590-GE-PL-30001_1.2 Page **22** of **110**

Construction Environmental Management Plan

Waratah Super Battery Energy Storage System

CPP Project No:12590

(State Significant Infrastructure SSI-48492458)

Relevant Schedule / Clause No.	Requirement/Mitigation Measure	Reference Section in this Plan
Part B / B15.	The Proponent must: (a) minimise the off-site visual impacts of the development, including the potential for any glare or reflection; (b) ensure the 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.	Refer to Section 6.16.
Part B / B16.	The Proponent must: (a) minimise the off-site lighting impacts of the development; and (b) ensure that any external lighting associated with the development: (i) is installed as low intensity lighting (except where required for safety or emergency purposes); (ii) does not shine above the horizontal; and (iii) complies with Australian/New Zealand Standard AS/NZS 4282:2019 — Control of Obtrusive Effects of Outdoor Lighting, or its latest version.	Refer to Section 6.16.
Part B / B17.	Prior to the commencement of development, the Proponent must implement the Unanticipated Discovery Protocols (Navin Officer Heritage Consultants, 2022) for the development.	Unexpected/Chance Finds Protocol outlined under Section 6.13.
Part B / B18.	The Proponent 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 <i>Water Act 1912</i> and/or the <i>Water Management Act 2000</i> , the Applicant is required to obtain the necessary water licences for the development.	Noted.
Part B / B19.	The Applicant must ensure that the development does not cause any water pollution, as defined under Section 120 of the POEO Act.	Refer to Appendix F – Erosion & Sediment Plan.
Part B / B20.	The Proponent must: (a) minimise any soil erosion and control sediment generation: (b) ensure that construction, upgrading or decommissioning of the development has appropriate erosion and sedimentation controls, designed, installed and maintained in accordance with the relevant requirements in the 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	Refer to Appendix F - Erosion & Sediment Plan

12590-GE-PL-30001_1.2 Page **23** of **110**

Construction Environmental Management Plan

Waratah Super Battery Energy Storage System

CPP Project No:12590

(State Significant Infrastructure SSI-48492458)

Relevant Schedule / Clause No.	Requirement/Mitigation Measure	Reference Section in this Plan
	impacts on surface water, localised flooding and groundwater at the site; (d) ensure the battery storage and ancillary infrastructure are designed, constructed and maintained to avoid causing any erosion on site; (e) ensure all works are undertaken in accordance with Guidelines for Controlled Activities on Waterfront Land (NRAR, 2018), or its latest version, unless OPIE Water agrees otherwise.	
Part B / B21.	Prior to commencing construction of the battery storage, the Proponent must prepare a Fire Safety Study for the development, to the satisfaction of FRNSW and the Planning Secretary in writing. The study must: (a) be consistent with the Department's Hazardous Industry Planning Advisory Paper No. 2 'Fire Safety Study' guideline; (b) include reasonable worst-case bush fire scenario to and from the battery storage and the associated bush fire management; (c) describe the final design of the battery storage; and (d) identify measures to eliminate the expansion of any fire incident including: (i) adequate fire safety systems and appropriate water supply; (ii) separation and / or compartmentalisation of battery units; and (iii) strategies and incident control measures specific to the battery storage design. Following approval by the Planning Secretary, the Proponent must implement the measures described in the Fire Safety Study.	Refer to Waratah BESS Fire Safety Study (Omnii, 2023).
	Note: 'to the satisfaction of FRNSW' above means confirmation in writing from FRNSW that the Study meets the requirements of FRNSW as required by the Department's Hazardous Industry Planning Advisory Paper No. 2 'Fire Safety Study' guideline.	
Part B / B22.	The Proponent 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.	Refer to Sections 6.9 and 6.11.
Part B / B23.	The Proponent must: (a) minimise the fire risks of the development, including managing vegetation fuel loads on-site; (b) ensure that the development: - meets the Aim and Objectives of <i>Planning for Bushfire Protection 2019</i> , including provision of appropriate asset protection zones; and	Refer to Emergency Management Plan – (CPP Doc Ref 12590-GE-PL- 30005). Refer to Waratah BESS Fire Safety Study (Omnii, 2023).

12590-GE-PL-30001_1.2 Page **24** of **110**

Construction Environmental Management Plan

Waratah Super Battery Energy Storage System

CPP Project No:12590

(State Significant Infrastructure SSI-48492458)

Relevant Schedule / Clause No.	Requirement/Mitigation Measure	Reference Section in this Plan
	includes a 10-metre defendable space around the perimeter that permits unobstructed vehicle access	Refer to Section 6.5 and Section 14. 14 and Section 6.15.
	 includes an Asset Protection Zone that is wholly contained within the development footprint; 	
	 manages the defendable space areas as an Asset Protection Zone; and 	
	 is suitably equipped to respond to any fires on site including provision of a 20,000-litre water supply tank for bush and grass firefighting fitted with a 65mm Storz fitting and a FRNSW compatible suction connection located adjacent to an internal access road; (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.	
Part B / B24.	Prior to commencing commissioning, the Proponent must develop and implement a comprehensive Emergency Plan and detailed emergency procedures for the development and provide a copy of the plan to the local Fire Control Centre and FRNSW. The plan must:	Refer to Emergency Management Plan – (CPP Doc Ref 12590-GE-PL- 30005).
	 (a) be prepared in accordance with the findings of the Fire Safety Study required under Condition B21 of Schedule 2; (b) 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) and A Guide to Developing a Bush Fire Emergency Management and Evacuation Plan (RFs 2014); (c) list works that should not be carried out during a total fire ban; (d) 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; (e) include details on how the battery storage and sub-systems can be safely isolated in an emergency; (f) include bushfire emergency management planning; (g) include details of 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 (h) include an Emergency Services Information Package in accordance with Emergency services information and tactical fire plan (FRNSW, 2019), 	

12590-GE-PL-30001_1.2 Page **25** of **110**

Construction Environmental Management Plan

Waratah Super Battery Energy Storage System

CPP Project No:12590

(State Significant Infrastructure SSI-48492458)

Relevant Schedule / Clause No.	Requirement/Mitigation Measure	Reference Section in this Plan
Part B / B25.	and an Emergency Responders Induction Package to the satisfaction of FRNSW and RFS; The Proponent must: - implement the Emergency Plan and Emergency Services Information Package for the duration of the development; and - keep two copies of the Emergency Plan and Emergency Services Information Package on-site in a prominent position adjacent to the site entry points at all times. The Proponent must:	Refer to Section 6.5.
	 (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. 	
Part B / B26.	Prior to carrying out any construction, the Proponent must develop and implement a Remedial Action Plan prepared in accordance with the relevant guidelines produced or approved under the <i>Contaminated Lands Management Act 1997</i> . Remediation works must be undertaken by a suitably qualified and experienced consultant(s).	Refer to Appendix G – Remediation Action Plan
Part B / B27.	Within one month of the completion of the remediation works, the Proponent must submit a copy of a validation report/letter to the EPA, Council and 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.	Refer to Appendix K - Validation Report/Letter
Part B / B28.	Within six months of the completion of remediation works and prior to carrying out any construction, the Proponent must submit a Site Audit Report and Site Audit Statement to the EPA, Council and the Planning Secretary. The reports must be prepared by the Site Auditor in accordance with relevant guidelines produced or approved under the Contaminated Lands Management Act 1997 and must confirm: (a) the remedial works have been completed in accordance with the RAP and REMP and the site is suitable for its intended land use; and (b) the risks to human health and the environment have been addressed in accordance with the objectives of the RAP.	Refer to Appendix L – Site Audit Report and Site Audit Statement

12590-GE-PL-30001_1.2 Page **26** of **110**

Construction Environmental Management Plan

Waratah Super Battery Energy Storage System

CPP Project No:12590

(State Significant Infrastructure SSI-48492458)

Relevant Schedule / Clause No.	Requirement/Mitigation Measure	Reference Section in this Plan
Part B / B29.	Prior to the commencement of construction, the Proponent 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.	Refer to Appendix E – Contamination Management Plan
Part C / C1.	Prior to commencing construction, the Proponent 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;	Refer to Appendix A - Environmental Management Strategy.
	 (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) set out the procedures that would be implemented to: (i) keep the local community and relevant agencies informed about the operation and environmental performance of the development; (ii) receive, handle, respond to, and record complaints; (iii) resolve any disputes that may arise; (iv) respond to any non-compliance; (v) respond to emergencies; and (e) include: 	
	 (i) references to any strategies, plans and programs approved under the conditions of this approval; and (ii) a clear plan depicting all the monitoring to be carried out in relation to the development, including a table summarising all the monitoring and reporting obligations under the conditions of this approval. Following the Planning Secretary's approval, the Proponent must implement the Environmental Management Strategy. 	
Part C / C2.	The Proponent must: (a) update the strategies, plans or programs required under this approval 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 approval to the satisfaction of the Planning Secretary within 1 month of the: (i) submission of an incident report under condition C10 of Schedule 2; (ii) submission of an audit report under condition C14 of Schedule 2; or	Noted.

12590-GE-PL-30001_1.2 Page **27** of **110**

Construction Environmental Management Plan

Waratah Super Battery Energy Storage System

CPP Project No:12590

(State Significant Infrastructure SSI-48492458)

Relevant Schedule / Clause No.	Requirement/Mitigation Measure	Reference Section in this Plan
	(iii) any modification to the conditions of this approval.	
Part C / C3.	With the approval of the Planning Secretary, the Proponent may: (a) prepare and submit any strategy, plan or program required by this approval on a staged basis (if a clear description is provided as to the specific stage and scope of the development to which the strategy, plan or program applies, the relationship of the stage to any future stages and the trigger for updating the strategy, plan or program); (b) combine any strategy, plan or program required by this approval (if a clear relationship is demonstrated between the strategies, plans or programs that are proposed to be combined); and (c) update any strategy, plan or program required by this approval (to ensure the strategies, plans and programs required under this approval are updated on a regular basis and incorporate additional measures or amendments to improve the environmental performance of the	Noted.
Part C / C4.	development). If the Planning Secretary agrees, a strategy, plan or program may be staged or updated without consultation being undertaken with all parties required to be consulted in the relevant condition in this approval.	Noted.
Part C / C5.	If approved by the Planning Secretary, updated strategies, plans or programs supersede the previous versions of them and must be implemented in accordance with the condition that requires the strategy, plan or program.	Noted.
Part C / C6.	If the Planning Secretary agrees, a strategy, plan or program may be staged without addressing particular requirements of the relevant condition of this approval if those requirements are not applicable to the particular stage.	Noted.
Part C / C7.	Prior to commencing the construction, operations, upgrading or decommissioning of the development or the cessation of operations, the Proponent 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 Proponent 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.	Noted.
Part C / C8.	Prior to commencing construction, the Proponent must submit detailed plans of the final layout of the development to the Department via the Major Projects website, showing comparison to the approved layout and including details on the siting of the battery storage and ancillary infrastructure, via the Major Projects website.	Noted.

12590-GE-PL-30001_1.2 Page **28** of **110**

Construction Environmental Management Plan

Waratah Super Battery Energy Storage System

CPP Project No:12590

(State Significant Infrastructure SSI-48492458)

Relevant Schedule / Clause No.	Requirement/Mitigation Measure	Reference Section in this Plan
	The Proponent must ensure that the development is constructed in accordance with the Final Layout Plans.	
Part C / C9.	Prior to commencing operations or following the upgrades of any battery storage components or ancillary infrastructure, the Proponent must submit work as executed plans of the development showing comparison to the final layout plans to the Department via the Major Projects website.	Noted.
Part C / C10.	The Department must be notified in writing via the Major Projects website immediately after the Proponent becomes aware of an incident. The notification must identify the development (including the project approval number and the name of the project 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.	Refer to Section 16.1.1 and Section 16.1.2.
Part C / C11.	The Planning Secretary must be notified in writing via the Major Projects website within seven days after the Proponent becomes aware of any non-compliance.	Refer to Section 16.1.1 and Section 16.1.2.
Part C / C12.	A non-compliance notification must identify the development and the project approval number for it, set out the condition of approval 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.	Refer to Section 16.1.1 and Section 16.1.2.
Part C / C13.	A non-compliance which has been notified as an incident does not need to also be notified as a non-compliance.	Refer to Section 16.1.1 and Section 16.1.2.
Part C / C14.	Independent Audits of the development must be conducted and carried out at the frequency and 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	Refer to Appendix A - Environmental Management Strategy (Section 7). Section 15.5
Part C / C15.	Proposed independent auditors must be agreed to in writing by the Planning Secretary prior to the commencement of an Independent Audit.	Refer to Appendix A - Environmental Management Strategy (Section 7). Section 15.5
Part C / C16.	The Planning Secretary may require the initial and subsequent Independent Audits to be undertaken at different times to those specified in condition C14 of Schedule 2 upon giving at least 4 weeks' notice to the Proponent of the date upon which the audit must be commenced.	Refer to Appendix A - Environmental Management Strategy (Section 7). Section 15.5

12590-GE-PL-30001_1.2 Page **29** of **110**

POWER PROJECTS A QUANTA SERVICES COMPANY

Construction Environmental Management Plan

Waratah Super Battery Energy Storage System

CPP Project No:12590

(State Significant Infrastructure SSI-48492458)

Relevant Schedule / Clause No.	Requirement/Mitigation Measure	Reference Section in this Plan
Part C / C17.	In accordance with the specific requirements in the Independent Audit Post Approval Requirements (2020), the Proponent must: (a) review and respond to each Independent Audit Report prepared under condition C14 of Schedule 2 of this approval, or condition C16 of Schedule 2 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.	Refer to Appendix A - Environmental Management Strategy(Section 7). Section 15.5
Part C / C18.	Independent Audit Reports and the Proponent'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.	Refer to Section 15.5.
Part C / C19.	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.	Noted.
Part C / C20.	The Proponent must: (a) make the following information publicly available on its website as relevant to the stage of the development: (i) the EIS; (ii) the final layout plans for the development; (iii) current statutory approvals for the development; (iv) approved strategies, plans or programs required under the conditions of this approval; (v) the proposed staging plans for the development if the construction, operation and/or decommissioning of the development is to be staged; (vi) a comprehensive summary of the monitoring results of the development, which have been reported in accordance with the various plans and programs approved under the conditions of this approval; (vii) how complaints about the development can be made;	Requisite information can be found on the Proponents' (that is, EnergyCo) website (https://www.energyco.nsw.gov.au/projects/waratah-super-battery)

12590-GE-PL-30001_1.2 Page **30** of **110**

Construction Environmental Management Plan

Waratah Super Battery Energy Storage System

CPP Project No:12590

(State Significant Infrastructure SSI-48492458)

Relevant Schedule / Clause No.	Requirement/Mitigation Measure	Reference Section in this Plan
	(viii) any independent environmental audit,	
	and the Proponent's response to the recommendations in any audit; and	
	(ix) any other matter required by the	
	Planning Secretary; and	
	(b) keep this information up to date.	

Table 2 Mitigations.

6.2 Traffic Management Plan

To support the EMP during the construction of the Waratah BESS a standalone post-approval Traffic Management Plan (TMP) (see Appendix B)) has been prepared and meets Infrastructure Approval Condition B7. The management and mitigation measures contained in the TMP addressed specific impacts associated with the construction of the Waratah BESS and address the requirements detailed in the Infrastructure Approval which are specific to the project. It is noted that the TMP may include additional management and mitigation measures above CPP's standard management and mitigation measures (see Section 6.2.1) or that contained in the *EnergyCo, Waratah Super Battery – Munmorah, Environmental Impact Statement, November 2022* (EIS) (refer Section 6.6.7). The TMP therefore is to be implemented in conjunction with the CEMP.

It is noted that the EIS Section 6.7.7 - Management and Mitigation Measures relate only to the construction phase (i.e. it is assumed that all preconstruction requirements such as plan preparation, consultation etc have been addressed and have therefore not been included).

6.2.1 CPP's Standard Management and Mitigation Measures

The Project / Site Manager will:

- Minimise and control wherever possible the interaction and impact between heavy vehicles, light vehicles and public traffic and pedestrians.
- Ensure a safe working environment for all personnel working at or visiting the site.

6.2.2 EIS Management and Mitigation Measures

In accordance with the EIS Section 6.7.7 – Management and Mitigation Measures, the Site / Project Manager will:

- Manage construction traffic as per the TMP (see Appendix B for further detail.)
- Ensure diesel delivery trucks to the Colongra Power Station are unimpeded.
- Monitor sealed roads leading to and from the project site and take necessary steps to rectify any dirt, mud or other road deposits caused by site vehicles, to maintain the safety of road users.
- Where possible, offset the construction vehicle activity from peak periods of road network activity.
- Induct employees and contractors to raise awareness and understanding of traffic and transport mitigation measures to be implemented during construction via the CEMP.

12590-GE-PL-30001 1.2 Page **31** of **110**



Waratah Super Battery Energy Storage System

CPP Project No:12590

(State Significant Infrastructure SSI-48492458)

6.3 Soil Management

To support the EMP during the construction of the Waratah BESS a standalone post-approval Contamination Management Plan (CMP) (See Appendix E) and Erosion and Sediment Control Plan (ESCP) (See Appendix F) have been prepared. The management and mitigation measures contained in the CMP and ESCP addressed specific impacts associated with the construction of the Waratah BESS and reflect the requirements detailed in the Infrastructure Approval which are specific to the project. It is noted that the CMP and ESCP may include additional management and mitigation measures above CPP's normal procedures or that contained in the EIS which are detailed in Sections 6.3.1 to 6.3.6. Therefore the CMP and ESCP are to be implemented in conjunction with the CEMP.

The contamination of the site is associated with its previous use as the Munmorah Power Station. The contamination of the site includes PFAS, coal, asbestos, hydrocarbons and volatile organic substances.

The site has been remediated and a site audit statement in accordance with the CLM Act has been issued (Refer to Waratah Super Battery Site Audit Statement) which confirms that the site is suitable for the proposed commercial/industrial land use.

The potential contamination risks during the construction of the Project is therefore minimal. To further minimise the contamination risks a contamination management plan which includes site specific controls to be implemented has been prepared (See Appendix E).

6.3.1 Soil Identification and Reuse

6.3.1.1 CPP's Standard Management and Mitigation Measures

The Site / Project Manager will:

 Conduct a soil identification and reuse assessment at the commencement of the project. (NB It is anticipated that the requirements of the Site Audit Statement noted below will satisfy this commitment).

This assessment will be documented in the Waste Management and Minimisation Assessment.

- Where contaminated soil is suspected, carry out a soil investigation to classify the soils and determine management of the material. This may involve the following:
 - An intrusive investigation (soil sampling and analysis to determine the Waste Classification.
 - Contamination validation report.
 - o Geotechnical report.
- Where soil testing is required, sampling will be undertaken in accordance with AS4482.1 2005 & AS4482.2: 1999.
- Engage an appropriately qualified consultant to undertake soil sampling.
- The laboratory analysis is determined by assessing the past use of the site and any known contaminants present in the soil.

6.3.1.2 EIS Management and Mitigation Measures

In accordance with the EIS Section 6.4.5 – Management and Mitigation Measures, the Site / Project Manager will:

 Implement the measures required to manage any residual contamination at the project site as described in the Site Audit Statement.

12590-GE-PL-30001 1.2 Page **32** of **110**



Waratah Super Battery Energy Storage System

CPP Project No:12590

(State Significant Infrastructure SSI-48492458)

- Any PFAS containing materials considered for reuse onsite would be assessed in accordance with the PFAS NEMP 2.0 (HEPA 2020) and seek appropriate regulatory approvals for reuse.
- Excavation for the foundation of the transmission towers and is likely to encounter contaminated material. The tower location is to be undertaken in consultation with GPM to avoid as far as practicable known contaminated areas. Excavations in this area would be subject to GPM approval and controls including the disposal of waste material.

6.3.1.3 Unexpected Finds Protocol

- In the event material excavated contains unexpected contaminants and/or underground services works shall cease immediately, and the Site Manager shall be notified immediately.
- Signs of potential contamination include:
 - Presence of buried drums, chemical containers or dumped materials in the area (including asbestos, rubble and construction waste).
 - Visible appearance of contaminated soil, discolouration or staining of soil and bare soil patches.
 - Unhealthy vegetation.
 - o Unusual odours originating from soil (fuels, solvents, rotten egg gas).
 - o Oil / chemical sheen on water.
- If any of these are detected during excavation works, stop and follow the process set out in Figure 4.

12590-GE-PL-30001 1.2 Page 33 of 110

Construction Environmental Management Plan

Waratah Super Battery Energy Storage System

CPP Project No:12590

(State Significant Infrastructure SSI-48492458)

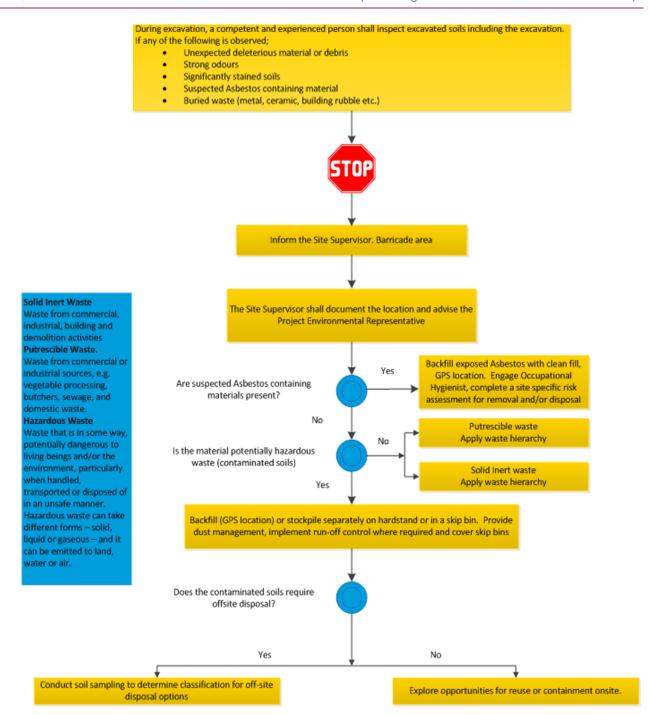


Figure 4 Soil Unexpected Finds Protocol

6.3.2 Soil Reuse

6.3.2.1 CPP's Standard Management and Mitigation Measures

The Site Manager will ensure that:

• Surface vegetation is removed by blading off, by scarification and raking.

