

Akaysha Energy

Environmental Management Strategy

Orana Battery Energy Storage System

| August 2024



Question today *Imagine tomorrow* Create for the future

Environmental Management Strategy Orana Battery Energy Storage System

Akaysha Energy

WSP
Level 27, 680 George Street
Sydney NSW 2000
GPO Box 5394
Sydney NSW 2001

Tel: +61 2 9272 5100
Fax: +61 2 9272 5101
wsp.com

Rev	Date	Details
A	15/02/2024	Draft for comment
B	15/03/2024	Final
C	06/06/2024	Final updated in response to DPHI comments
D	30/07/2024	Final updated in response to comment

	Name	Date	Signature
Prepared by:	E Parry	