12590-GE-PL-30001 1.2 Page **34** of **110**



Waratah Super Battery Energy Storage System

CPP Project No:12590

(State Significant Infrastructure SSI-48492458)

- Surface vegetation is removed and discarded separately to avoid spread of weed and seed.
- Stripping of soil will be undertaken and topsoil will be stockpiled in a dedicated area.
- At the planning stage of this project, soil stockpile requirements are identified using the Erosion and Sediment Control Plan (See Appendix F).

6.3.2.2 EIS Management and Mitigation Measures

In accordance with the EIS Section 6.7.7 – Management and Mitigation Measures, the Site / Project Manager will:

- Topsoil and subsoil would be stripped and stockpiled separately.
- Topsoil would be stockpiled and maintained for redistribution at the surface.
- Subsoil, if suitable, would be stockpiled for use as road subbase or as backfill at the project site.
- Topsoil recovered from the surface strip will be utilised for dressing of batters and drains, and also rehabilitation of disturbed areas where technically feasible and suitable.
- Where possible, excavated materials would be reused onsite for construction fill or landscaping purposes, if suitable.

6.3.3 Soil and Stockpile Management

6.3.3.1 CPP's Standard Management and Mitigation Measures

Stockpiles shall be managed in accordance with the risks arising from:

- Dust (refer Section 6.7 of this Plan).
- Soil erosion (refer Section 6.3.5 of this Plan and Section 6.5).
- Weed management (refer Section 6.6 of this Plan).
- Visual amenity.

The Site manager will:

- Conduct regular inspections of all stockpiles and manages them in accordance with the risk factors above.
- At the commencement of the project, assess if spoil is to be stockpiled and reused or removed from site.
- Strip and stockpile vegetation separately.
- Strip and stockpile topsoil separately from subsoil or overburden for later rehabilitation of the site.
- Install sediment fencing downslope of all stockpiles sites as identified in *Erosion and Sediment Control Plan* (See Appendix G).
- Ensure stockpiles are not within five metres of significant vegetation, concentrated water flows, roads or other water flow areas.

12590-GE-PL-30001 1.2 Page **35** of **110**



Waratah Super Battery Energy Storage System

CPP Project No:12590

(State Significant Infrastructure SSI-48492458)

6.3.3.2 EIS Management and Mitigation Measures

In accordance with the EIS Section 6.7.7 – Management and Mitigation Measures, the Site / Project Manager will:

• In the event there is surplus spoil material that cannot be reused, stockpile the spoil on site and investigate options to recycle spoil where practicable.

6.3.4 Spoil Transport

6.3.4.1 CPP's Standard Management and Mitigation Measures

If excavated and/or stockpiled spoil is to be removed from site:

- It will be placed in trucks and removed to a licenced disposal depot.
- All loads will be covered prior to leaving site.
- Prior to leaving site all trucks will report the Site Office.
- The truck and its load will be inspected by the Site Manager or delegate.
- Records of this inspection will be recorded in Waste Disposal Register.

6.3.4.2 EIS Management and Mitigation Measures

In accordance with the EIS Section 6.12.4 – Management and Mitigation Measures, the Site / Project Manager will ensure:

- Spoil is be managed in accordance with Section 6.12.
- Spoil is be assessed in accordance with NSW EPA (2014) Waste Classification Guidelines Part 1: Classifying Waste.

6.3.5 Erosion and Sediment Control Plans

6.3.5.1 CPP's Standard Management and Mitigation Measures

The Site Manager will:

Implement the Erosion and Sediment Control Plan found in Appendix F.

NOTE:

Erosion control measures either protect or reinforce the soil surface/subsurface from erosion forces or convey run off in a non-erosive way.

Sediment control measures capture eroded soil particles by either slowing the velocity of the water so that the sediment can settle out by gravity.

Sediment is only generated when soil erosion occurs, therefore design, installation and construction of effective erosion control measures should be the first priority followed by good housekeeping once land disturbance work commences.

12590-GE-PL-30001 1.2 Page **36** of **110**



Waratah Super Battery Energy Storage System

CPP Project No:12590

(State Significant Infrastructure SSI-48492458)

6.3.6 Erosion and Sediment Control

6.3.6.1 CPP's Standard Management and Mitigation Measures

The Site manager will ensure that:

- Sediment control devices are identified in *Erosion and Sediment Control Plan* (See Appendix F) and installed parallel with the ground contours, immediately down slope of any areas where the natural ground surface will be disturbed.
- Where possible soil and material collected in erosion control or sediment collection structures will be reused to fill excavations or site restoration (unless contaminated).
- Machinery and vehicles remain on existing roads and access roads whenever possible.
- Movements will be further restricted during and immediately following wet weather to minimise disturbance to ground cover.
- Works are not undertaken immediately prior to or during periods of high rainfall.
- Erosion and sediment collection structures are be inspected on a weekly basis.

This inspection will be documented in Weekly WHSE Inspection Form.

6.3.6.2 EIS Management and Mitigation Measures

In accordance with the EIS, the Site / Project Manager will:

- Minimise the area and duration that disturbed land is exposed to erosion risks.
- Install temporary localised erosion control measures when undertaking small pits and trenches excavations, should the works not be located within the sites primary erosion control system.

Referenced Documents:

FRM-G002 Waste Management and Minimisation Assessment TMP-G001 Erosion and Sediment Control Plan REG-S009 WHS Register FRM-S063 Weekly Inspection

6.4 Flora and Fauna Management

To support the EMP during the construction of the Waratah BESS a standalone post-approval Flora and Fauna Management Plan (FFMP) has been prepared (See Appendix D). The management and mitigation measures contained in the FFMP addressed specific impacts associated with the construction of the Waratah BESS and reflect the requirements detailed in the Infrastructure Approval which are specific to the project. It is noted that the FFMP may include additional management and mitigation measures above CPP's standard procedures (see Section 6.4.1) or that contained in the EIS (see Section 6.4.2). Therefore the FFMP is to be implemented in conjunction with the CEMP.

6.4.1 CPP's Standard Management and Mitigation Measures

The Site / Project Manager will ensure that:

Requirements to prevent impact to flora and fauna are identified and planned for at the planning stage
of this project.

12590-GE-PL-30001 1.2 Page **37** of **110**



Waratah Super Battery Energy Storage System

CPP Project No:12590

(State Significant Infrastructure SSI-48492458)

- No clearing of vegetation or fauna habitat is permitted outside the approved disturbance area as described a "Subject Land" in **Figure 5**.
- As part of the assessment process client's documentation such as REF, EIA, EIS and other similar documentation will be reviewed by the Project and Site Manager.
- Pre-Clearance Survey Assessment will be utilised to identify areas of significance in relation to flora and fauna.
- Controls required to maintain these areas will also be identified.
- Native fauna will not be disturbed unless unavoidable for the purposes of the project.
- Where this is necessary, a specialist assessment of flora and fauna will be undertaken and appropriate controls to mitigate any impacts will be implemented.
- Machinery and vehicles remain on existing access tracks to minimize disturbance to any existing ground cover.
- Any ground cover disturbed as a result of the works is to be restored to former condition on project completion.
- Native fauna will not be intentionally disturbed, and the advice of the client's Environmental Representative sought if the likelihood of such disturbance arises.
- All personnel entering the site will be made aware during site induction training about the presence of potential threatened species and endangered ecological communities.
- If during the course of the project CPP personnel become aware of the presence of threatened species, populations or endangered ecological communities or their habitats, that were not identified and assessed in the REF (if applicable), and which are likely to be affected by the activity the following will steps will be followed:
 - o Immediately cease work likely to affect the threatened species, populations or endangered ecological communities or their habitats.
 - o Inform the relevant statutory authority as soon as practicable by phone, electronically or in writing.
 - Do not recommence work likely to affect the threatened species, populations or endangered ecological communities or their habitats until receiving written advice from the relevant authority.
- Any deep excavations (greater than 1.5 metres deep) left open at night will have a ramp/opening
 installed to allow access for any fauna to escape or will be or will be completely covered, with cover
 being secured.

12590-GE-PL-30001 1.2 Page **38** of **110**

CONSOLIDATED POWER PROJECTS A SOLIANTA SERVICES COMPANY

Construction Environmental Management Plan

Waratah Super Battery Energy Storage System

CPP Project No:12590

(State Significant Infrastructure SSI-48492458)



Figure 5 Project Disturbance Footprint

12590-GE-PL-30001_1.2 Page **39** of **110**



Waratah Super Battery Energy Storage System

CPP Project No:12590

(State Significant Infrastructure SSI-48492458)

6.4.2 EIS Management and Mitigation Measures

In accordance with the EIS Section 6.2.9 – Management and Mitigation Measures, the Site / Project Manager will:

• Implement the Flora and Fauna Management plan found in Appendix D.

Referenced Documents: FRM-G008 Pre-Clearance Assessment Survey

6.5 Waste Management and Minimisation

The Project has the potential to utilise a range of different resources and generate a number of different waste types throughout the construction phase.

Anticipated waste streams include:

- Green waste generated during vegetation trimming and removal on site.
- Topsoil from disturbed areas will be stored for use in future rehabilitation activities onsite.
- Excess spoil from excavation works.
- General construction waste such as off-cuts, packaging and excess construction material (such as concrete, timber, plastic and metal).
- Empty cable drums.
- Waste oils, greases and lubricants from maintenance of construction plant and equipment.
- Domestic waste from site personnel including food scraps, glass and plastic bottles, paper and plastic containers.

All sewage waste generated during construction will be contained within sewage holding tanks and will be removed from site on a regular fortnightly pump out and disposed of at a licensed waste facility.

These tanks will be fitted with high level alarms.

6.5.1 CPP's Standard Management and Mitigation Measures

The Site Manager will ensure that:

- Methods for waste management and minimisation are identified and planned for at the planning stage
 of the project using the Waste Management and Minimisation Assessment.
- There is no receiving or disposing of waste on site.
- Waste will be removed from the site as soon as practicable, and ensure it is sent to an appropriately licensed waste facility for disposal.
- Records of all waste disposed from site are maintained (see Section 6.5.1.1).
- Routine checks for litter and rubbish on site including along access tracks and roads and remove to appropriate disposal facilities are conducted as part of the Environmental Inspection Checklist.

This waste management and minimisation assessment will adopt the following principles:

12590-GE-PL-30001 1.2 Page **40** of **110**



A QUANTA SERVICES COMPANY

Construction Environmental Management Plan

Waratah Super Battery Energy Storage System

CPP Project No:12590

(State Significant Infrastructure SSI-48492458)

Priority	Strategy	Action
1	Avoidance as top priority	Action to reduce waste generated by industry and government
2	Resource Recovery	Reuse, reprocessing, recycling and energy recovery
3	Disposal as last resort	Environmentally responsible management of disposal

Table 3 Waste Management Principles

6.5.1.1 Waste Tracking

All wastes from this project will be tracked using Waste Disposal Register.

This register will identify the following as a minimum:

- Date and time that loads departed site.
- Who inspected the load and type of waste.
- Vehicle rego and load quantity.
- Quantity of material recycled or reused.

6.5.2 EIS Management and Mitigation Measures

In accordance with the EIS Section 6.12.4 – Management and Mitigation Measures, the Site / Project Manager will ensure:

- Waste is managed in accordance to POEO Act and associated regulations (Refer Measure WA2 under Table 6.66 in EIS).
- Waste is classified, stored and handled in accordance with the EPA's Waste Classification Guidelines 2014 (or its latest version).
- Where space constraints permit, waste would be segregated and stockpiled on site, with materials such as concrete, metals, electrical and asphalt separated and sent to a construction and demolition waste recycling facility. Other recyclable materials would be sent for recycling as a mixed waste stream.
- Opportunities for take back agreements in procurement would be identified e.g., packaging and pallets etc.
- The disturbance, movement and disposal of hazardous or special waste including asbestos containing materials, would be carried out in accordance with the *Work Health and Safety Regulation 2017*, Contamination Management Plan (See Appendix E) and relevant guidelines.
- Labelled and colour coded receptacles would be provided at the construction site office and crib room
 for general waste from construction personnel to ensure source separation of recyclable materials and
 residual landfill waste. These wastes would be collected on a regular basis by authorised and
 appropriately licensed waste collection contractors for offsite recycling or disposal.
- Putrescible waste would be stored in designated bins and collected by an authorised contractor for disposal to a suitably licensed facility.
- Waste from construction vehicle and plant maintenance activities would be collected and stored in designated waste storage areas for collection by an authorised contractor for disposal off site. Any

12590-GE-PL-30001 1.2 Page **41** of **110**



Waratah Super Battery Energy Storage System

CPP Project No:12590

(State Significant Infrastructure SSI-48492458)

potentially hazardous waste would be stored separately in clearly labelled receptacles and disposed of in accordance with its waste classification.

- Waste oil and oil filters would be stored in separate recycling bins and collected by an authorised contractor, and recycled off site, where feasible.
- Tyres would be collected by an authorised contractor for recycling at a facility licensed to receive tyres (including tyre pieces).
- Greywater and sewage will be managed on site using a propriety on site wastewater treatment system and trucked off site to a licenced facility.

6.5.3 Contaminated Materials and Wastes

6.5.3.1 CPP's Standard Management and Mitigation Measures

Waste Management and Minimisation Assessment will also determine the requirements for contaminated materials and wastes.

Referenced Documents:

FRM-G002 Waste Management and Minimisation Assessment REG-S009 WHS Registers/QEST Portal

6.6 Weed Management

Most of the project site is highly modified and disturbed, with vegetated areas separated by exotic grassland, existing roads, and hardstand. A small detention basin exists within the project site which at the time of surveys, harboured vegetation dominated by pine trees.

6.6.1 CPP's Standard Management and Mitigation Measures

The Project / Site Manager will ensure that:

- Areas of significance in relation to weed management are identified prior to the commencement of the project.
- Pre-Clearance Assessment Survey will be utilised to document this assessment.
- As part of the assessment process client's documentation such as REF, EIA, EIS and other similar documentation will be reviewed.
- All plant, equipment and vehicles are to be cleaned down prior to arrival at site.
- Plant and equipment should be verified free from weed seed and the Mobile Plant Inspection Form (FRM-S123) completed.
- If mobile plant is particularly muddy (e.g. during periods of high rainfall) then the mud will also be scraped from the machinery, to ensure all soil and vegetable matter is removed.
- All imported fill will be certified Virgin Excavated Natural Material.
- Imported blue gravel will be free from weeds and other organic matter that may be a source of weed propagation.

12590-GE-PL-30001 1.2 Page **42** of **110**



Waratah Super Battery Energy Storage System

(State Significant Infrastructure SSI-48492458)

CPP Project No:12590

6.6.1.1 Mobile Plant

- All mobile plant required during the course of this project will arrive on site clean and free from mud, weeds etc.:
- All mobile plant required will be inspected prior to entering using this project using Mobile Plant Inspection Form (FRM-S123).

6.6.1.2 On site Wash Down Area Selection

If during the course of this inspection weed / seed contaminants are identified the piece of plant or equipment will be send-off site to get washed down. If we were to wash down on site, then the following requirements will be used to select a wash down area:

- The equipment or plant will be prohibited from entering site or at the discretion of the Site Manager the following may occur:
 - ensure site is away from watercourses and drains, this will prevent weed / seeds, grease and detergents pollution.
 - this area will be bunded to ensure sediment & sediment laden water is captured for treatment and appropriate disposal.
 - the site must be easily identified for future reference as this location will need monitoring for future outbreaks in the following seasons.
 - the client/landowner must be notified of this location.
 - o an area that is well grassed will reduce mud during cleaning down and assist as competition for any weed seed that may germinate in the future.
 - o if applicable landowners should be consulted to determine a suitable wash down area.

Note - the contractor supplying the mobile plant is responsible for wash-down.

6.6.1.3 Equipment

- A shovel to remove large clods of soil before washing down.
- A yard broom to remove loose sediment before washing down.
- A high-pressure water tanker or spray unit.
- Broom/dustpan for cleaning cabins.

Note - A garden hose may be adequate for small wash downs.

6.6.1.4 Cleaning of Vehicles

- Place vehicle/machine in a safe position stable and immobile.
- Stop engine, apply park brake, chock wheels and lower all implements or secure/chock them if they
 are required up for cleaning.
- Ensure the area is free of obstructions/objects that may cause injury (power lines etc.).
- Identify any points that require specific attention, e.g. behind guards and protective plates, radiators, spare tyres etc.

Remove necessary guards/belly plates to access areas for cleaning.

12590-GE-PL-30001 1.2 Page **43** of **110**



Waratah Super Battery Energy Storage System

CPP Project No:12590

(State Significant Infrastructure SSI-48492458)

- Identify areas that may require cleaning with compressed air shovel and / or broom rather than water in every instance.
- Clean under guards and underneath machinery/vehicle and then do the cabin, upper body and implements.
- Tool boxes and storage compartments may also require cleaning.
- Move vehicle/machine with caution.
- Avoid re-contamination, wash remaining mud etc off tyres/tracks.
- Carry out final inspection to ensure all areas have been cleaned.
- Replace guards.
- When moving machinery, plant or vehicles out of wash bay, move directly toward and across entry grid to the site to ensure the vehicle remains decontaminated.

6.6.2 EIS Management and Mitigation Measures

In accordance with the EIS Section 6.2.9 – Management and Mitigation Measures, the Site / Project Manager will ensure:

The weed management measures described in Section 6.6 are implemented.

Referenced Documents:

FRM-G008 Pre-Clearance Assessment Survey FRM-S123 Mobile Plant Inspection Form/QEST Portal

6.7 Air Quality Management

The nearest sensitive receptors are located in the suburb of Halekulani, approximately 600 metres southeast of the project site at the nearest point. To the west of the project site are the neighbouring suburbs of San Remo and Buff Point, about 1.4 kilometres west and 1.3 kilometres southwest, respectively.

Sensitive habitats in the vicinity includes Colongra Swamp located approximately 640 metres northeast of the project site.

A review of the local wind meteorological data shows that most of the high-speed winds which contribute to dust lift off, occur from the south and northeast, meaning that dust impacts would occur to the north and southwest (downwind). There are no identified sensitive receptors to the north of the project site and the nearest receptors to the southwest are approximately 1.3 kilometres away.

6.7.1 CPP's Standard Management and Mitigation Measures

The Project / Site Manager will ensure that:

 Air quality requirements are determined at the commencement of this project using the WHSE Emergency Requirements Assessment Form.

6.7.1.1 Mobile Plant

- Once mobile plant arrives on site mobile plant is inspected using Mobile Plant Inspection Form and if a risk assessment is required Plant Risk Assessment Checklist will be completed.
- The mobile plant will be registered and determined if the mobile plant is fit for purpose.

12590-GE-PL-30001 1.2 Page **44** of **110**



Waratah Super Battery Energy Storage System

CPP Project No:12590

(State Significant Infrastructure SSI-48492458)

- Maintenance records (last service record as a minimum) are provided with plant.
- Onboarding of plant into quest will be done by the site manager or the Site SQE advisor.

6.7.1.2 Dust Suppression

- All activities with potential for dust generation must have reasonable and practical dust controls implemented as identified within the Risk Assessment.
- CPP will take all reasonable and practicable measures to prevent or minimise the generation of dust during construction. Such measures may include:
 - Loose, uncovered areas of soil shall be stabilised as soon as possible following clearing.
 - Soils shall be stockpiled only when necessary and for short durations. Stockpile heights shall be kept to a minimum. Stockpiles which have potential to give rise to windblown dust shall be wetted.
 - Ensuring all construction related stockpiles are regularly watered to prevent dust emissions during high wind conditions. If stockpiles are to be maintained for longer than 28 days, other management options including hydroseeding may be investigated to prevent dust erosion from these long-term stockpiles. Stockpiled materials e.g. sand, aggregate, cut material, shall be stabilised to reduce dust generation.
 - Topsoil shall be stockpiled separately and in stockpiles no higher than 2 metres.
 - Design stockpiles with slopes preferably no greater than 2:1 (horizontal: vertical).
 - o Minimise the handling of stockpiles, number of stockpiles and the time of exposure.
 - o Minimise or avoid dust-generating activities in dry and windy conditions.
 - Minimising the period of time between excavating and backfilling where possible.
 - Any disturbed areas no longer required shall be rehabilitated, as soon as practicable, to promote soil stability and prevent dust generation.
 - Weather forecasts shall be examined to identify when conditions may contribute to dust emissions.
 - Vehicle speeds on site shall be restricted ≤20 km/hr to minimise dust generation.
 - Dust suppression techniques shall be employed where material cannot be stabilised e.g. water carts, sprays, dust guards, wind breaks, binding chemicals or covers.
 - Trucks shall be kept clean to ensure that loose material being dislodged during road transport off site. If necessary, a "cattle grid" may be installed prior to the truck exiting a work or construction site to assist the removal of loose material.
 - Loads shall be covered wherever possible to ensure that materials do not generate dust whilst being transported off site.
- The work being carried out by CPP has a high element of both civil and bulk earthwork activities; therefore, there is a high potential for the generation of fugitive dust.
- Dust suppression is implemented for earthwork activities, as appropriate.
- Observations and monitoring of the works will occur during potential dust generating activities.
- CPP will manage generation of Fugitive Dust utilising dust suppression systems; these may include but not limited to the following items:

Water cart.

12590-GE-PL-30001 1.2 Page **45** of **110**



Waratah Super Battery Energy Storage System

CPP Project No:12590

(State Significant Infrastructure SSI-48492458)

- Water trailer.
- Sprinkler system.
- Binding chemicals.

6.7.2 EIS Management and Mitigation Measures

In accordance with the EIS Section 6.13.5 – Management and Mitigation Measures (Refer to Table 6.70 – Mitigation Measure – air quality), the Site / Project Manager will:

- Ensure that plant and equipment is maintained in a good condition to minimise ignition risk of fuel or chemicals, spills, and air emissions that may cause nuisance.
- Reduce and/or modify the works being undertaken on days with forecast and actual high winds (i.e., over 10 m/s), if wind-blown dust is observed to be leaving the site boundary.
- Modify or stop works that are creating levels of dust which may significantly impact on public amenity until the dust hazard is reduced to an acceptable level.

6.7.3 Monitoring

- The site shall be continually visually monitored for excessive dust generation. This monitoring will be
 performed by the CPP Site Manager/HSE Advisor. The CPP Site Manager/HSE Advisor has the
 authority to cease works where sufficient controls are not implemented and excessive dust creation is
 present. In dry and windy conditions specific attention shall be taken to the monitoring of excessive
 dust generation.
- The Weekly HSE Inspection will document whether dust and air quality control measures being maintained.
- Following any nuisance dust complaint, a visual inspection of the area shall be undertaken and investigated.
- Any air quality issues shall be recorded on the Environmental Inspection Checklist.
- As required, air quality monitoring may be undertaken to investigate any ongoing complaints relating
 to environmental nuisance caused by construction dust and/or particulate matter. Monitoring may be
 carried out at a place(s) relevant to the potentially affected dust sensitive receptor.

6.7.4 Reporting

- All complaints / incidents regarding dust shall be reported and investigated in accordance with the Incident Management Procedure.
- All concerns/complaints shall be resolved in a timely manner, by considering all practicable means to mitigate air quality impacts.

Referenced Documents:

FRM-S142 WHSE Emergency Requirements Assessment Form FRM-S123 Mobile Plant Inspection Form/QEST Portal FRM-S039 Plant Risk Assessment Checklist Template REG-S009 WHSE Master Registers

12590-GE-PL-30001 1.2 Page **46** of **110**



Waratah Super Battery Energy Storage System

CPP Project No:12590

(State Significant Infrastructure SSI-48492458)

6.8 Dewatering

To support the EMP during the construction of the Waratah BESS a standalone post-approval Erosion and Sediment Control Plan (ESCP) (see Appendix G) has been prepared. The management and mitigation measures contained in the ESCP addressed specific impacts associated with the construction of the Waratah BESS and reflect the requirements detailed in the Infrastructure Approval which are specific to the project. It is noted that the ESCP may include additional management and mitigation measures above CPP's standard procedures or that contained in the EIS. Therefore, the ESCP is to be implemented in conjunction with the CEMP.

6.8.1 CPP's Standard Management and Mitigation Measures

The Site Manager will ensure that:

- The Project does not cause any water pollution, as defined under Section 120 of the *Environment Operations Act 1997*.
- Dewatering requirements are determined for stormwater and infiltrated groundwater from excavations and / or low-lying areas using the *Dewatering Assessment* at the commencement of the project.
- This assessment will identify dewatering methods to ensure the environment is not harmed.
- Dewatering areas will be identified in *Erosion and Sediment Control Plan* (See Appendix G).
- Dewatering Assessment will be utilised to determine if water treatment during the dewatering process is required.

6.8.1.1 Water Treatment – pH Levels

- If the pH of captured water is outside the range of 6.5-8.5, it will need to be treated.
- If the pH is above 8.5, hydrochloric acid will be used to lower the pH. A 500ml dose of acid lowers 7000 litres of water by a pH of approximately 1.5.
- To treat water with acid, a specific Safe Work Method Statement will be prepared following consultation with the relevant Material Safety Data Sheet and its risk assessment.
- If the pH of water is below 6.5, a base such as agricultural lime, with a pH of 8.2, will be used to raise the pH.

6.8.1.2 Water Treatment – Suspended Solids

- If the Total Suspended Solids (TSS) of captured water is greater than 50 mg/L a flocculent should be used e.g. gypsum, liquid alum or flocculent blocks.
- Treating water with a flocculent will make the sediments drop to the bottom.
- Water retention tanks also have internal baffles installed to further assist with reducing the sediment load.
- Dosing rates of 30kg per 100m³ will be used and application methods will be applied as per methods recommended in the *Landcom publication Managing Urban Stormwater*, *Soils and Construction*.

12590-GE-PL-30001 1.2 Page **47** of **110**



Waratah Super Battery Energy Storage System

CPP Project No:12590

(State Significant Infrastructure SSI-48492458)

Note - an even application over the captured water is essential for effective flocculation. Apply evenly in water and wait for the sediment to settle out.

6.8.1.3 Water Treatment – Hydrocarbons

• If an oily sheen is found on the surface of captured water absorbent material from a spill kit will be used to absorb and skim off the sheen prior to discharge.

6.8.1.4 Laboratory Testing

- Laboratory sampling and testing will be required for captured water to ensure that water quality is guaranteed prior to either reuse or discharge of water.
- Laboratories will be NATA accredited.

6.8.1.5 Dewatering Requirements

- All dewatering areas will be assessed using Dewatering Assessment (FRM-G012).
- If additional dewatering areas are identified during construction, the Dewatering Assessment will be revisited.
- Identified dewatering areas will be recorded in Erosion and Sediment Control Plan (See Appendix G).

Discharge of water to the environment should not cause any of the following environmental impacts:

- Erosion at the discharge location or in receiving environments.
- Erosion of structures or services.
- Harm to native vegetation.
- Sediment build-up in drains, waterways or wetlands.

The following should also be considered:

- Energy dissipation must be provided at the surface of all dewatering discharge outlets e.g. concrete aprons, geofabric, shade cloth, gabions, turkey nests.
- The preference discharge location should be given to locations with established stable drainage.

6.8.1.6 Discharging Captured Water

The Project / Site Manager will ensure that:

Approval to discharge captured and treated water is issued after the criteria in Water Release
 Assessment is achieved as required.

During the discharge of captured and treated water:

- If possible, visually monitor water quality at a downstream inspection point to ensure no plume is evident.
- If plumes are identified cease work immediately, treat accordingly.
- Re-approval will again be granted after the criteria in Water Release Assessment is achieved.

12590-GE-PL-30001 1.2 Page **48** of **110**



Waratah Super Battery Energy Storage System

CPP Project No:12590

(State Significant Infrastructure SSI-48492458)

- The water sediment tank will be inspected on a regular basis (suggest 15 minutes), or a flotation device is to be installed to ensure the pump does not drawdown water beyond a certain level (and risk discharging flocculated and/or sludgy material).
- No additional water is to be pumped into the storage area until all stored captured water has been discharged.

Referenced Documents:

FRM-G012 Dewatering Assessment TMP-G001 ESCP (Erosion and Sediment Control Plan) FRM-G013 Water Release Assessment

6.9 Chemicals and Hazardous Materials

During construction various hazardous materials and chemicals will be required to be used and/or stored on site. Typically, hazardous materials and chemicals utilised during construction include (but not limited to):

- Acetylene.
- Adhesives, glues, epoxies, etc.
- Concrete and other mortar products.
- Contact cleaners.
- Cold-galvanising spray.
- Fuels, oils and lubricants (such as diesel, unleaded petrol, thinners, etc.).
- Batteries.
- Paints and other paint markers.

6.9.1 CPP's Standard Management and Mitigation Measures

6.9.1.1 Hazardous substances (chemicals)

Employees using hazardous substances shall be given information, instruction, supervision, or training in:

- Identification, properties and potential hazards of dangerous substances including access to Safety Data Sheets (SDS).
- Correct procedures for safe storage and handling of hazardous substances.
- Emergency procedures in case of a spill, leak, fire or explosion, appropriate spill kit will be on-site in case of spillage emergency.
- A register is kept up to date and is accessible for all substances related to the project.
- Hazardous and dangerous goods will be identified, and a risk assessment conducted to ensure the safety of personnel who may use the substance and controls will be listed within the applicable SWMS.

6.9.1.2 Safety Data Sheets (SDS)

A file of SDS's pertaining to chemicals used on the project shall be available within the site office.

12590-GE-PL-30001 1.2 Page **49** of **110**



Waratah Super Battery Energy Storage System

CPP Project No:12590

(State Significant Infrastructure SSI-48492458)

- Any new chemicals brought on to the site shall be identified to the Site SQE Advisor / Site Manager and a copy of the corresponding SDS shall be provided and filed.
- All Chemicals on site must be recorded on the Master Register of Substances.

6.9.1.3 Labelling

- All containers used to store substances will be clearly marked with the product name.
- All storage areas will be clearly marked with the following information:
 - o Product name.
 - o Risk and safety phrases.
 - o Hazard warning word/dangerous goods class and symbol (e.g. flammable).

6.9.1.4 Transport

- For storage and transport, large quantities will be defined as greater than 200 litres.
- Large quantities of hazardous substances and dangerous goods will be transported to site by the supplier of the substance.
- In circumstances where the supplier is unable to transport/deliver the hazardous substances and dangerous goods, a subcontractor or CPP will be engaged.
- In this circumstance, the subcontractor and/or CPP will prepare a SWMS for this activity.

6.9.1.5 Storage

- Storage and handling shall comply with the NSW EPA's Storing and Handling of Liquids: Environmental Protection – Participants Handbook.
- Storage quantities should be kept to a minimum to cater for demand but avoid excessive storage for long periods.
- Adequate storage facilities must be provided for all chemicals and will meet the following requirements:
 - o Will not be located within 5m of No Go Zones.
 - Be bunded in accordance with Australian Standard AS1940 (packaged and larger quantities) and/or stored in an Australian Standard compliant chemical cabinet.
 - Prevent stormwater/rainwater ingress.
 - Have a fit-for-purpose spill kit available in case of spills and emergency response plan (Emergency Response Plan (see FRM-G004)).
 - o will be inspected weekly.
- For dangerous goods, this includes requirements for separation and segregation for all incompatible substances as identified in the Dangerous Goods Storage Segregation Guide.

12590-GE-PL-30001 1.2 Page **50** of **110**



Waratah Super Battery Energy Storage System

CPP Project No:12590

(State Significant Infrastructure SSI-48492458)

6.10 Fuel

In order to minimize the potential risk of spills from the storage of fuel or transfer of fuel from one vessel to another, CPP requires all fuel trailers/trucks to be either self-bunded with double skin or to be stored / transferred within a bunded area.

- The bunded area must be adequate to hold 110% of the holdings of the largest vessel and must be lined with appropriate impervious material to contain the leak.
- Bunds must be regularly inspected particularly after heavy rainfall.
- The bund must be able to prevent the migration of any spillage into the environment and must be constructed from toxic resistant materials.

6.10.1.1 Disposal

The following must be considered when disposing of all chemicals (dangerous, hazardous, non-dangerous and non-hazardous):

- Less than 20 Litres—disposed of at a licensed/registered landfill depot.
- Greater than 20 litres—a licensed waste contractor will be engaged to remove the substance.

Auditable records of waste company licences, disposal sites and waste consignment notes must be held on file for each removal activity.

Reference document(s):

FRM-S020 Hazardous Chemical and Dangerous Goods Risk Assessment FRM-S063 Weekly Inspection/QEST Portal GUI-S019 Dangerous Goods Storage Segregation Guide REG-S002 Master Register of Substances

6.11 Spill Management

6.11.1 CPP's Standard Management and Mitigation Measures

The Site Manager will ensure that:

- A spill assessment is conducted using *Spill Response Equipment Selection Assessment* prior to works commencing.
- The number and type of spill kits will be determined during this assessment.
- Spill Kits will be formally examined at the commencement of a project and on a 6-monthly basis thereafter using *Spill Response Kit Checklist*.
- The location of spill kits on this project will be identified on the construction activities zone map (CAZMAP).
- Following the assessment outlined above spill response procedures will be prepared and documented in *Emergency Response Plan Spills*.
- See emergency response procedure for further details on trials and effectiveness of response plans.

6.11.1.1 Spill Response

The following response should be undertaken for all spill events:

12590-GE-PL-30001 1.2 Page **51** of **110**

POWER

A QUANTA SERVICES COMPANY

Construction Environmental Management Plan

Waratah Super Battery Energy Storage System

CPP Project No:12590

(State Significant Infrastructure SSI-48492458)

- Identify the nature of spill.
- Assess the risks to personnel.
- Stop, contain and control the spill if safe to do so.
- Report the spill once site has been made safe and secure.
- If unsafe, call emergency services:
 - Notify your supervisor immediately.
 - Notify personnel in the vicinity of the spill if evacuation is required.

The spill response flow chart shown in Figure 6 shall be used for the management of all spills on site.

Referenced Documents:

FRM-G006 Spill Response Equipment Selection Assessment CHK-G003 Spill Response Kit Checklist TMP-G001 ESCP (Erosion and Sediment Control Plan) FRM-G004 Emergency Response Plan – Spills

12590-GE-PL-30001 1.2 Page **52** of **110**

CONSOLIDATED POWER PROJECTS A QUANTA SERVICES COMPANY

Construction Environmental Management Plan

Waratah Super Battery Energy Storage System

CPP Project No:12590

(State Significant Infrastructure SSI-48492458)

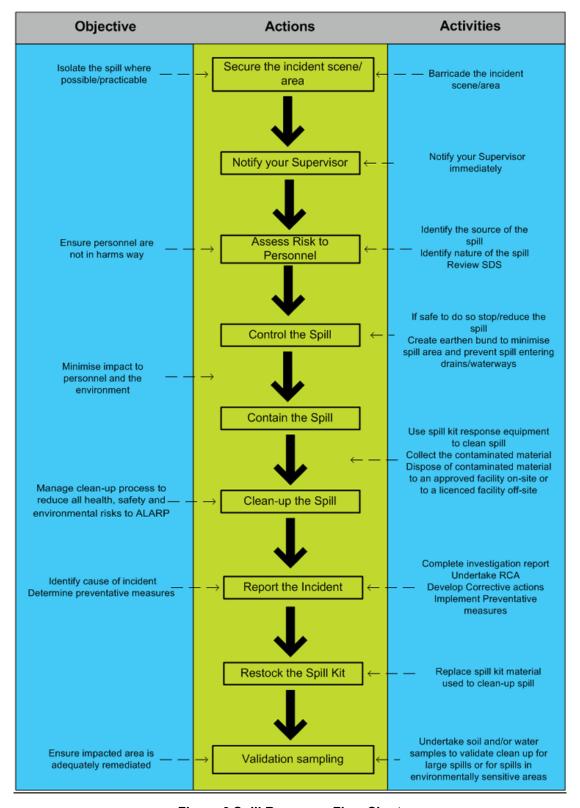


Figure 6 Spill Response Flow Chart

12590-GE-PL-30001 1.2 Page **53** of **110**

CONSOLIDATED POWER PROJECTS A QUANTA SERVICES COMPANY

Construction Environmental Management Plan

Waratah Super Battery Energy Storage System

CPP Project No:12590

(State Significant Infrastructure SSI-48492458)

6.12 Noise and Vibration Management

The noise and vibration management and mitigation measures contained in this CMP addressed specific impacts associated with the construction of the Waratah BESS and reflect the requirements detailed in the Infrastructure Approval which are specific to the project and/or above CPP's normal operating procedures as detailed below.

6.12.1 Modelled Noise Impacts at Sensitive Receivers

The EIS assessed three construction noise scenarios – site preparation, construction and commissioning. The construction equipment and corresponding sound power levels along with the activity sound power level for each construction noise scenario is shown in Table 4.

Equipment	Sound Power Level, dBA	Site Preparation Equipment	Construction Equipment	Commissioning Equipment
Backhoe	104	Yes	No	No
Concrete saw	117	Yes	Yes	No
Concrete truck and pump	108	No	Yes	No
Crane	105	No	Yes	Yes
Dump truck	117	Yes	No	No
Elevated work platform	105	No	Yes	Yes
Excavator	107	Yes	No	No
Front end loader	113	Yes	Yes	No
Generator	99	Yes	Yes	No
Grader	110	Yes	No	No
Hand tools	102	No	Yes	Yes
Light Vehicles	106	Yes	Yes	No
Scraper	116	Yes	No	No
Truck	107	No	Yes	Yes
Vibratory roller	108	Yes	Yes	No
Water truck	107	Yes	Yes	No
Overall Sound Power Level, dBA		117	114	109

Table 4 Construction Equipment and Sound Power Levels

The nearest sensitive residential receivers to the project are shown on Figure 7.

12590-GE-PL-30001 1.2 Page **54** of **110**

POWER PROJECTS A QUANTA SERVICES COMPANY

Construction Environmental Management Plan

Waratah Super Battery Energy Storage System

CPP Project No:12590

(State Significant Infrastructure SSI-48492458)

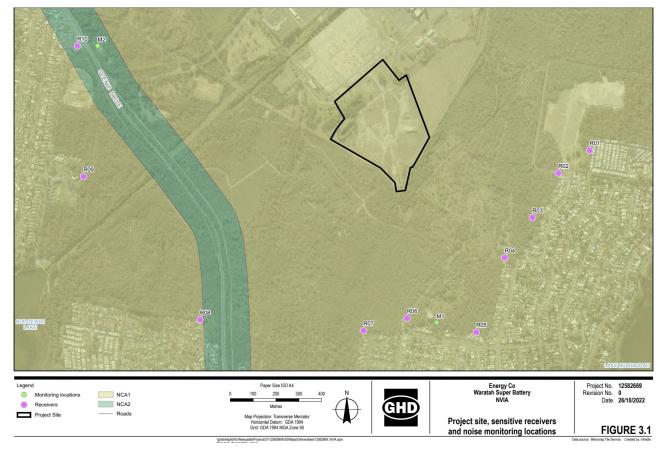


Figure 7 Sensitive Noise Receivers

Table 5 shows the noise management level and the predicted noise level for each construction scenario at each receiver location. Exceedances of between 1-2 dBA are predicted at R02, R06 and R07 during the site preparation scenario. The noise modelling assumes that the two loudest items of equipment in the scenario are operating at maximum capacity simultaneously at the closest distance between the construction works and the receiver.

Receiver	Noise Management Level	Site Preparation Equipment	Construction Equipment	Commissioning Equipment
R01	45	45	42	37
R02	45	47	44	39
R03	45	44	41	36
R04	45	42	39	34
R05	45	39	36	31
R06	45	47	44	39
R07	45	46	43	38
R08	58	36	33	28
R09	45	35	32	27
R10	58	41	38	33

Table 5 Predicted Noise Levels at Residential Receivers During Construction

12590-GE-PL-30001 1.2 Page **55** of **110**



Waratah Super Battery Energy Storage System

CPP Project No:12590

(State Significant Infrastructure SSI-48492458)

6.12.2 Modelled Vibration Impacts at Sensitive Receivers

Given the separation distances between the vibration generating activities (e.g. vibratory roller, excavator etc) during construction and receivers (e.g. residence, sensitive receiver building etc), no adverse vibration impacts are expected to occur.

6.12.3 CPP's Standard Management and Mitigation Measures

The Project / Site Manager will ensure that:

- All employees, contractors and subcontractors will receive an environmental induction. The induction must at least include:
 - All noise and vibration mitigation measures.
 - o Relevant licence and approval conditions.
 - Permissible hours of work.
 - o Any limitations on high noise generating activities.
 - Location of nearest sensitive receivers.
 - Construction employee parking areas.
 - o Designated loading/unloading areas and procedures.
 - Site opening/closing times (including deliveries).
 - o Environmental incident procedures.
- The noise levels of plant and equipment should have an operating sound power lower or similar to the levels presented in Table 4. The overall noise envelope for the equipment used is to be equal to or less than the total sound power level for the modelled construction scenario.
- Schedule noisy activities at less noise-sensitive times of day.
- Locate noisy equipment as far away as possible from sensitive receivers wherever possible.
- Select equipment that is likely to result in the lowest noise impact whilst still completing the task.
- Turn off all plant and equipment when not in use.
- Regular inspection and maintenance of equipment is undertaken to ensure it is in good working order and operating as per design performance requirements.
- Limit speeds on site during construction to ≤20 km/hr and the use of compression brakes when accessing the main site entrance.
- A health and surveillance assessment are conducted using the WHSE Emergency Requirements

 Assessment Form at the commencement of the project to determine noise and vibration requirements

 Including:
 - o Suitable noise suppression or abatement measures are implemented; or
 - Noise and vibration monitoring.

12590-GE-PL-30001 1.2 Page **56** of **110**



Waratah Super Battery Energy Storage System

CPP Project No:12590

(State Significant Infrastructure SSI-48492458)

6.12.3.1 Notification of Residents

- Adjacent residents shall be notified of construction activities by the Site Manager prior to commencement using Notification of Works.
- If construction on a Sunday or public holiday is required, then this shall be authorised by the Project Manager and restricted to between 8:00am and 6:00pm and the approval of the Planning Secretary sought.
- The principal and nearby landholders/residents shall be given three (3) days' notice of the pending work.

6.12.4 EIS Management and Mitigation Measures

6.12.4.1 Operating Hours

In accordance with the EIS Section 6.6.5 – Management and Mitigation Measures and Infrastructure Approval (SSI 48492458) - condition B12. The Site / Project Manager will ensure that construction activities can only be undertaken as per the below condition. Any works outside the below standard hours must be approved by the planning secretary:

- All construction, upgrading or decommissioning activities are to be undertaken between:
 - o 7 am to 6 pm Monday to Friday
 - o 8 am to 1 pm Saturdays and
 - o 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
 - o emergency work to avoid the loss of life, property and/or material harm to the environment.

Referenced Documents:

FRM-S142 WHSE Emergency Requirements Assessment FRM-G009 Notification of Works

6.13 Cultural Heritage Management

No previously recorded Aboriginal heritage sites/objects or statutory non-Aboriginal heritage listed items have been recorded within the project site.

6.13.1 CPP's Standard Management and Mitigation Measures

The Project / Site Manager will ensure that:

- Cultural heritage awareness induction training is undertaken by all personnel prior to commencing construction on-site.
- A cultural heritage assessment using the Pre-Clearing Assessment Survey prior to the commencement of the project.

12590-GE-PL-30001 1.2 Page **57** of **110**



Waratah Super Battery Energy Storage System

CPP Project No:12590

(State Significant Infrastructure SSI-48492458)

- As part of the assessment process client's documentation such as REF, EIA, EIS and other similar documentation will be reviewed and addressed.
- Areas of significance in relation to cultural heritage will be identified.
- controls required to maintain these areas will be identified.

6.13.1.1 Cultural Heritage Monitoring

Where Cultural Heritage Monitors are required their inspection points can be recorded on the Cultural and Heritage Monitoring Record with any findings recorded on the Cultural and Heritage Find Record.

6.13.2 CPP's Standard Management and Mitigation Measures

6.13.2.1 Discovery of Cultural Heritage Items

In the unlikely event that addition heritage site(s)/item(s) are encountered, the following Unexpected Finds Protocols will be implemented (Refer to Chance Finds Protocol B17 of Infrastructure Approval).

It is critical for the construction team to be aware that any suspected archaeological evidence must remain as it was found (in situ) until it is assessed by a qualified archaeologist, as per the below steps. These objects, where they are located and the material around them (referred to as the object's 'context') is critical for understanding their value to the Site and determining what may be located near to the area of the find. The object and its context are legally protected under the *NSW National Parks and Wildlife Act 1974* (aboriginal items or remains) or the NSW *Heritage Act 1977* (European historic heritage items or remains).

If any cultural heritage items are uncovered or discovered and /or any relics are uncovered or discovered, then work must cease immediately and notify the Site Manager and Project Manager who will advise of the correct procedure.

6.13.2.2 Discovery of Unexpected Suspected Archaeological Material – Site/item

An 'unexpected heritage item' means any unanticipated discovery of an actual or potential heritage item, for which CPP does not have approval to disturb or does not have a safeguard in place (apart from this procedure) to manage the disturbance.

These discoveries are categorised as either:

- Aboriginal objects (e.g. stone tool artefacts, shell middens, axe grinding grooves, pigment or engraved rock art, burials and scarred trees that are not a handicraft made for sale).
- Historic (non-Aboriginal) heritage items may include:
- Archaeological 'relics can include bottles, remnants of clothing, pottery, building materials and general refuse. A 'relic' is protected under the NSW Heritage Act 1977 and is defined as any deposit, object or material evidence that:
 - Relates to the settlement of the area that comprises New South Wales, not being Aboriginal settlement; and
 - Is of State or local heritage significance;
 - Other historic items (i.e. works, structures, buildings or movable objects). Examples include culverts, historic road formations, historic pavements, buried roads, retaining walls, tramlines, cisterns, fences, sheds, buildings and conduits.

12590-GE-PL-30001 1.2 Page **58** of **110**



Waratah Super Battery Energy Storage System

CPP Project No:12590

(State Significant Infrastructure SSI-48492458)

- Human skeletal remains. These remains can be classified as:
 - Reportable deaths
 - Aboriginal objects.
 - Relics

Step 1: The discoverer of the find(s) will notify machinery operators in the immediate vicinity of the Aboriginal object so that work can be halted immediately in the area of the find(s).

Step 2: The find will be reported to the site supervisor and the Principal/Project Manager.

Step 3: The area will be fenced off and a qualified heritage consultant/archaeologist consulted. The archaeologist will determine if the find(s) belong to a previously recorded site or potential archaeological deposit. If the location of the finds is consistent with a previous recording, construction work can proceed provided that any required mitigative actions defined in an approved management plan which addresses cultural heritage impacts have been completed.

Step 4: If the heritage consultant/archaeologist considers the new material uncovered constitutes:

- An archaeological 'relic' or a heritage item, NSW Heritage Council will be consulted, in accordance
 with Section 146 of the NSW Heritage Act 1977, to determine an appropriate course of action prior to
 the recommencement of work in the area of the item.
- An Aboriginal object, Heritage NSW, the Local Aboriginal Land Council and Registered Aboriginal party(ies) will be consulted.

The archaeologist (and Aboriginal Sites Officer, if relevant) may determine from the photographs that no site inspection is required because no archaeological constraint exists for the project (e.g. the item is not a 'relic', a 'heritage item' or an 'Aboriginal object'). Any such advice should be provided in writing.

CPP will also notify DPE.

Step 5: Subject to the archaeologist's assessment (and the Aboriginal Sites Officer's assessment, if relevant), work may recommence at a set distance from the item. This is to protect any other archaeological material that may exist in the vicinity, which has not yet been uncovered. Existing protective fencing established in Step 3 may need to be adjusted to reflect the extent of the newly assessed protective area. No works are to take place within this area once established.

Step 6: The archaeologist (and Aboriginal Sites Officer, if relevant) may provide advice after the site inspection and preliminary assessment that no archaeological constraint exists for the project (e.g. the item is not a 'relic', a 'heritage item' or an 'Aboriginal object'). Any such advice should be provided in writing.

Step 7: Where the item has been identified as a 'relic', 'heritage item' or an 'Aboriginal object' (i.e. AHIMS site card and lodged with AHIMS) the archaeologist should formally record the item.

Step 8: The archaeologist must prepare and submit to the CPP Representative an archaeological or heritage management plan (with input from the Aboriginal Sites Officer, where relevant) shortly after the site inspection. This plan is a brief overview of the following:

- (a) description of the feature,
- (b) historic context, if data is easily accessible,
- (c) likely significance,
- (d) heritage approval and regulatory notification requirements,
- (e) heritage reporting requirements,
- (f) stakeholder consultation requirements,
- (g) relevance to other project approvals and management plans etc.

12590-GE-PL-30001 1.2 Page **59** of **110**



Waratah Super Battery Energy Storage System

CPP Project No:12590

(State Significant Infrastructure SSI-48492458)

Step 9: The recording and assessment results will be reported to the Proponent/Project Manager and an appropriate management strategy will be developed and instigated, in consultation with Aboriginal representatives and DPE. The management of the find(s) may involve:

- a. The conduct of an archaeological salvage excavation with the aim of recovering a sufficient sample of the deposit to allow an analysis which is commensurate with the assessed potential of the deposit, or
- b. Collection of surface artefacts and any other required samples; and
- c. The temporary storage of recovered Aboriginal objects by the project archaeologist pending the completion of analysis.

Where required, seek additional specialist technical advice (such as a forensic or physical anthropologist to identify skeletal remains (see Discovery of Potential Human Skeletal Remains).

Step 10: In the event of the collection of Aboriginal artefacts from the project site:

a. The artefacts will be appropriately recorded and collected.

The location of the recovered artefacts will be recorded using a hand-held GPS, (if available and where necessary), or alternatively, by noting road project chainage intervals;

b. The collected artefacts will be placed in a clear-plastic bag and placed in temporary secure storage at the site office.

Each bag should have the following information marked on it using a broad nib permanent spirit pen:

- The site location.
- The date (day/month/year).
- The collector's name.
- Any other relevant information (such as a GPS reference or description of contents).
- Where necessary, the Proponent is responsible for the temporary and secure storage of recovered Aboriginal objects prior to their long-term management (refer step 13).

Step 11: Following the completion of those construction works in which Aboriginal objects may potentially be revealed, the project archaeologist will analyse the data from collected artefacts, together with any data and finds from salvage excavations, (conduct any radiocarbon dating determinations, where appropriate) and prepare a report.

Step 12: Review the archaeological or heritage management plan to confirm if regulator notification is required. Is notification required? If No implement archaeological or heritage management plan. If yes proceed to Step 13.

Step 13: Forward the signed notification letter to the relevant regulator (i.e. notification of relics must be given to the NSW Heritage Council, while notification for Aboriginal objects must be given to Heritage NSW.

Informal notification (via a phone call or email) to the regulator prior to sending the letter is appropriate. The archaeological management plan and the completed site recording form must be submitted with the notification letter. The Department will also be notified.

Step14: The post-analysis management of any recovered items will be the subject of discussion and a potential resolution(s) of the Aboriginal Focus Group, and liaison with and approval from DPE.

Step 15: Resume works once written clearance from CPP Environmental Representative and the archaeologist (and regulator, if required). Clearance would only be given once all archaeological excavation and/or heritage recommendations (where required) are complete. Resumption of project work must be in accordance with all relevant project/heritage approvals/determinations.

12590-GE-PL-30001 1.2 Page **60** of **110**



Waratah Super Battery Energy Storage System

CPP Project No:12590

(State Significant Infrastructure SSI-48492458)

Step 16: If required, ensure archaeological excavation/heritage reporting and other heritage approval conditions are completed in the required timeframes. This includes artefact retention repositories, conservation and/or disposal strategies.

6.13.2.3 Discovery of Potential Human Skeletal Remains

In the event that a potential burial site or potential human skeletal remains are exposed during construction (e.g. surface disturbance works) the procedure below is to be implemented in accordance with the Policy Directive – Exhumation of Human Remains (NSW Department of Health 2008), Skeletal Remains – Guidelines for the Management of Human Skeletal Remains under the NSW *Heritage Act 1977* (NSW Heritage Office 1998) and the Aboriginal Cultural Heritage Standards and Guidelines Kit (NPWS 1997):

- As soon as remains are exposed, work in this area is to halt in the immediate area to allow assessment and management (isolation of the site).
- Contact New South Wales Police Heritage NSW, NSW Heritage Council, Local Aboriginal Land Council and Registered Aboriginal Party(ies).
- If the remains are identified as forensic the area is deemed as crime scene.
- If the remains are identified as Aboriginal and not forensic, the Site is to be secured and the following protocol will be implemented.
- A physical or forensic anthropologist will inspect the remains in situ and make a determination of ancestry (Aboriginal or non-Aboriginal) and antiquity (pre-contact, historic or forensic).
- If the remains are non-Aboriginal (historical) remains and not forensic, the Site is to be secured and NSW Heritage Council is to be contacted.
- If the remains are Aboriginal and not forensic, the Site is to be secured and Heritage NSW, Local Aboriginal Land Council and Registered Aboriginal Party(ies) will be contacted.

The above process functions only to appropriately identify the remains and secure the Site. From this time, the management of the remains is to be determined through liaison with the appropriate stakeholders (New South Wales Police Force, forensic anthropologist, DPE, Heritage NSW, and registered Aboriginal parties etc.) and in accordance with the NSW *Public Health Act 1991*.

Approval from NSW Health, under the NSW *Public Health Act 1991*, will be required prior to removing/exhuming any skeletal remains. If removal/exhumation is required and approved, controlled excavation and removal by the Site archaeologists and other appropriate specialists (forensic anthropologist, New South Wales Police Force, as appropriate) will be undertaken in accordance with Heritage Council Skeletal Remains Guidelines and any requirements of the Heritage NSW and NSW Health.

If removal/exhumation is required, a Site-specific management policy for the removal of any potential human skeletal remains uncovered within the Site will be developed by an appropriately qualified third party, in consultation with a physical anthropologist, Heritage NSW and relevant stakeholder groups. The management policy will consider the issues detailed in the Heritage Council Skeletal Remains Guidelines. These issues include but are not limited to:

- Excavation issues including personnel who may need to be required, Occupational Health and Safety and recording.
- Access issues including limited access, security and public and professional participation.
- Management issues including management during excavation and analysis, publicity, interpretation, location of interim resting place (in consultation with relevant stakeholders), ongoing curation of recovered materials and professional access to data.

• Re-interment and commemoration.

12590-GE-PL-30001 1.2 Page **61** of **110**



Waratah Super Battery Energy Storage System

CPP Project No:12590

(State Significant Infrastructure SSI-48492458)

Cultural Heritage Find Record will be used as a record of their discovery.

Referenced Documents:

FRM-G008 Pre-Clearance Assessment Survey FRM-G010 Cultural Heritage Find Record FRM-G005 Cultural and Heritage Monitoring Record

6.13.3 EIS Management and Mitigation Measures

In accordance with the EIS Section 6.3.5 – Management and Mitigation Measures, the Site / Project Manager will ensure that:

- Cultural heritage awareness induction training for all personnel prior to commencing construction onsite is implemented.
- In the event of an unexpected archaeological/heritage item find during construction, works within the area would cease and a suitably qualified heritage professional would be engaged to assess the significance and management of the finds. An unanticipated discovery protocol would be implemented that details measures to be undertaken if heritage objects/sites not previously recorded in the project site are detected during clearing, ground disturbance, or construction activities. Example unanticipated discovery protocols are provided in Appendix J of the EIS.
- In the unlikely event that human remains are discovered during construction, all works would cease in the immediate vicinity. The discovery would be reported to Enviroline, Heritage NSW, the local police, and the RAPs. Further assessment would be undertaken to determine if the remains were Aboriginal or non-Aboriginal. An unanticipated discovery protocol would be implemented that details measures to be undertaken if suspected human skeletal remains are detected during clearing, ground disturbance, or construction activities. Example unanticipated discovery protocols are provided in Appendix J of the EIS.

6.14 Site Rehabilitation Management

6.14.1 CPP's Standard Management and Mitigation Measures

The Project / Site Manager will ensure that:

- As the work proceeds excess debris, materials, waste and used packing will be removed from site.
- At the completion of the project CPP will:
 - o Remove all site generated rubbish from the site and immediate surrounds.
 - Clean up all disturbed areas of site and remove spoil, all excess excavated material or unsuitable fill to a suitable tip.
 - o Grade, trim, level and compact all areas to specified levels and so as to shed water.
 - o Clean and remove all foreign material from drains, conduits, pits and cable trenches.
 - Remove all temporary portable buildings and surplus materials.
 - o Disconnect and remove construction power supply.
 - Remove any imported rubble from any hardstands or walkways.
 - o Scarify soil to relieve compaction with tines of grader or similar.

12590-GE-PL-30001 1.2 Page **62** of **110**



Waratah Super Battery Energy Storage System

CPP Project No:12590

(State Significant Infrastructure SSI-48492458)

- Re-spread topsoil in an even lay across the area to be rehabilitated.
- Apply shallow scarification of the topsoil to promote water point for better revegetation.
- Re-spread vegetation evenly over the rehabilitated area.

Referenced Documents:

FRM-G007 Rehabilitation Assessment

6.15 Plant and Equipment Management

The CPP Site Manager shall ensure all plant and equipment are fit for purpose and maintained in good working condition in addition to being:

- Inspected prior to mobilisation including verification of maintenance records.
- Serviced at regular maintenance intervals as detailed in the operations manual for the specific item of plant.
- Daily checks facilitated when in use.
- Any damaged plant or equipment shall be tagged out of service and quarantined.
- Operator training and competency is verified prior to use.

High pressured hydraulic equipment shall be:

- Operated in accordance with the manufacturer's instructions.
- Inspected prior to use including:
 - condition of pressure plugs
 - dates where applicable
 - pressure hoses and connections

6.16 Visual Impact Management

Visual impacts are predicted to be negligible during construction of the project.

6.16.1.1 CPP's Standard Management and Mitigation Measures

The Project / Site Manager will:

- Minimise the off-site visual and lighting impacts of the development.
- Not mount any advertising signs or logos on site, except where this is required for identification or safety purposes.
- Control dust emissions in response to visual cues.
- Minimise night time security lighting to the maximum extent possible (i.e. manually operated safety lighting at the main component locations).
- Rehabilitate progressively or immediately post construction and decommissioning areas where soils disturbance has occurred.
- 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.

12590-GE-PL-30001_1.2 Page **63** of **110**



Waratah Super Battery Energy Storage System

CPP Project No:12590

(State Significant Infrastructure SSI-48492458)

 Complies with Australian Standard AS4282 (INT) 1997 – Control of Obtrusive Effects of Outdoor Lighting, or its latest version.

6.16.1.2 EIS Management and Mitigation Measures

In accordance with the EIS Section 6.5.5 – Management and Mitigation Measures, the Site / Project Manager will:

• Ensure the visual appearance of all ancillary infrastructure (including paint colours) blends in as far as possible with the surrounding landscape.

6.17 Bushfire Management

The following construction activities were identified as potential fire ignition sources:

- On-site hot works.
- Sparks from metal on metal or rock friction during ground engaging machinery operation.
- Discarded cigarette butts from smokers.

6.17.1 EIS Management and Mitigation Measures

6.17.1.1 On-site Hot Works

In accordance with the EIS Section 6.10.6– Management and Mitigation Measures, the Site / Project Manager will:

- Prohibit all hot works on days of Extreme and Catastrophic Fire Danger.
- At all other times ensure:
 - o A Safe Work Method Statement (SWMS) is completed for all hot works.
 - A hot work permit is issued to all hot work.
 - All fire prevention measures (fuel free clearance zone around hot work site; wetting down measures and spark guards) specified in the JSA and/or hot work permit are implemented.
 - Fire extinguishers or other fire response apparatus required by the SWMS and/or hot work permit are present at the work site.
 - Upon completion of hot works, appropriate checks to be undertaken to ensure no fire or smouldering material remains.

6.17.1.2 Sparks From Metal on Metal or Rock Friction

The Project / Site Manager will:

- Prohibit all hot works on days of Extreme and Catastrophic Fire Danger.
- Ensure grass fire ignition prevention is included in the SWMS for all earthmoving and hole boring works.
- Ensure fire extinguisher(s) are carried on all earthmoving machinery and present at all hole boring operations.

12590-GE-PL-30001 1.2 Page **64** of **110**

CONSOLIDATED POWER PROJECTS A QUANTA SERVICES COMPANY

Construction Environmental Management Plan

Waratah Super Battery Energy Storage System

CPP Project No:12590

(State Significant Infrastructure SSI-48492458)

6.17.1.3 Discarded Cigarette Butts

No smoking on project site except in designated smoking areas at the construction office site or laydown areas.

7 LEGAL AND OTHER REQUIREMENTS

- CPP conforms with relevant state legislation.
- CPP's legal requirements and obligations are identified and communicated through SWMS, EMP, the Legal Register.
- The SQE Manager monitors changes to legislation and advises Project Managers via emails or bulletins and the update of CPP System requirements.

All work will comply with applicable legislation, Codes of Practice and Australian Standards. The applicable significant legislation includes:

Environment Legislation			
Central Coast Local Environmental Plan 2022 (Central Coast LEP)	State Environmental Planning Policy (Transport and Infrastructure) 2021 (Transport and Infrastructure SEPP)		
Coal Mine Subsidence Compensation Act 2017 (NSW)	Water Management Act 2000 (NSW)		
Fisheries Management Act 1994 (NSW)	Rural Fires Act 1997 (NSW)		
Environment Protection and Biodiversity Conservation Act 1999 (Commonwealth)	National Parks and Wildlife Act 1974 (NSW)		
Environmental Planning and Assessment Act 1979 (NSW)	Heritage Act 1977 (NSW)		
Environmental Planning and Assessment Regulation 2021 (NSW)	Protection of the Environment Operations Act 1997 (NSW)		
Contaminated Land Management Act 1997 (NSW)	Building Code of Australia		
Biodiversity Conservation Act 2016 (NSW)	Interim Construction Noise Guideline (Department of Environment and Climate Change 2009)		
Biosecurity Act 2015 (NSW)	Mining Act 1992 (NSW)		
Petroleum (Onshore) Act 1991 (NSW)	Pipelines Act 1967 (NSW)		
Roads Act 1993 (NSW)			

Table 6 Environmental Legislation

12590-GE-PL-30001 1.2 Page **65** of **110**



Waratah Super Battery Energy Storage System

CPP Project No:12590

(State Significant Infrastructure SSI-48492458)

WHS Codes of Practice			
First Aid in the Workplace	Managing the risks of plant in the workplace		
Excavation Work	Managing the Work Environment and Facilities		
How to Manage and Control Asbestos in the Workplace	Work Health and Safety Consultation, Co-operation and Co-ordination		
How to Safely Remove Asbestos	Managing Noise and Preventing Hearing Loss at Work		
Labelling of Workplace Hazardous Chemicals	Managing Risks of Hazardous Chemicals in the Workplace		

Table 7 Codes of Practice

Reference document(s):

SOP-Q015 Legislative Review

8 OBJECTIVES AND TARGETS

8.1 Key Performance Indicators (KPIs) and Performance Reporting

- CPP is committed to setting a standard of environmental excellence for this project and a methodology for achieving it.
- To measure the implementation of this standard, CPP will utilise both Lead (inputs and actions) and Lag data (events) as detailed below.
- The Site Manager shall address progress of lead and lag indicator targets during the Site Managers monthly report which in turn will be a key item discussed at the project monthly meetings.
- The Project Manager will develop strategies at these meetings to achieve these targets if targets are not being achieved.

8.2 Lead Indicators

The project's leading indicators are detailed in Table 8.

Lead Indicator	Target	KPI	Responsibility
Mobilisation Audit	Once within 8 weeks of project commencing on site	90% Compliance	QA Coordinator
Environmental Management Plan Audit	Once within 60 days of the project commencing	90% Compliance	QA Coordinator
Environmental Management Plan Audit	Risk based commencing after Initial Audit as determined by the QA Coordinator and Project Manager	90% Compliance	QA Coordinator
Sub-Contractor Compliance Audits	Aligned with CPP WHSEQ Audits	90% Compliance	QA Coordinator
Pre-Start Meetings	1 per day worked	100% Compliance	Site Manager
Toolbox Meetings	1 per week	100% Compliance	Site Manager
Visits by Project Manager	1 per month	100% Compliance	Project Manager
WHSE Observation's	1 per leader, per week	100% Compliance	Site Manager
Hazards Reported	5 per month	100% Compliance	Site Manager
Project Risk Register Reviewed	At least once per month		Site Manager
Maintain Legislative Compliance	No prosecutions, breaches, fines or notices		Site Manager

Table 8 Project Leading Indicators

12590-GE-PL-30001 1.2 Page **66** of **110**



Waratah Super Battery Energy Storage System

CPP Project No:12590

(State Significant Infrastructure SSI-48492458)

8.3 Lag Indicators

The projects lagging indicators are detailed in Table 9.

Lag Indicator	Target	KPI	Responsibility
Number of Near Miss Events (NM)		100% Reported	Site Manager
Number of Report Only Events (RO)	Zero Harm	<= 1 per project	Site Manager
Number of Environmental Events (ENV)	Zero mann	0	Site Manager
Number of OFIs for non-conformance & issues (OFI)		<= 2 per month	SQE Manager/Site Manager

Table 9 Lag Indicators

9 IMPLEMENTATION & OPERATION

9.1 Organisation Structure

The organisational structure will be reviewed on a regular basis to ensure a capacity for meeting Environmental Policy, EMP and any regulatory requirements.

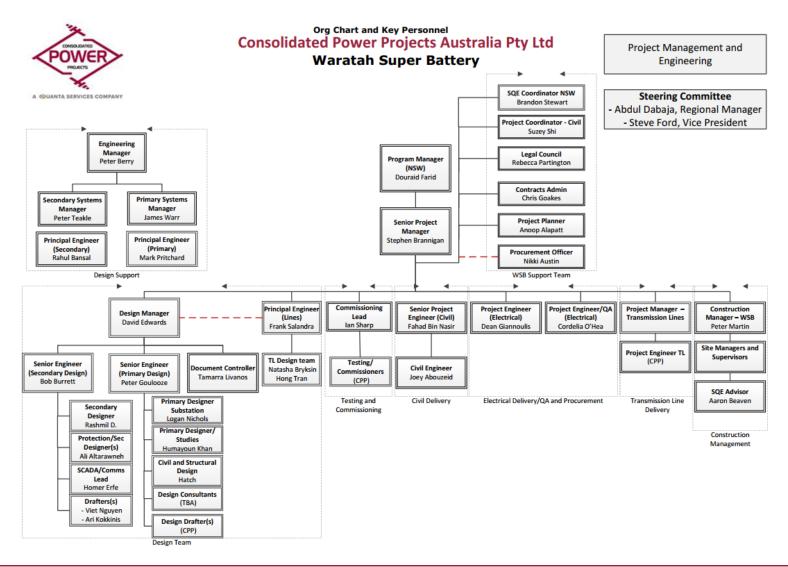
10 RESOURCES, ROLES, RESPONSIBILITIES AND AUTHORITY - SPECIFIC ENVIRONMENTAL DUTIES

- Roles and responsibilities for achieving Environmental outcomes for this project are listed in the following sections.
- Support roles and responsibilities specified within the procedures are explained in this Management Plan.
- An organisation chart for the project is shown in Figure 8.

12590-GE-PL-30001 1.2 Page **67** of **110**

Waratah Super Battery Energy Storage System CPP Project No: 12590

(State Significant Infrastructure SSI-48492458)



12590-GE-PL-30001 1.2 Page **68** of **110**

Waratah Super Battery Energy Storage System CPP Project No: 12590

(State Significant Infrastructure SSI-48492458)

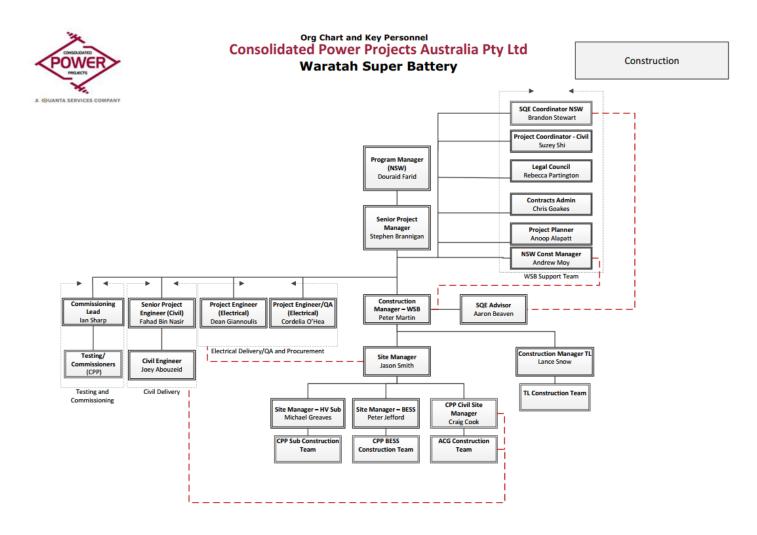


Figure 8 Organisation Chart

12590-GE-PL-30001_1.2 Page **69** of **110**



Waratah Super Battery Energy Storage System CPP Project No: 12590

(State Significant Infrastructure SSI-48492458)

10.1 Project Manager

The Project Manager is responsible for ensuring that this Management Plan is fully implemented.

Without limiting the role of the Project Manager, he/she has responsibility for:

- The overall management of the project.
- The first point of contact for any issues or discrepancies arising during the project.
- Maintaining the progress and mutual interaction of the associated and interested parties in such a way that reduces the risk of overall failure.

10.2 Site Manager

The Site Manager is responsible for ensuring that the requirements within this Management Plan are fulfilled.

Without limiting the role of the Site Manager, he/she is responsible for:

- The day-to-day management of the project.
- Managing any problems encountered on-site.
- Managing the quality, health and safety checks and environmental aspects of the project.
- Being responsible for pre-site items.
- Managing the communications between all parties involved in the on-site development of the project.

10.3 SQE Manager

The SQE Manager reports for the board and stakeholders and is responsible for:

- Ensuring that the WHSEQ System is implemented according to organisational requirements.
- Maintaining a high level of WHSEQ compliance and awareness amongst all personnel.
- Ensuring all staff are familiar with the requirements of the management system.
- Ensuring that an effective system of regular review of environmental documentation and procedures is conducted to ensure legislative compliance and duty of care obligation is upheld.

10.4 Site Safety Quality Environmental (SQE) Advisor

Responsible to the SQE Manager the Site SQE Advisor is responsible for:

- Ensuring that the WHSEQ Management System is implemented on CPP sites according to organisational requirements.
- Maintaining a high level of WHSEQ compliance and awareness amongst all personnel.
- Managing all aspects of WHS, non-conformances, events, hazard identification and event reporting.

Ensuring site compliance with CPP WHS System.

12590-GE-PL-30001 1.2 Page **70** of **110**

Waratah Super Battery Energy Storage System CPP Project No: 12590

(State Significant Infrastructure SSI-48492458)

10.5 Employees

Without limiting the role of employees, they are responsible for:

- Ensuring that their actions do not negatively impact the environment.
- Attending all required WHSE meetings, toolboxes and SWMS reviews as required.
- Reporting any hazards or risks.
- Undertaking machinery checks to minimise risk of onsite contamination.
- Participating where necessary in event investigations.

10.6 Subcontractors

Contractor or subcontractors are responsible for:

- Ensuring that Contractors Management system meet or exceed CPP standards.
- Providing evidence to CPP to show that they have adequate supervision and control of employees and their intended activities on the project site.
- Providing records, licenses, tickets and verification of competencies to CPP on request and prior to commencement of work onsite.
- Implement control measures for the risks associated with their tasks as shown in the Project Risk Register.
- Report any changes or improvements that may affect hazard and risk control measures for activities that could be added to the Risk Register for consideration.
- Comply with all project requirements.

10.6.1 Subcontractors Reporting Requirements

Event reporting Time frames:		
Head's Up Notification	Within 2 Hours of being informed of the Event	
Written (Preliminary) Event Report	Within 24 Hours of the event occurring	
Completed Event Investigation Report Cat 3 <	Within 72 Hours of the event occurring	
Initial ICAM Investigation Report Cat 4 >	Within 5 days of the event occurring	
Completed ICAM Investigation Report Cat 4 >	Within 20 days of the event occurring - Follow directions from CPP	

Table 10 Event Reporting Requirements and Timeframes for Sub-Contractors

12590-GE-PL-30001 1.2 Page 71 of 110



Waratah Super Battery Energy Storage System CPP Project No: 12590

(State Significant Infrastructure SSI-48492458)

Corrective Action Time Frames:			
CAT 1	Within 1 month		
CAT 2	Within 2 Weeks		
CAT 3	Within 72 Hours		
CAT 4	Before End of Shift		
CAT 5	Immediately		

Table 11 Corrective Action Reporting Requirements and Timeframes for Sub-Contractors

Reference Document(s):

GEN-C010 Subcontractor Project Pack SOP-S118 Development of SWMS TMP-S025 SWMS Template FRM-S131 SWMS Review Form

11 COMMUNICATION

CPP has systems and processes in place to ensure clear communication and consultation with workers and clients to facilitate positive input and participation in quality matters relating to the Project.

11.1 Consultation

Consultation between all workers will be facilitated during the development, implementation and regular review of:

- Plans.
- Policies.
- Procedures.
- SWMS.
- Pre-starts.
- Toolboxes.

11.2 Internal Communication

- Internal meetings will be held for the project and will involve Designers, Clients Representatives, CPP
 Project Manager, Site Manager, Subcontractors Site Manager/s and where possible Site SQE Advisor.
- CPP have the following regular internal communication sessions:
 - o Daily pre-starts.
 - Weekly toolbox meetings.
 - Other meeting / communication sessions as required.

Reference Document(s):

FRM-S027 Daily Pre-Start FRM-S028 Toolbox Meeting Agenda FRM-Q004 Meeting Agenda and Minutes

12590-GE-PL-30001 1.2 Page **72** of **110**

Waratah Super Battery Energy Storage System

CPP Project No: 12590 (State Significant Infrastructure SSI-48492458)

11.3 External Communication

External communication will be:

- In accordance with the contractual requirements or as agreed between CPP and the client.
- Where queries are raised, advice will be sort first.
- CPP will not instigate discussions with external interested parties except where legislation requires it.

Parties that may have an interest in issues relating to the quality aspects of the project are:

- Safe Work / Work Safe.
- Utility Network Owners (e.g. Electricity, Water Gas, Telecom etc.).
- Local Councils.
- Road Authorities.
- Local community and community groups.
- Interest groups.
- Other stakeholders.

A summary of the key concerns raised during the community engagement for the EIS is shown in Table 12.

Event reporting Time	frames:
Transport	The main increase in traffic would occur over the 18-month construction phase generating up to 120 light vehicle movements per day, 65 heavy vehicles movements per day, and a total of 12 over-dimensional vehicle movements.
Noise & Vibration	Noise has the potential to impact on neighbouring communities
Biodiversity	Potential impacts on animals crossing local roads
Hazards	Concerns regarding electromagnetic fields (EMF) from the project.
Fire and hazard	Fire emanating from the battery units and bushfire protection
Land and water	Contamination, groundwater, subsidence
Access	Maintaining access for critical fuel delivery to the Colongra Power Plant

Table 12 Summary of issues raised during community engagement.

11.4 External Interactions

- Some projects may have CPP workers interacting with personnel NOT under our control.
- This may occur on projects where we are operating on a site with ongoing operations.
- On projects with external interactions, CPP will consult / liaise with the client or person with control of
 the external work that may affect/interact with our own operations to ensure the risks are identified and
 controls implemented to ensure the safety of external workers and our own.
- Identified risks will be included in the risk register, discussed at pre-start meetings and when relevant included in SWMS.

11.5 Landowner Communication

When CPP is in possession of site and a Landowner wants access to their land, they should contact the Site Manager in advance to ensure they will not be adversely impacted by planned works or vice versa. A landholder may be required to undertake an induction or be escorted to ensure their safety when accessing an area of their land that CPP is operating in.

12590-GE-PL-30001 1.2 Page 73 of 110



Waratah Super Battery Energy Storage System CPP Project No: 12590

(State Significant Infrastructure SSI-48492458)

Where landowners are conducting works on the site, they will be fully inducted otherwise a visitor's induction will suffice with a full-time escort whilst onsite.

- All arrangements for CPP to gain access to public, or privately-owned land and any landholder specific arrangements will be established between the landholder and the client.
- CPP will record any special landholder arrangements in the WHSE Register and review the register prior to entering a landholder's property to ensure any specific arrangements are identified and implemented.
- Landowners will be notified 3 days prior to the commencement of any works that are on their land, and any works adjacent their land that may impact on the use of their land or property;
- CPP Staff will maintain good relationships with landholders, be courteous, polite and respectful;
- Leave all gates as you find them;
- Report any damage to stock fences immediately to your Site Manager;
- Refer any landholder issues to your supervisor or Site Manager.
- CPP will not enter into any landholder arrangements that differ from the client arrangement unless they are in writing and approved by the Project Manager and / or Client.

Reference Document(s):

TMP-Q007 Letter Template

11.6 Incident Investigation

An incident is defined under the COC as a set of circumstances that causes or threatens to cause material harm to the environment.

Material harm is defined under the COC as harm that:

- 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.

A non-compliance is an occurrence, set of circumstances or development that is a breach of the COC's but is not an incident.

Once it has been determined that an incident or non-compliance has occurred and classified accordingly as per SOP-001 Event Reporting and Investigation Process, Section 16.1.1, Section 16.1.2 and Section 16.1.3 details the reporting requirements for the incident or non-compliance.

CPP's incident investigation process is to be followed as shown in Figure 11.6.1.1 with findings to be provided to Akaysha.

12590-GE-PL-30001 1.2 Page **74** of **110**

(State Significant Infrastructure SSI-48492458)

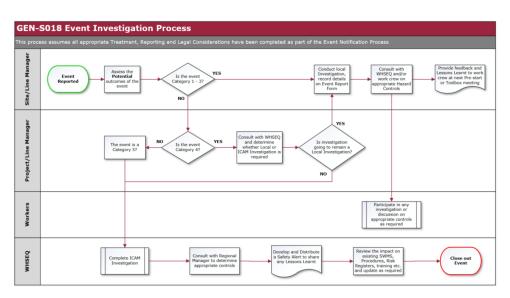


Figure 11.6.1.1 CPP event investigation process

11.6.1 Inductions

- The Project Manager shall:
 - ensure that a site-specific induction including all relevant safety aspects identified in the project risk register is developed.
 - ensure that all employees, contractor employees and visitors to the site attend an induction prior to commencing works.
- Records of all inductions (signed form and copies of licenses) shall be retained for the life of the project and recorded on the site induction register.
- All employees, contractors and sub-contractors will have completed the generic WHS General Induction for Construction Work.

11.6.2 Site Attendance

- All personnel are required to attend the Principal Contractor's induction.
- All employees, subcontractors and visitors will be required to sign in and out of attendance registers.

11.6.3 Management of Visitors

- A Visitor to the site is someone that will:
 - not be a frequent visitor;
 - o not be performing work.
- Visitors will be given a visitor's induction and must be accompanied at all times by a fully inducted person.
- Visitors are required to provide their own safety boots and all other minimum PPE requirements may be loaned if the visitor does not have safety vest, safety glasses and hard hat.

12590-GE-PL-30001 1.2 Page **75** of **110**

Waratah Super Battery Energy Storage System

CPP Project No: 12590 (State Significant Infrastructure SSI-48492458)

11.6.4 Management of Delivery Drivers

- A delivery driver is someone that is:
 - o delivering or receiving items during the project construction;
 - o not performing any other work other than delivering or picking up materials; and
 - o not a frequent delivery driver to site;
 - delivery drivers to the site will be required to sign a site attendance register on arrival to site and sign out on departure;
 - o provision will be made for deliveries to be made in a number of ways.

Delivery	Conditions		
To Main Compound Area	Delivery Driver Induction		
	Risk Assessment - SWMS		
	PPE		
Escorted to Unloading Area	Delivery Driver Induction		
	Escort is inducted		
	Communication		
	Risk Assessment - SWMS		
	PPE		
Regular Delivery	Site induction		
	Risk Assessment - SWMS		
	Report to office		
	Receive instructions / permissions		
	PPE		

Table 13 Delivery Driver Requirements

11.6.5 Working in Sub-Stations and Switchyards

- All work inside or on sub-stations and switchyards must be undertaken in accordance with the relevant asset owner's requirements.
- Metal ladders and measuring tapes will not be used in switchyards and substations.
- In addition:
 - o Do not carry any object above shoulder height;
 - A minimum of two people will carry long objects (below shoulder height).

Reference document(s):

FRM-S136 Project Induction Declaration REG-S009 WHS Registers/QEST Portal FRM-S139 Project Induction – Visitor/QEST Portal TMP-S135 Site Specific Induction Template FRM-S161 Delivery Driver Induction/QEST Portal

12590-GE-PL-30001 1.2 Page **76** of **110**



Waratah Super Battery Energy Storage System CPP Project No: 12590

(State Significant Infrastructure SSI-48492458)

11.7 Project Kick-Off Meetings

- Prior to works commencing on the Project, CPP will hold a Kick-Off Meeting with subcontractors and where required clients and client representatives.
- The Kick-Off Meeting is to convey all relevant project requirements, procedures and related work instructions to all relevant personnel.
- The Kick-Off Meeting will also be used as a forum to discuss the Project Risk Register to ensure all parties understand the identified risks and mitigation strategies which will be implemented.
- The Project Kick-Off Meeting must cover as a minimum;
 - o site inductions;
 - o project specific hazards;
 - high risk construction activities;
 - o site coordination;
 - permits to work;
 - vehicle management;
 - event management;
 - o emergency management.

11.8 Daily Pre-Start Meetings

Pre-Start Meetings will be held daily, they are led by a Site Manager, Supervisor, and/or Site SQE Advisor.

Daily pre-starts will cover as a minimum:

- Safety issues (hazards, permits, equipment, interactions, deliveries) that are anticipated or identified for the day's work;
- Advising and discussing with personnel the work planned for the day;
- Advising personnel which Supervisor is responsible for each part of the work;
- Providing a forum at which personnel can discuss work related issues that have not been resolved elsewhere;
- Reviewing issues from the previous day.

Reference document(s):

FRM-S027 Daily Pre-Start

11.9 Toolbox Meetings

Toolbox Meetings will be held weekly, led by a Site Manager, Supervisor, and/or Site SQE Advisor and shall include the following items:

- Work related issues that have not been resolved elsewhere;
- Action items to be recorded and followed up at the subsequent meeting;
- Safety first, alerts and other safety information is discussed;
- To periodically revise and reinforce emergency procedures; and
- Provide a short information/training session.

12590-GE-PL-30001 1.2 Page 77 of 110



Waratah Super Battery Energy Storage System CPP Project No: 12590

(State Significant Infrastructure SSI-48492458)

Reference document(s):

FRM-S028 Toolbox Meeting Agenda

11.10 Dispute Resolution

This process will be explained in the project site induction.

Where a workplace WHSE problem arises:

- The matter will be brought to the attention of the CPP Site Manager;
- The Site Manager will organise to have the matter rectified immediately;
- If this is not possible, the Site Manager will arrange for all employees affected by the issue to be relocated until the necessary corrective actions are complete.
- Should a dispute arise over an environmental issue:
 - An immediate inspection of the disputed area will be conducted by the Project Manager, Site Manager, Site SQE Advisor and/or the SQE Manager;
 - Where the dispute involves a subcontractor, their Project and/or Site Manager will also be present.
- The resolution of environmental issues should:
 - First be raised and discussed with the relevant supervisor;
 - If agreement cannot be reached on the level of risk and required actions the issues should be referred in the first instance to the Site SQE Advisor;
 - o The issue will continue to be escalated until an outcome satisfactory to all parties can be reached;
 - o If no agreement can be reached an independent assessment of the issue will be undertaken.
- Where there remains any disagreement in relation to resolving the dispute, the Project Manager may refer the matter to the local statutory authority.

11.11 Work Health Safety and Environmental Representatives

- A worker may ask CPP or their subcontractors for the election of a WHSE representative to represent them on WHSE matters.
- If a worker makes this request, work groups must be established to facilitate this election. This process requires CPP and their workers to negotiate and agree on the formation of work groups.
- A work group may operate across multiple businesses if all parties agree to such an arrangement.

Reference Documents:

FRM-S103 Consultation and Communication Election

11.12 Complaints

Any complaints received shall be:

- Treated with respect and reported to the Site Manager immediately;
- The Site Manager will immediately notify the client's representative verbally;
- It will be recorded on an Opportunity for Improvement form (OFI);
- Logged on the Opportunity for Improvement Register.

12590-GE-PL-30001 1.2 Page 78 of 110



Waratah Super Battery Energy Storage System CPP Project No: 12590

(State Significant Infrastructure SSI-48492458)

CPP's Project Manager shall:

- Provide an initial response to the complainant within three (3) days of receipt of the complaint; and
- Undertake all practical measures to modify the activity causing the impacts.
- Manage all complaints in accordance with EMS Section 5.4 Complaints Handling (Appendix A).

For complaints regarding significant matters, a detailed response shall be provided to the complainant within **fourteen (14) working days** following receipt of the complaint.

Reference document(s):

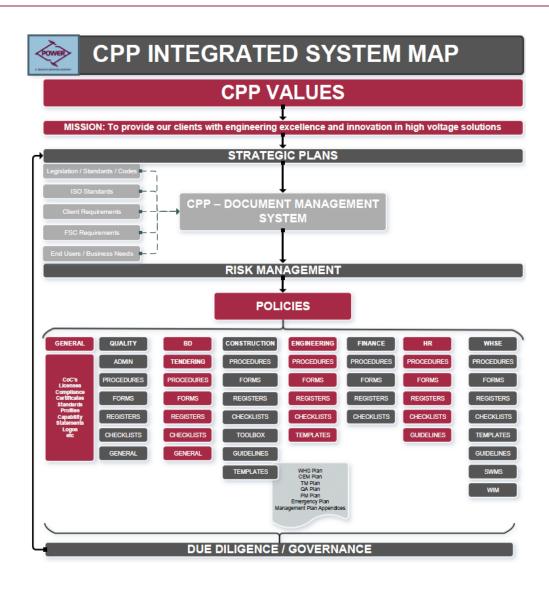
SOP-S001 Event Reporting and Investigation Procedure FRM-S001 Event Notification Report Form/QEST Portal FRM-S002 Event ICAM Investigation Form FRM-S003 Event Witness Form REG-S001 WHSE Incident Reporting Register/QEST Portal FRM-Q012 Opportunity for Improvement Form/QEST Portal REG-Q005 Opportunity for Improvement Register/QEST Portal

12 DOCUMENT AND DATA CONTROL

- CPP maintains a Company Management System that identifies the procedures used by the Company and their application throughout the organisation.
- This system incorporates policies, procedures and associated documentation that is implemented on all projects and used throughout the organisation and complies with AS/NZS 4801.
- CPP maintains certification for the following systems, which are externally audited by a JAS/ANZ accredited company:
 - Quality ISO 9001;
 - Safety AS/NZS 4801;
 - Environment AS/NZS 14001.
- Overview of the CPP Management System Framework:

12590-GE-PL-30001 1.2 Page **79** of **110**

(State Significant Infrastructure SSI-48492458)



12.1 Project-Specific Documentation

The project will require the development of and implementation of several site-specific plans/ procedures to cater for and control construction issues.

The following plans shall be produced for the project:

- Project Management Plan;
- Quality Management Plan;
- WHS Management Plan;
- Environmental Management System;
- Traffic Management Plan;
- Biodiversity Management Plan;
- Flora and Fauna Management Plan;
- Contamination Management Plan;
- Erosion and Sediment Control Plan;

12590-GE-PL-30001 1.2 Page **80** of **110**



Waratah Super Battery Energy Storage System

CPP Project No: 12590

(State Significant Infrastructure SSI-48492458)

- Emergency Management Plan;
- Fire Safety Study;
- All plans, procedures, safe work method statements and hazard and risk assessments shall be prepared and reviewed as required by senior personnel.

The Consolidated Power Project Manager or Principal Contractor will arrange for the workshops to be held; the Principal / Client will be invited to attend.

The Risk Workshop must cover as a minimum:

- Environmental aspects and impacts;
- Site inductions;
- Project specific hazards;
- High risk construction activities;
- Site coordination;
- Permits to work;
- Vehicle management;
- Event management;
- Emergency management.

The outcomes from the Workshops will be included in the Project Risk Register and distributed to all workshop attendees and the project team prior to mobilisation.

- The Project Risk Register:
 - o will be accessible to all personnel, preferably by being displayed in the site office;
 - will also be made available to Subcontractors who may have to prepare safe work method statements, assessments and control measures for their activities;
 - o is a live document and is to be maintained throughout the life of the project;
 - will be used to identify a review for each specific stage of construction (e.g. Civil construction, electrical, trenching);
 - will be used to record the identified hazards, risk assessment and risk control methods, risk owners and due dates.
- The Project Risk Register will contain the following:
 - a description of the tasks and hazards;
 - o provide an unmitigated risk score that categorises those risks in relation to likelihood of occurrence and potential consequence (including regulatory and legal consequences);
 - contain control measures to eliminate or minimize likelihood and consequence of each risk;
 - identify the person responsible for monitoring and implementing mitigation plans; and
 - o include a mitigated risk score.

13 EMERGENCY PREPAREDNESS

• A risk assessment of the types of emergencies for this project must be conducted and managed as part of the project risk register.

12590-GE-PL-30001 1.2 Page 81 of 110



Waratah Super Battery Energy Storage System CPP Project No: 12590

(State Significant Infrastructure SSI-48492458)

- Emergency Management Plan must be developed to capture the types of emergencies identified in the Project Risk Register.
- Consideration MUST be given to how the emergency plan interacts with 3rd parties or asset owners, if working on an operational or otherwise occupied site. (e.g. conducting work within a live sub-station).
- Plans will highlight the types and nature of emergencies, emergency contacts, procedures;
- Frequency of project emergency drills is **3** months, but the intervals between tests may be reduced depending on type of emergency and duties for people specified in the plan;
- The emergency plan of a project **MUST** be tested within the first **8** weeks from when a project commences and then re-tested at least every three months.
- Emergency Management Plans **MUST** be communicated to all project personnel during the induction and placed on notice boards.

Reference Document(s)

TMP-C066 Emergency Management Plan FRM-S115 Emergency Response Review REG-S031 Master Risk Register SOP-S001 Event Reporting and Investigation 12590-GE-PL-30003 - BEEP

14 FIRE PROTECTION

- Site Manager shall:
 - supply, install, and maintain portable fire extinguishers in tool containers, site offices, plant,
 equipment, vehicles, construction areas and flammable storage area and other areas as required.
 This information will be documented in the WHSE Emergency Requirements Assessment;
 - ensure that all workers are instructed in the basic inspection, safe use and operation of all relevant fire extinguisher types;
 - maintain an onsite register of inspection and maintenance of all fire extinguishers for audit purposes;
 - ensure sufficient supply and regular maintenance of fire extinguishers is carried out in accordance with the Australian Standards;
 - advise the local council fire station when works are commenced on site and shall ensure that on days of total fire bans that either no naked flames or devices that could create a spark shall be used or if required to ensure that local council approval has been obtained and that the requirements of the permit are abided by.
- To assess your level of risk on total fire ban and fire danger period days, actions to take, and what activities are and are not permitted, it is important to understand the Fire Danger Rating.
- The rating is forecast by the Bureau of Meteorology each day and is an early indicator of the potential danger, should a bushfire start.

12590-GE-PL-30001 1.2 Page 82 of 110



Waratah Super Battery Energy Storage System CPP Project No: 12590

(State Significant Infrastructure SSI-48492458)

FIRE DANGER RATING vs ALLOWED SITE WORKS MATRIX						
FIRE RATING	WHAT DOES IT MEAN?	WHAT SHOULD I DO?	SITE REQUIREMENTS			
CATASTROPHIC TOTAL FIRE BAN DAY	 These are the most dangerous conditions for a fire. Your life may depend on the decisions you make, even before there is a fire. Stay safe by going to a safer location early in the morning or the night before. Structures may not be able to withstand fires in these conditions - you may not be able to leave, and help may not be available 	 YOU NEED TO ACT NOW For your survival, leaving early is the only option. Put your survival first and leave bushfire prone areas the night before or early in the day - this is your safest option. Act immediately - do not wait and see. Decide when you will leave, where you will go, how you will get there and when you will return. Avoid forested areas, thick bush or long, dry grass; Prepare, know, and practice a survival plan 	YOU WILL BE ADVISED NOT TO ATTEND SITE FOR THE DAY			
EXTREME TOTAL FIRE BAN DAY	 These are dangerous fire conditions. Check your bushfire plan and ensure that the site is fire ready. If a fire starts, take immediate action. If you are not prepared to the highest level, go to a safer location well before the fire impacts the site. Reconsider travel through bushfire risk areas 	YOU NEED TO GET READY TO ACT • Leaving early is the safest option for your survival. • Only stay if you are prepared to the highest level. This means your building needs to have been constructed to bushfire protection levels e.g.; enclosed eaves, covers over external air conditioners, metal flyscreens etc. • You must be well prepared and able to actively defend your building if a fire starts. This means you have the right training, equipment, and resources to put out fires around the building e.g. enough water supply, petrol / diesel portable pump, generator, protective clothing etc. • If you are not prepared to the highest level, leaving bushfire risk areas early is your safest option.	HOT WORKS PERMITS SUSPENDED Trenching only on stripped ground No steel tracks in cropped areas beside trenches and around tower hardstands. Water cart / Water trailer and dedicated fire spotter must be in place at all times. Fire spotter to have contact with workgroup at all times, mobile or handheld. No stripping of ground unless a fire has started and needs to be controlled. No hot works or hot works type maintenance on machines in fields, on hardstands or within substation.			
HIGH	 There is a heightened risk - be alert for fires in your area. Decide what you will do if a fire starts. If a fire starts, your life may be at risk. The safest option is to avoid bushfire risk areas 	YOU NEED TO BE AWARE • Well prepared buildings that are actively defended can provide safety. This means you have the right training, equipment, and resources to put out fires around your building e.g. enough water supply, petrol / diesel portable pump, generator, protective clothing etc but only stay if you are physically and mentally	 Trenching only on stripped ground No steel tracks in cropped areas beside trenches and around tower hardstands. Water cart / Water Trailer and dedicated fire spotter must be in place at all times. 			

12590-GE-PL-30001_1.2 Page **83** of **110**





(State Significant Infrastructure SSI-48492458)

FIRE DANGER RATING vs ALLOWED SITE WORKS MATRIX						
FIRE RATING	WHAT DOES IT MEAN?	WHAT SHOULD I DO?	SITE REQUIREMENTS			
		prepared to defend in these conditions. If you are not prepared, leaving bushfire prone areas early in the day is your safest option.	 Fire spotter to have contact with workgroup at all times, mobile or handheld. No stripping of ground unless a fire has started and needs to be controlled. 			
			No hot works or hot works type maintenance on machines in fields, on hardstands or within substation, without prior council/shire/local fire authority approval.			
			Check Shire / Council / Fire Authorities for exemptions: Schedule 10 in SA, Section 40 Permit in Vic, Total fire ban exemption application in NSW, consult QRFS Chief Fire Warden for your area.			
MODERATE	• Stay up to date and be ready to act if there is a fire	 Check your Bushfire Survival Plan Monitor conditions. Action may be needed. Leave if necessary 	 Work can proceed as normal with caution. Plant should avoid operating on crops or stubble. Hot works and machine maintenance works including hot works can be completed under permit on hard stands, 			

Table 14 Fire Danger Ratings

Reference document(s):

TMP-C066 Emergency Management Plan FRM-S117 Emergency Contact Details FRM-S142 WHSE Emergency Requirements Assessment Form REG-S009 WHS Register/QEST Portal 12590-GE-PL-30003 - BEEP

15 MONITORING & MEASUREMENT

15.1 Workplace Inspections

- The Site Manager shall:
 - conduct Weekly WHSE Inspections to assess the site for unsafe or environmentally unacceptable work conditions;

12590-GE-PL-30001 1.2 Page 84 of 110





(State Significant Infrastructure SSI-48492458)

- any identified concerns or issues shall be raised at the daily pre-start meeting;
- ensure any actions identified during an inspection are assigned to a person for completion and monitored for close out using the Project Issues Tracking Register;
- ensure any relevant identified issues are discussed at daily pre-starts;
- wherever possible the Site Manager shall utilise a subcontractor to participate in the inspection as a "second person".
- Senior Management personnel will visit the project quarterly and record a WHSEQ Observation.

Inchestion True	Frequency											
Inspection Type	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Weekly Site Inspection by CPP	2	4	4	4	4	4	4	4	4	4	4	3
Pre-Start Meetings	23	20	22	21	23	21	22	23	20	23	22	21
Toolbox	2	2	2	2	2	2	2	2	2	2	2	2
Chemical Management					1						1	
Fire extinguishers					1						1	
Spill Kits					1						1	

Table 15 Project Inspection schedule

Reference document(s):

FRM-S063 Weekly Inspection/QEST Portal FRM-S126 WHSEQ Observation Form/QEST Portal REG-S002 Master Register of Substances (SDS) FRM-G003 Spill Response Kit Checklist REG-S009 WHS Registers/QEST Portal

15.2 Documentation

- CPP has implemented and maintains Company Management Systems that identify the documents used by the Company and their application throughout the organisation.
- This includes details on the implementation of the quality policy, procedures and forms.

15.3 Records

- Some documents used in this project may have references that are connected to the client's system or that may be outside of the latest QMS requirements.
- The existing references shall be maintained and in all other respects the QMS applies.

15.4 Internal audits

- CPP undertake internal audits to verify implementation and compliance with the CPP certified system.
- CPP will undertake at the same time audits on subcontractors on site.
- CPP will conduct regular internal audits.
- This CEMP plan will be regularly audited.
- Audit reports will be completed and issued in a timely manner.
- All findings will be recorded for tracking and trending purposes.
- Corrective actions will be closed within the stipulated timeframe.

12590-GE-PL-30001 1.2 Page 85 of 110



(State Significant Infrastructure SSI-48492458)

- Once the Internal Audit Report is completed, reviewed and agreed with the Responsible Manager, the Responsible Manager or their delegate shall track and record the close out and follow up of all OFI's.
- Closeout time frames for actions arising from audits are listed in the table below and are used as a guide only. Each identified action will be closed out in accordance with the criticality of the finding and site priorities.

CATEGORY	TIMEFRAME
CAT 0	Immediately/1 day
CAT 1	Within 7 days
CAT 2	Within 15 days
CAT 3	Within 30 days
CAT 4	Within 45 days

Table 16 Close out Timeframes.

 Copies of project audits should be retained in the relevant audit and OFI project folders by the Responsible Manager.

15.5 Independent Environmental Audit

In accordance with the Infrastructure Approval under Section 5.19 of the *Environmental Planning & Assessment Act 1979* (Application Number: SSI 48492458) (the Infrastructure Approval):

- Independent Audits of the development will be conducted and carried out at the frequency and in accordance with the *Independent Audit Post Approval Requirements* (2020) to the following frequency:
 - o within 3 months of commencing construction; and
 - within 3 months of commencement of operations.
- Proposed independent auditors will be agreed to in writing by the Planning Secretary prior to the commencement of an Independent Audit.
- The Planning Secretary may require the initial and subsequent Independent Audits to be undertaken at different times to those specified under the Infrastructure Approval Condition C14 of Schedule 2, upon giving at least 4 weeks' notice to EnergyCo of the date upon which the audit must be commenced.
- 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.

Note - For Project sites non-conformances identified by site inspections and all 2nd and 3rd party audits etc., will be registered and tracked by the Responsible Manager using Project Issue Tracking List. Where the responsibility of closing out such an action is placed onto the SQE department then the action is registered as an OFI on the OFI register.

Reference Document(s):

REG-Q002 Audit Register SharePoint

REG-Q005 Opportunity for Improvement Register / QEST Portal

SOP-Q002 Auditing

FRM-Q012 Opportunity for Improvement/QEST Portal

CHK-Q001 Internal SQE Pre Audit Check Tool

CHK-Q002 Mobilisation Pe Audit Check Tool

CHK-Q003 Subcontractor SQE Pre Audit Tool

REG-S009 WHS Registers/QEST Portal

Infrastructure Approval under Section 5.19 of the Environmental Planning & Assessment Act 1979 (Application Number: SSI 48492458)

12590-GE-PL-30001 1.2 Page 86 of 110



Waratah Super Battery Energy Storage System CPP Project No: 12590

(State Significant Infrastructure SSI-48492458)

In accordance with the Infrastructure Approval and the specific requirements outlined within the *Independent Audit Post Approval Requirements* (2020), EnergyCo will:

- Review and respond to each Independent Audit Report prepared under the Infrastructure Approval -Condition C14 of Schedule 2, Condition C16 of Schedule 2 where notice is given by the Planning Secretary.
- Submit the response to the Planning Secretary; and
- 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.
- Independent Audit Reports and EnergyCo's response to audit findings will 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.

Reference document(s):

SOP-S001 Event Reporting and Investigation Procedure

FRM-S001 Event Notification & Report Form/QEST Portal

FRM-S002 Event ICAM Investigation Form

FRM-S003 Event Witness Form

FRM-S004 Hazard Report Form/QEST Portal

FRM-S005 ICAM Investigation Report

REG-S009 WHS Registers/QEST Portal

REG-S001 WHSE Incident Reporting Register/QEST Portal

Infrastructure Approval under Section 5.19 of the Environmental Planning & Assessment Act 1979 (Application Number: SSI 48492458)

12590-GE-PL-30001 1.2 Page 87 of 110

(State Significant Infrastructure SSI-48492458)

16 REPORTING AND RECORDING

- All CPP personnel and subcontractor employees are required to report all events, near misses, dangerous occurrences involving personal injury, environmental impact or plant and equipment damage directly following the occurrence.
- Events shall be reported to the Site Manager immediately.
- The Site Manager shall:
 - Raise the Heads-Up form to initially advise of the event;
 - o Raise the Event Notification and Report form;
 - o Commence appropriate investigation based on the potential category of the event;
 - Injured persons requiring medical treatment shall be accompanied to the doctor or hospital as appropriate;
 - The Project Manager, in consultation with the SQE Manager is responsible for reporting to the client on SQE matters within contractual requirements;
 - All Event are tracked for completion of action items to ensure identified controls are implemented through the Project Issues Tracking Registers;
 - A PDF copy of the Event Form should also be supplied to the client or principal within contractual requirements either by email or by entering client's online data base;
- Where required relevant state authorities will be notified by the SQE Manager of any:
 - "immediately notifiable work-related injury";
 - o serious events involving the failure or malfunction of safety equipment or procedures.

Event reporting Time frames:				
Head's Up Notification	Within 2 hours of being informed of the event			
Written (Preliminary) Event Report	Within 24 hours of the event occurring			
Completed Event Investigation Report Cat 3 <	Within 72 hours of the event occurring			
Initial ICAM Investigation Report Cat 4 >	Within 5 days of the event occurring			
Completed ICAM Investigation Report Cat 4 >	Within 20 days of the event occurring			

Table 17 Event Reporting Timeframes

Corrective Action Time Frames:				
CAT 1	Within 1 month			
CAT 2	Within 2 weeks			
CAT 3	Within 72 hours			
CAT 4	Before end of shift			
CAT 5	Immediately			

Table 18 Corrective Action Reporting Timeframes

12590-GE-PL-30001 1.2 Page 88 of 110

(State Significant Infrastructure SSI-48492458)

16.1.1 Notifiable Event Reporting

A person conducting a business or undertaking must notify the principal contractor immediately of a notifiable incident as defined by legislation the project WHS plan provides details on the reporting of Work Health and Safety incidents to the regulator.

Notifying the regulator of a pollution incident can be done via phone, fax or email using the contact information in Table 17.

When reporting a pollution incident to the EPA, the following information must be provided.

- Name, address and daytime telephone number of the person making the report;
- Incident details (indicate if the incident is still occurring at the time this notification is lodged);
- Date and time of incident;
- Details of source of pollution—business name, address, etc.
- Location of incident (not always the same as address).

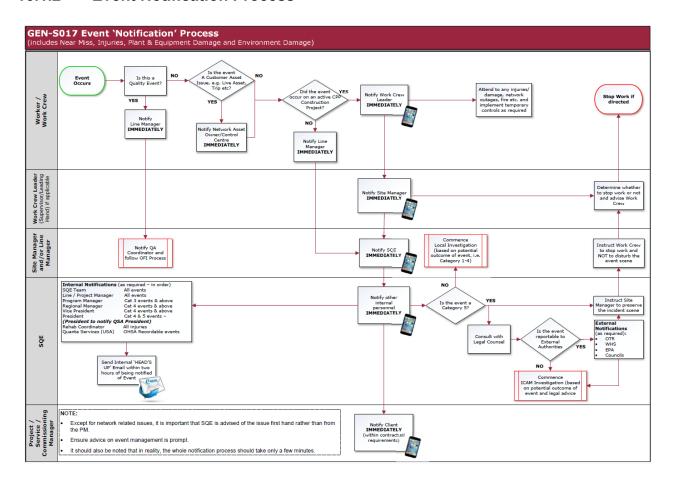
Populator Talanhana No. Comment					
Regulator	Telephone No.	Comment			
To be contacted immedia	ately in order of priority				
Fire and Rescue NSW	000 or 1300 729 579	To be contacted first if the incident presents an immediate threat to human health or property and emergency services are required. Fire and rescue to be contacted last if emergency response is not required.			
Environment Protection Authority – Environment Line	131 555	In the event of a 'material harm incident', response and notification must be undertaken as per Table 19. Note the agencies listed in Table 19 must be contacted in the order listed.			
		The decision on whether to notify the incident in accordance with Part 5.7 of the POEO Act should not delay immediate actions to provide the safety of people or contain a pollution incident. However, incident notification will be made as soon as it is safe to do so.			
		www.epa.nsw.gov.au			
Ministry of Health	02 4924 6477	24 Hour Line and ask to speak to the Environmental Health Officer			
SafeWork NSW	13 10 50	www.safework.nsw.gov.au			
Central Coast Council	Work Hours: 02 4306 7900 After Hours Emergencies: 02 4306 7900.	www.centralcoast.nsw.gov.au/			
To be contacted within 2	4 hours of incident				
Department of Planning, Industry and Environment	Via Planning Portal (preferred) or 1300 305 695				

Table 19 Regulator Contact Details

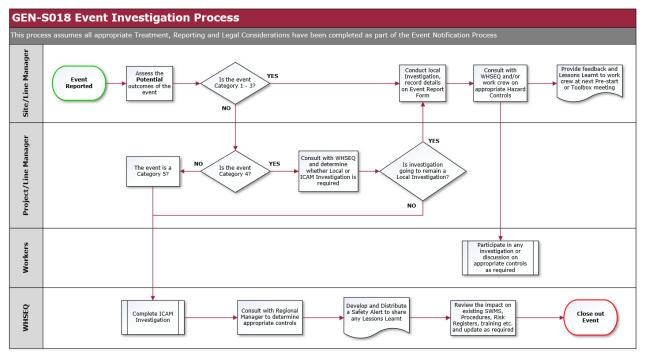
12590-GE-PL-30001 1.2 Page 89 of 110

(State Significant Infrastructure SSI-48492458)

16.1.2 Event Notification Process



16.1.3 Event Investigation Process



12590-GE-PL-30001 1.2 Page **90** of **110**

(State Significant Infrastructure SSI-48492458)

APPENDIX A ENVIRONMENTAL MANAGEMENT STRATEGY

This Environmental Management Strategy is a standalone document and will be provided separately.

Akaysha Energy

Environmental Management Strategy Waratah Super Battery







12590-GE-PL-30001 1.2 Page **91** of **110**



Waratah Super Battery Energy Storage System CPP Project No: 12590

(State Significant Infrastructure SSI-48492458)

Question today Imagine tomorrow Create for the future

Environmental Management Strategy Waratah Super Battery

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Rev	Date	Detalls
A	22/02/2023	Draft for client review

	Name	date	algnature
Prepared by:	E Parry	21/02/2023	
Reviewed by:	L MacDonald	21/02/2023	
Approved by:	L MacDonald	21/02/2023	

WSP acknowledges that every project we work on takes place on First Peoples lands.
We recognise Aboriginal and Tomes Strait Islander Peoples as the first scientists and engineers and pay our respects to Elders past and present.

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PS135673-ENV-EMS - WSB vA Issued February 2023

12590-GE-PL-30001 1.2 Page 92 of 110





(State Significant Infrastructure SSI-48492458)

APPENDIX B TRAFFIC MANAGEMENT PLAN

This Traffic Management Plan is a standalone document and will be provided separately.

Traffic Management Plan



Waratah Super Battery Energy Storage System

State Significant Infrastructure (SSI-48492458)



CPP Project No: 12590

Document Number: 12590-GE-PL-30004					
Revision:	1.0	Revision Date: 07/03/2023	3		
Task:	Responsibility:	Date:	Signature:		
Developed by:	Caileigh Toupin / Brandon Stewart	07/03/2023	2023.03.08 08:36:42+11'00'		
SQE Review:	Brandon Stewart	07/03/2023	2023.03.08 08:37:02+11'00		
Review by Responsible Site Manager:	Peter Martin	07/03/2023	PM Martin, Peter 2023-03-08 08: 30:49		
Approved by Accountable Project Manager:	Stephen Brannigan	07/03/2023	Brannigan, Stepher 2023-03-08 08:39:8		

12590-GE-PL-30001 1.2 Page 93 of 110

(State Significant Infrastructure SSI-48492458)

APPENDIX C BIODIVERSITY MANAGEMENT PLAN

This Biodiversity Management Plan is a standalone document and will be provided separately.

Akaysha Energy

Biodiversity Management Plan Waratah Super Battery







12590-GE-PL-30001 1.2 Page **94** of **110**



A QUANTA SERVICES COMPANY

Construction Environmental Management Plan

Waratah Super Battery Energy Storage System CPP Project No: 12590

(State Significant Infrastructure SSI-48492458)

Question today Imagine tomorrow Create for the future

Biodiversity Management Plan Waratah Super Battery

Akaysha Energy

WSP Level 3, 51-55 Bolton St Newcastle NSW 2300 PO Box 1162 Newcastle NSW 2300

Tel: +61 2 4929 8300 Fax: +61 2 4929 8382

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Rev	Date	Details
A	23/02/2023	Draft

	Name	Date	Signature
Prepared by:	Gemma Maling, Nathan Cooper	23/02/2023	
Reviewed by:	Toby Lambert	23/02/2023	
Approved by:	Nathan Cooper	23/02/2023	

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PS135673-NEW-ECO-REP-001 RevA February 2023

12590-GE-PL-30001 1.2





(State Significant Infrastructure SSI-48492458)

APPENDIX D

FLORA AND FAUNA MANAGEMENT PLAN

This Flora and Fauna Management Plan is a standalone document and will be provided separately.

Flora and Fauna Management Plan



Waratah Super Battery Energy Storage System

State Significant Infrastructure (SSI-48492458)



CPP Project No: 12590

Document Number: 12590-GE-PL-30002						
Revision:	1.0	Revision Date: 07/0	3/2023			
Task:	Responsibility:	Date:	Signature:			
Developed by:	Lily Cains (Niche)	07/03/2023	LilyCains			
SQE Review:	Brandon Stewart	07/03/2023	2023.03.09 15:06:13+11'00'			
Review by Responsible Site Manager:	Peter Martin	07/03/2023	PM Martin, Peter 2023-03-09 13: 59:44			
Approved by Accountable Project Manager:	Stephen Brannigan	07/03/2023	Brannigan, Stephen 			

12590-GE-PL-30001 1.2 Page **96** of **110**



Waratah Super Battery Energy Storage System CPP Project No: 12590

(State Significant Infrastructure SSI-48492458)

APPENDIX E CONTAMINATION MANAGEMENT PLAN/UNEXPECTED FINDS PROCEDURE

As per Infrastructure Approval (SSI 48492458), condition B29. Prior to the commencement of construction, an unexpected finds procedure must be prepared to ensure that potentially contaminated material is appropriately managed. The procedure 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.

As the site has been remediated to the Remediation Action Plan (Appendix G). The Waratah Super Battery project site will have minimal contamination risk; however, site specific protocols have been implemented in the event of unexpected finds as per the recommendation in Consulting Earth Scientists, Remediation Action Plan, (Appendix G).

A precautionary approach of any unidentifiable objects/substance will be enforced at the site and the principal of RACER will apply as follows:

- Remove people from within the immediate vicinity of the unidentified object/substance.
- Alert other persons in the vicinity to the presence of the unidentified/hazardous object/substance and alert the Site Manager and Environmental Representative of the presence of the object/substance.
- Confine, cover and isolate the unidentified/hazardous object/substance until a detailed plan of action has been formulated.
- Excavate.
- Remove object/substance from site once the hazards have been identified and a risk assessment undertaken by an Environmental Scientist and agreed upon by the Site Manager.

Based on the history of the site the following potential unexpected finds have been identified:

- Type A (fibrous) asbestos.
- Type B (non-fibrous) asbestos.
- Coal ash deposits and coal ash impacted materials.
- Underground structures, buried drums or underground tanks.
- Major exposure of odorous, discoloured or stained soil.
- Malodourous/aesthetically unsuitable soils

12590-GE-PL-30001 1.2 Page 97 of 110



Waratah Super Battery Energy Storage System CPP Project No: 12590

(State Significant Infrastructure SSI-48492458)

Unexpected Contamination Finds Procedure

In the event that unexpected, buried features or contamination sources are encountered during the course of site works, the following contingency measures for the management of potential types of contamination should be taken as nominal responses in the absence of a specific plan.

Contamination type or feature	Nominal response			
Significant unexpected features such as fibrous asbestos or potentially hazardous finds	Work in the area should cease and an appropriately qualified Environmental Consultant should be contacted for assessment of the area. The sequence of work undertaken should follow advice given at the time by the Environmental consultant but is likely to require isolation or secure stockpiling of the material separately as potentially contaminated for later assessment, or it may require to remain in place with work in that area suspended pending more detailed assessment.			
Coal ash deposits and coal ash impacted materials	Work in the area should cease and an appropriately qualified Environmental Consultant should be contacted for assessment of the area. The sequence of work undertaken should follow advice given at the time by the Environmental consultant but is likely to require the excavation and stockpiling of the ash deposits for assessment. Ash deposits may be suitable for relocation to the Munmorah Ash Dam, provided the material is not impacted by contaminants such as PFAS.			
Underground structures, buried drums or underground tanks.	Work in the area should cease and an appropriately qualified Environmental Consultant should be contacted for assessment of the area. The sequence of work undertaken should follow advice given at the time by the Environmental Consultant. Works - with oversight by the Environmental Consultant - is likely to comprise careful removal of the drum/s or tank/s from the excavation, photographing the condition of the drum or tank, collection of validation soil samples from the excavation walls and base, and isolation of the drum or tank in a secure bunded area for later assessment. If a drum or tank has leaked, any associated contaminated soil should be removed and placed with the drum/s or tank. Waste classification analysis will be required of the impacted soil prior to offsite removal. Work in the area should resume only once the Environmental Consultant has deemed it appropriate.			
Major exposures of odorous, discoloured or stained soil	Work in the area should cease and an appropriately qualified Environmental Consultant should be contacted for assessment of the area. The sequence of work undertaken should follow advice given at the time by the Environmental Consultant but is likely to require separate and secure stockpiling of the material as potentially contaminated for assessment.			

Table 20 Management of unexpected finds.

12590-GE-PL-30001 1.2 Page 98 of 110

CONSOLIDATIED POWER PROJECTS A QUANTA SERVICES COMPANY

Construction Environmental Management Plan

Waratah Super Battery Energy Storage System CPP Project No: 12590

(State Significant Infrastructure SSI-48492458)

Depending upon the contamination which may be discovered, it may be necessary to prepare and implement specific work method statements and procedures to address the assessment, handling and disposal of unexpected findings during the bulk earthworks. Assessments of suspect materials and preparation of any such plans or procedures should only be carried out by a qualified environmental scientist or engineer.

At any stage of the earthworks project when unexpected finds are encountered, the initial notification must be made immediately to the site supervisor who will then contact the appropriate environmental consultant and determine what interim measures should be applied.

If any material requires specific segregation and removal due to potential or actual contamination, then after removal the surrounding material may require to be sampled and tested for the contaminant of concern before excavation continues. This to be as directed by the Environmental Consultant.

The assessment, remediation, validation, handling, transport, and disposal of contaminated materials in NSW is subject to State and Federal legislation and includes but not limited to:

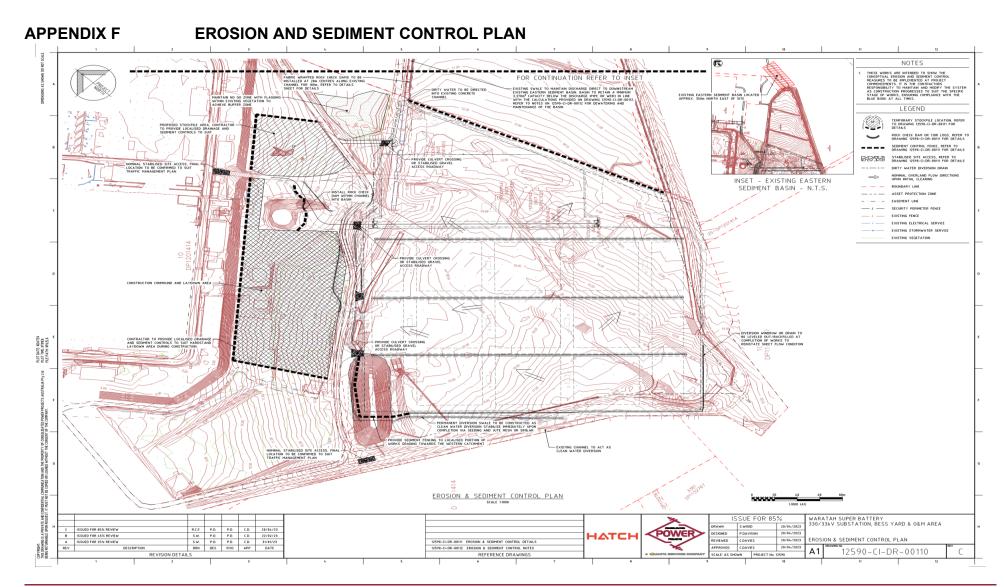
- Contaminated Land Management Act 1997.
- Protection of the Environment Operations Act 1997 (POEO Act).
- Protection of the Environment Operations (Waste) Regulation 2005.
- State Environment Planning Policy No 55 Remediation of Land.
- Local Council Local Environment Plan.
- Work Health and Safety Act 2011.
- Work Health and Safety Regulation 2011.
- CES Document Reference: CES170608-GPM-DS-UXF Page 3 of 3
- SafeWork NSW.
- National Environment Protection (Assessment of Contamination) Measure, 1999, as amended.
- Australian Standard AS 4482.1 Part 1 Non-volatile and Semi-volatile Compounds.
- Australian Standard AS 4482.2 Part 2 Volatile Compounds.
- NSW EPA (2014): Waste Classification Guidelines. Part 1: Classifying Waste.

12590-GE-PL-30001 1.2 Page 99 of 110

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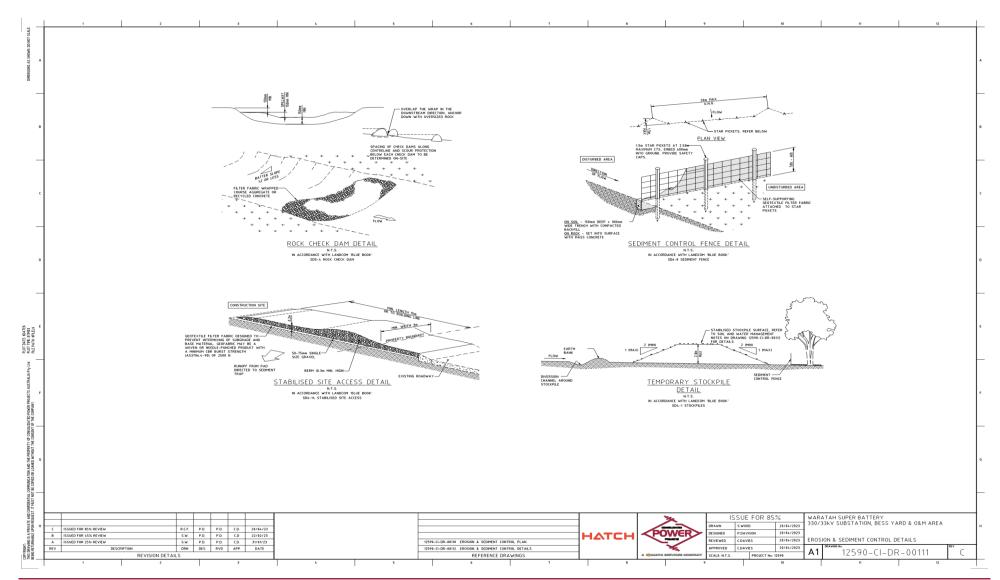
Waratah Super Battery Energy Storage System
CPP Project No:12590
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Waratah Super Battery Energy Storage System
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(State Significant Infrastructure SSI-48492458)





Waratah Super Battery Energy Storage System CPP Project No:12590

(State Significant Infrastructure SSI-48492458)

WARATAH SUPER BATTERY 330/33kV SUBSTATION AND BESS YARD

BENCHMARKS TO BE PROVIDED PRIOR TO COMMENCEMENT OF CONSTRUCTION CONTRACTOR TO VERIFY SETOUT BEFORE COMMENCING EARTHWORKS. REFER ANY DISCREPANCES TO ENGINEER EXISTING CONTOURS SHOWN AT 2.0m INTERVALS

EXISTING AND PROPOSE DRAINAGE WORKS

THE SITE HAS A RIDGE LOCATED APPROXIMATELY WITHIN THE MIDDLE OF THE SITE DIRECTING THE GRUNDET TO THE HORTH EAST AND TO THE HORTH WEST SOLS. THESE TWO ACTOHEMINS GRADE TOWARDS TWO LARGE CONNECTE DRAWNS LOCATED ON INTER'S SIDE OF THE SITE DIRECTING THE RUNOFF TOWARDS AN EXISTING SETTLING BASIN PRIOR TO DISCHARGE FRONT HE SITE VIA A SITE WINDE WATER QUALITY BASIN PRIOR TO

ALL EXISTING COAL LAYERS, STOCKPILES AND STRUCTURES WERE REMOVED PRIOR TO

PROPOSED

AS PART OF THIS DEVELOPMENT, THE FOLLOWING PERMANENT AND TEMPORARY DRAINAGE WORKS ARE PROPOSED: TEMPORARY WORKS:

- SMALIDA SMALES ALONG THE MORTHEAST AND MORTHEAST PROTEINES OF THE STEE, DETECTING CONTINUES REPORT TOWNS THE EXISTING CONTEXT CAMBRILL WAS REPORTED TO THE STEED OF THE STEED

PLOT DATE: SDATES PLOT TIME: STIMES FILE PATH: SFLELS

PIT AND PIPE NETWORK TO CAPTURE INTERIOR STORM WATER, WITH DISCHARGE LOCATIONS TO MATCH THE PIPE DEVELOPED OUTLET LOCATION GRASSED OR LUBED SWALES AROUND THE PREMETER OF WORKS TO MAXIMISE VOLUME OF WATER DIRECTED TO THE NOMNATED DISCHARGE POINT.

PRINCIPAL CONTRACTORS RESPONSIBILITIES

- THE PRHOPAL CONTRACTOR SHALL BE RESPONSIBLE FOR HANTIANING ALL BROWNED THE PROPERTY OF THE PROPERTY OF THE PRODUCT THE CONSTRUCTION PHASE IS CONSIDERED TO EXTEND THROUGH UNITE. THE PRHALL LANDSCAPED HAS ESTABLESHED TO PROPURE A HAMBERT 70% GROUND COVER OWER AREA & LANDSCAPED AND COMPLETION OF ALL HANDSTAMD SURFACES TO THE DESIGN AREA & LANDSCAPED AND COMPLETION OF ALL HANDSTAMD SURFACES TO THE DESIGN AS TOROUGH ECOLATIONS AND ACCESS TRACKS.
- UPON COMPLETION TO THE ABOVE ACCEPTED VEGETATION COVER, THE CONTRACTOR SHALL THEN BE RESPONSBLE FOR REMOVING ALL TEMPORARY EROSION AND SEDMENT CONTROL HEAGURES, AS WILL AS DESLIT MAY SEDMENT TRAPS-PONDS AND DISPOSANG OF THE ACCUMENTED SEDMENTS APPROPRIATELY LE. EITHER BLEUDING WITH TOPSOIL AND VEGETATING OR DISPOSAL AT A SUTHIALY LICENSED FACILITY.

- THE STAGING OF THE WORKS IS INTENDED TO INCLUDE:
- THE STRONG OF THE OWNER OF THE STRONG OF THE OWNER OF THE STRONG OF THE

A REVIEW OF INITIAL CLEARING WORKS THROUGH TO FINAL EARTHWORKS PROFILES WAS REVIEWED. THE WORST CASE SCENARIO WAS FOLLOWING INITIAL CLEARING LE. LARGEST LS FACTOR THESE RESULTS ARE SHOWN BELOW.

C = 1 A = 57.88 T/HA/YR SITE = 9.1 HA SOIL LOSS = 526.7 m³/YR < 150m³/YR

BASED ON THE ABOVE REVIEW AND IN ACCORDANCE WITH THE BLUE BOOK GUIDANCE, SEDIMENT BASIN IS REQUIRED. IT IS PROPOSED THAT THE EXISTING EASTERN SETTLING BASIN IS TO BE USED AS THE SITE SEDIMENT BASIN.

Cv = 0.5
TOTAL CATCHMENT AREA = 14.98 HA UNCLUDING DOWNSTREAM CATCHMENT)
SETTLING ZONE = 10 x R^{q85648, 560pl} x Cv x A
SETTLING ZONE = 324cm²
4 HONTH SOIL LOSS = 130m³

EROSION CONTROL MEASURES THE CONTRACTOR IS REQUIRED TO IMPLEMENT THE NECESSARY EROSION CONTROL MEASURES REQUIRED TO MAXIMISE THE RETENTION OF SOILS AT SOURCE. AS A GUIDE, THE FOLLOWING MEASURES SHOULD BE COMBIDERED.

TEMPORARY GROUND COVER OR STABILISATION

- WHIRE AREAS OF WORKS ARE TO BE ON-HOLD FOR PERIODS EXCEEDING IS DAYS, THE CONTRACTOR HAY APPLY A TEMPORARY GROUND COVER TO REDUCT THE SEDMENT TEMPORARY GROUND COVER TO REDUCT THE SEDMENT TEMPORARY GROUND COVERS HAY INCLUDE MILACH, GRANIL, SEEDING, POLYTHER OR OTHER HEARS TO BRID THE SURPACE MAY INCLUDE SURFACE ROUGHNING OR LIGHT SCARPING.

NO GO ZONES OR VEGETATIVE FILTER STRIPS

TEMPORARY PROTECTION FROM WHO AND WITER BOOSON WILL BE UNCERTAKEN ON LANDS FROM A CONTROL OF THE STATE OF THE

DURING WINDY WEATHER, LARGE, UNPROTECTED AREAS ARE TO BE KEPT MOIST (NOT WET) BY SPRINKLING WITH WATER FOR DUST CONTROL.

EROSION & SEDIMENT CONTROL NOTES

SEDIMENT CONTROL MEASURES STABILISED SITE ACCESS

A STABILISED SITE ACCESS WAS CONSIDERED HOWEVER GIVEN THE LENGTH OF UNSCALED ROADS EXTENSIONS PAST THE CONSTRUCTION SITES, IT WAS DEEPED UNSCALED ROADS EXTENSION FOR THE RACES ACTIVITIES ARE EXPECTED TO GORBERTE SOURCE AND STACKED BY ASSESSMENT ASSUMED TO GORBERTE SOURCE AND THACKED OF PASSES FROM ROAD BACE STILL BE CONSIDERED.

ROCK CHECK DAMS

ROCK CHECK DAMS SHOULD BE ADOPTED BY THE CONTRACTOR TO MANAGE THE

OF WALTER AND SYLTEMENT OF SUBPRISE AS PECLOVES.

AT THE OWN COLLECTION FORMER SPIRE OF SUBPRISE AT RECOLAR MITCHAS.

AT THE OWN COLLECTION FORMER SPIRE TO SECURATE OFFSIT, TO ALLOW FOR MORE DOC. OCC. OWN SER (LOCATIO, THE ACCOUNTAGE OF SUBPRISE SPINLO OR PROVIDED AND CLEANED OFF ATTER EACH RAWMAL LEVEN.

SHOULD BE IMPORTED AND CLEANED OFF ATTER EACH RAWMAL LEVEN.

SHOULD SECURE OF SUBPRISE AS A SECURITY OF SUBPRISE AS A SECURITY

SEDIMENT FENCING

PROTECTION STORY THAT STAND ALSO SERVICES SOURCE STORY THAT THE SOURCE, FREVENING SERVICES TRANSPORTATION HITO PTS, COMMERCE SOR OFFSITE. SERVICES SHOW THAT THE PROTECTION OF THE DOWNSTEAM POINT OF ALL OF THE PROTECTION OF THE SOURCE SHOW THE STAND SHOW THE SHOW THE STAND SHO

DIVERSION SWALES

DIVERSION SWALES HAVE BEEN NOMINATED ALONG THE RELEVANT BOUNDARIES TO DRECT COLLECTED RUNGIFF TO A CONTROLLED DISCHARGE POINT, WITH FILTER WRAPPED ROCK CHECK POINT AND TEMPORARY SEDIMENT STORAGE CAPACITY. THE DIVERSION SWALES SIZING AND DESIGN ARE TO BE AS FOLLOWS:

(RUNOFF COEFFICIENT TABLE F3 OF yBLUE BOOK₈) × (10 YR, 5 MIN INTENSITY) × (CATCHHENT AREA) = 0.9 × 184 nm/hr × 52,000m² = 2392L/s

NOTE: CATCHMENT AREA IS BASED ON LARGEST PRE-DEVELOPED CATCHMENT GRADING TOWARDS THE NORTHEAST DIVERSION SWALE

DRAIN DIMENSION: ASSUMING 0.5% LONGITUDINAL GRADIENT:

N DENINSON: ASSCRING 0.5% LONGITURINAL GRADIENT:
-2506mb BASE -2506mb BASE -306mb DEPTH (NCKEASE DEPTH PROPORTIONALLLY WHERE SAND BAGS ARE
HISTALLED TO ENSURE 2506mb CLEAR DEPTH OVER SANDBAG)
-IVVI - 210H SIDE SLOPE DRAIN STABILISATION UNLINED, PROVIDED DISCHARGE
LEGAS TO SEGMENT BASIN.

SCOUR PROTECTION MEASURES PLACED ON SEDHENT BASIN EMERGENCY SPILLWAYS SHALL APPROPRIATELY PROTECT THE SPILLWAY CHUTE AND ITS SIDE BASTER FROM SCOUR AND SHALL EXTEND A MINIMUM OF 3M BEYOND THE DOWNSTREAM TOE OF THE BASIN'S EMBANKHENT WHERE IN ERCORDIE. SOLS. ALL MATERIALS REMOVED FROM ESC DEVICES DURING MAINTENANCE, OR DECOMISSIONING, WHETHER SOLID OR LIQUID, SHALL BE DISPOSED OF IN A HANNER THAT DOES NOT CAUSE ANY ONGOING EROSION OR POLLUTION HAZARD. IT IS SUGGESTED BLENDING THROUGH THE PROPOSED TOPSOIL LAYER OF THE PERPIETER

DEWATERING OPTIONS

THE FACLORIES TREATMENTS DIRECT BE CONSIDERED AS A REGULAR METHOD TO CONTROL THE RESON VICINES.

RECONCLATOR OF WATER THROUGH SITE VIA DUST SUPPRESSOR OF STOOPPLES. THE CONTROL THE CONTROL THE CONTROL THROUGH SITE VIA DUST SUPPRESSOR OF THE CONTROL THROW THE CONCEDED WHERE VALUE OF THE SITE OF THE SITE OF THE CONTROL THROUGH SITE OF THE SIT

FOLLOWING INITIAL ESTABLISHMENT OF THE BASIN, PLACEMENT OF A VISIBLE MARKER TO DELINEATE THE REQUIRED SEDIMENT STORAGE ZONE AND SETTLING ZONE IS REQUIRED. THESE MARKERS SHOULD INDICATE: IN HILLIPED, THISE MARKERS SHOULD BIOCATE.
20% OF STORGE CAPACITY ITEROGERMS THE MEED FOR ACCELERATED DEWATERING
IF OVER THIS LEVEL WHEN RAMFALL FORCAST)
MAXHUM SEDMENT STORAGE ZONE (TRIGGERING THE NEED FOR DESILTING WHEN
SEDMENT EXCELSOR THIS MARKEN.

NOTE: THESE CRITERIA MAY BE REMOVED ON AGREEMENT BY GPM WHERE PUMPING TO ALTERNATIVE ORNSTE DAMS OR ACTIVATING THE EXISTING LOW FLOW OUTLET TO THE DOWNSTREAM DAM.

TOTAL SUSPENDED SOLIDS (TSS) TO A MAXIMUM ABOUT

ADDITIONAL REQUIREMENTS BASED ON KNOWN SITE CONTAMINATION POTENTIAL ARE ALSO REQUIRED, TO BE CONFIRMED WITH GPM AND CPP PRIOR TO TESTING.

SEDIMENT BASIN WATER QUALITY SAMPLES SHALL BE TAKEN AT A DEPTH NO LESS THAN 200mm BELOW THE WATER SURFACE WITHIN THE BASIN.

NO ALUMNIUM BASED PRODUCTS MAY BE USED, UNLESS APPROVED IN WRITING BY THE APPOINTED ENVIRONMENTAL OFFICER.

THE PREFERRED CHENICAL/AGENT TO BE EMPLOYED IS A GYPSUM BASED PRODUCT. AS A QUIET, THE INTIAL DOSAGE PAITS WILL BE APPROXIMATELY 3D EXCORANS CONCINCION. AND BETWEEN POLICIONAND THE CONSERVATIONS OF THE INTIAL TREATMENTS ATTEMPTS. WHERE DOSAGE ABOVE SONG/L IS REQUIRED, APPROVAL SHALL BE GOTAGED FROM THE SOFTIME TO ASSIST ATTEMPTS.

THE CEMP SHALL DETAIL METHODS TO DEPLOY FOR MANAGEMENT OF PH LEVELS PRIOR TO DISCHARGE OF WATERS.

THE CITY SHALL PROVIDE ADDITIONAL DURANTE ON DISCLARGHOU CAPTURED WATERS, ROTHOR THAT RECORDING PACED, RELICUEL AS A REMEMBAR.
TREATHER! HETHOD/CERECAL ADDRITO
PROVINCION GRANT AND AND ADDRITO SHOOT, DURING AND AFTER TREATHERST RECLORING DAKY PRAWFALL REASSWESS THE RESISTENCY OF THE PROVINCIA DESCRIPTION OF THE PROVINCIANT OF THE PASSWESS THE PROVINCIANT OF THE PASSWESS THE PROVINCIANT OF THE PASSWESS THE

THE APPLICATION METHOD SHALL ENSURE THAT THE CHEMICAL/AGENT IS SPREAD THROUGHOUT THE ENTRE SURFACE OF THE SEDIMENT BASIN AND MIXED THROUGH TO ADD IN ADAPT SETTLEMENT.

THE APPLICATION, SETTLEMENT AND SUBSEQUENT TESTING (OR OTHER METHOD OF

- ADDITIONAL MEASURES SHALL INCLUDE:
 FLOATING ARM TO AVOID PICKING UP SETTLED SEDIMENTS
 HONITORING OF PUMP AT ALL TIMES DURING OPERATIONS
- PUMP RATE AND SYSTEM TO AVOID CREATING TURBID WATERS DURING DEWATERING
- FILTER CAGE TO AVOID PICKING UP FLOATING DERRIS

AT THE COMPLETION OF THE PROJECT THE BASIN SHALL BE DESILTED. THE PROCESS AND DISPOSAL LOCATION SHALL BE AS AGREED WITH CPP AND GPH IN CONSULTATION WITH A TARGETED CONTAMINATION REVIEW.

REMEDIATION METHODOLOGY

- THE EARTHWORKS ARE ANTICIPATED TO BE COMPLETED OVER A 12 MONTH PERSON. THROUGHOUT THE WORKS, THE STAGE REHIDATION, AS DESCREED WITHIN THE ALL COMPLETED PRAIL EARTHWORKS ELVELS WILL BE REMIDATION WITHIN 20 DAYS OF FINAL EARTHWORKS ELVELS BEING ACHEVED. REMIDATION IS CONSIDERED TO GOCKE WHEN A HIMMEN 70% ORGANIC OVER 15 ACHEVED.

MAINTENANCE AND RECORD KEEPING

- RECEPTORS FOR CONCRETE AND MORTAR SLURRES, PAINTS, ACID WASHINGS, LIGHT-WEIGHT WASTE MATERIALS AND LITTER ARE TO BE EMPTIED AS NECESSARY, DISPOSAL OF WASTE SHALL BE IN A HANNER APPROVED BY THE SITE SUPERINTENDENT AND GENERALLY OFF SITE.
- - DRAINS OPERATE EFFECTIVELY AND INITIATE REPAIR OR MAINTENANCE AS

- REQUIRED.

 SPILED SON, IGN OTHER MATERIAL) IS RENOVED FROM HAZARD AREAS, INCLUDING URELY AREAS OF CONCENTRATED DO HIGH VEILOUT FLOWS SOUTH AN MATERIAL SOUTHER, PAPER AREAS AND DROWWAYS.

 OF THE SEDIMENT STORAGE ZONE IS EXCEEDED. A STORAGE MARKER SHALL BE FROM WHITE THE SEDIMENT STORAGE ZONE IS EXCEEDED. A STORAGE MARKER SHALL BE FROM DOOD WHITHIN THE BASIN FOR MYSIAL CONFIDENCE WHITE THE MASS AND PROMISSIAL CONFIDENCE OF THE REDSON HAZARD AND BITATE UPDGRAMMO OR PEPARAS AS APPROPRIATE.
- PROPOSED CLEARING AND DISTURBANCE WORKS

- GROUND CLEARING TO SUIT THE FULL EXTENT OF EACHTONING THE PROJECT.
 CLEARING AND SUID GROUP PEPPARATION WORKS TO SUIT THE EXTENT OF THE
 CLEARING AND SUID WAY AND VARIOS EXTENT
 CLEARING AND EXCAVATION WORKS TO CONSTRUCT THE SITE DRAINAGE AND
 DISCHARGE LOCATIONS.

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	A	ISSUED FOR 25% REVIEW	R.C.F.	P.D.	P.D.	C.D.	31/01/23	1	12590	0-CI-DR-00110 EROSION & SEDIMENT CONT	TROL PLAN			-
	REV	DESCRIPTION	DRN	DES	RVD	APP	DATE	1	12590	9-CI-DR-00111 EROSION & SEDIMENT CONT	ROL DETAILS			76.
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WARATAH SUPER BATTERY WAKATAH SUPER BATTERY 330/33LV SURSTATION RESS YARD 2 02M AREA

12590-CI-DR-00112

ROSION & SEDIMENT CONTROL NOTES

Page 102 of 110

12590-GE-PL-30001 1.2



Waratah Super Battery Energy Storage System CPP Project No:12590

(State Significant Infrastructure SSI-48492458)

APPENDIX G REMEDIATION ACTION PLAN

This Remediation Action Plan is a standalone document and will be provided separately.



REMEDIATION ACTION PLAN

WARATAH SUPER BATTERY

301 SCENIC DRIVE, DOYALSON, NSW

PREPARED FOR GENERATOR PROPERTY MANAGEMENT PTY LTD

CES Document Reference: CES170608-GPM-DS

Written by: T. Goodbody Reviewed by: D. Johnson &

Dr Victor Aria

SC41156 & CEnvP 682

Authorised by:

D. Lowe

Client: Generator Property

Management Pty Ltd 301 Scenic Drive, Doyalson, NSW 2262

Date: 27 March 2023

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12590-GE-PL-30001 1.2 Page **103** of **110**



Waratah Super Battery Energy Storage System
CPP Project No:12590
(State Significant Infrastructure SSI-48492458)



REMEDIATION ACTION PLAN

WARATAH SUPER BATTERY

301 SCENIC DRIVE, DOYALSON, NSW

PREPARED FOR GENERATOR PROPERTY MANAGEMENT PTY LTD

CES Document Reference: CES170608-GPM-DS

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Revision Register

Revision Number	Revision Date	Description
0.0	17/11/2022	Draft Remediation Action Plan
1.0	30/11/2022	Remediation Action Plan
1.1	05/12/2022	Remediation Action Plan
2	27/02/2023	Remediation Action Plan
3.0	27 March 2023	Remediation Action Plan

The revision register tracks changes to the document.

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CES Report Reference: CES170608-GPM-DS

Page 2 of 121

12590-GE-PL-30001 1.2 Page **104** of **110**



Waratah Super Battery Energy Storage System

CPP Project No:12590

(State Significant Infrastructure SSI-48492458)

APPENDIX H BUSHFIRE EMERGENCY AND EVACUATION PLAN

This Bushfire Emergency and Evacuation Plan is a standalone document and will be provided separately.

Bushfire Emergency & Evacuation Plan



Waratah Super Battery Energy Storage System

State Significant Infrastructure (SSI-48492458)



CPP Project No: 12590

Current Document Number: 12590-GE-PL-30003							
Revision:	1.0	Revision Date: 07/0	03/2023				
Task:	Responsibility:	Date:	Signature:				
Developed by:	Tony Hawkins (ABPP)	07/03/2023	AAK-				
SQE Review	Brandon Stewart	07/03/2023	2023.03.07 15:59:21+11'				
Review by Responsible Site Manager:	Peter Martin	07/03/2023	Martin, Peter 2023-03-07 12: 42:37				
Approved by Accountable Project Manager:	Stephen Brannigan	07/03/2023	Brannigan, Stephen 2023-03-07 16:11:00				

12590-GE-PL-30001 1.2 Page **105** of **110**



Waratah Super Battery Energy Storage System CPP Project No:12590

(State Significant Infrastructure SSI-48492458)

APPENDIX I

COMMUNITY & ENVIRONMENT POLICY

COMMUNITY & ENVIRONMENT POLICY

Consolidated Power Projects (CPP) is environmentally responsible and we value sustainable development. We are committed to managing our environmental and community impact in the delivery of our investment outcomes.

Core Principles

- We are dedicated to environmental conservation in all aspects of our operations
- We believe that the environment is important to everyone's future
- Actively engage the community to build mutual understanding, respect and trust
- Value community relationships as integral to our business
- We are committed to continually improving the efficiency with which we use our resources
- To not compromise the environments in which we operate
- · To maintain industry best practice

To achieve these principles, we...

- Promote the need for ecological and resource sustainability
- Embrace responsibility and accountability
- Utilise local communities and services where practicable
- Maintain an Environmental Management System to ISO 14001 certification
- Consult with employees, stakeholders, and local communities on issues that will impact on the environment
- Will proactively pursue the identification of all environmental aspects and manage the impacts
- Assess our suppliers and subcontractor's abilities to operate within the same framework



12590-GE-PL-30001_1.2 Page **106** of **110**



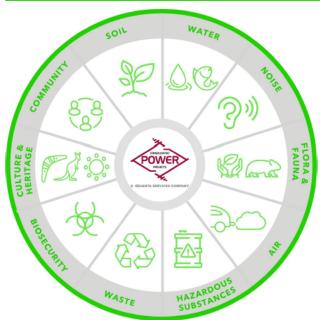
Waratah Super Battery Energy Storage System
CPP Project No:12590

(State Significant Infrastructure SSI-48492458)

APPENDIX J

ENVIRONMENT ESSENTIALS

ENVIRONMENT ESSENTIALS



HAZARD IDENTIFICATION

Identify environmental aspects (hazards) both before work begins and during changing work conditions. Together with your crew at pre-starts or toolbox meetings:

- Refer to the wheel and Identify what environmental aspects are nearby that can be impacted by operations
- Decide how to control, build capacity, and absorb any environmental impacts
- Undertake Take 5 and SWMS review

IMPLEMENT ABSOLUTE CONTROLS THAT:

- 1. Specifically target the source
- 2. Effectively mitigate exposure to the source
- Fail safely, even if there is human error during the work period (unrelated to the installation of the control)
- 4. Are inclusive of the hierarchy of controls



SOIL

Segregate and manage contaminated soil. Implement and maintain erosion, sediment and dust control



WATER

Protect streams, rivers, groundwater and stormwater from contamination



FLORA & FAUNA

Fulfil our responsibilities to protect native flora and fauna, threatened and endangered species, ecology and habitats



NOISE

Protect the community from construction noise and vibration within agreed constraints



AIR

Minimise air pollutants and invest to offset our greenhouse emissions



HAZARDOUS SUBSTANCES

Manage the use and disposal of hazardous and listed substances. Store / secure chemicals in bunded areas. Protect the environment from spills



WASTE

Manage waste in accordance with the waste hierarchy. Ensure the disposal of waste is carried out by authorised service providers



BIOSECURITY

Inspect and make sure all plant, equipment, machinery and soils brought on to site are free of any weeds, fungus and biological threats



CULTURE & HERITAGE

Preserve and protect areas and objects that are significant to Aboriginal, Cultural and Historical Heritage



COMMUNITY

Proactively work with community, business, industry and government to manage and reduce pollution, waste and adverse impacts on the environment

12590-GE-PL-30001 1.2 Page **107** of **110**



Waratah Super Battery Energy Storage System
CPP Project No:12590
(State Significant Infrastructure SSI-48492458)

APPENDIX K VALIDATION REPORT/LETTER

Within one month of the completion of the remediation works a copy of a validation report/letter, 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 must be submitted to the EPA, Council and the planning secretary.

When this validation report/letter becomes available, it will form part of this appendix.

12590-GE-PL-30001 1.2 Page **108** of **110**



Waratah Super Battery Energy Storage System
CPP Project No:12590
(State Significant Infrastructure SSI-48492458)

APPENDIX L SITE AUDIT REPORT & SITE AUDIT STATEMENT

Within six months of the completion of remediation works a Site Audit Report and Site Audit Statement must be submitted to the EPA, Council and the Planning Secretary. The reports must be prepared by the Site Auditor in accordance with relevant guidelines produced or approved under the Contaminated Lands Management Act 1997 and must confirm:

- a) the remedial works have been completed in accordance with the RAP and REMP and the site is suitable for its intended land use; and
- b) the risks to human health and the environment have been addressed in accordance with the objectives of the RAP (Appendix G).

When this Site Audit Report and Site Audit statement becomes available, it will form part of this appendix.

12590-GE-PL-30001 1.2 Page **109** of **110**



Waratah Super Battery Energy Storage System CPP Project No:12590 (State Significant Infrastructure SSI-48492458)

APPENDIX M ENVIRONMENTAL MANAGEMENT PLAN REVISIONS

Document Revision History

From	То	Summary of Changes
Rev 1.0	Rev 1.1	Updated Construction Manager, Site Manager and SQE Advisor
		details
		Updated Org Chart and Key Personnel in section 10
		Removed commitment in section 6.12.3
		Updated section 6.12.4.1 to cover condition B12
		Updated wording of condition B17 in condition table 2
		Updated reference section in table 2 for condition B27 and B28
		Updated Appendix F to high resolution drawings
		Updated Remedial Action Plan in Appendix G
		New appendix K for Validation report/letter
		New appendix L for Site Audit Report and Site Audit Statement
		Updated appendix E to cover requirement of condition B29
		Environmental Management Plan Revisions moved to appendix M
Rev 1.1	Rev 1.2	Appendix F Erosion And Sediment Control Plan updated to 85% drawings

12590-GE-PL-30001_1.2 Page **110** of **110**

Appendix C

Unexpected finds procedure



Unexpected finds procedure

An unexpected finds procedure has been prepared by CPP as part of the CEMP. The procedure involves:

- Detection of signs of potential contamination such as:
 - Presence of buried drums, chemical containers or dumped materials in the area (including asbestos, rubble and construction waste).
 - Visible appearance of contaminated soil, discolouration or staining of soil and bare soil patches.
 - Unhealthy vegetation.
 - Unusual odours originating from soil (fuels, solvents, rotten egg gas).
 - Oil / chemical sheen on water.
- In the event material excavated contains unexpected contaminants works shall cease immediately and the Site Manager shall be notified immediately.
- If any of signs of contamination are detected during excavation works, stop and follow the process set out in Figure B1 below.
- 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.

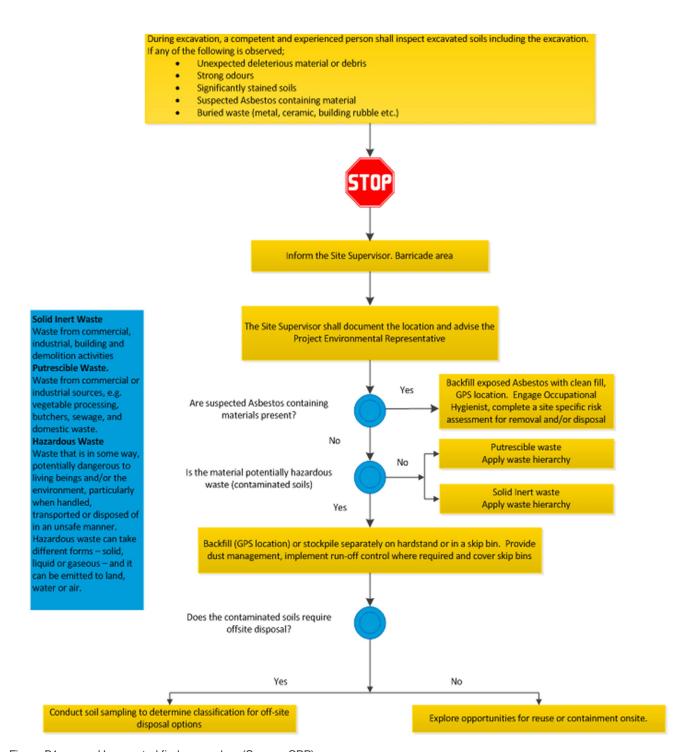


Figure B1 Unexpected finds procedure (Source: CPP)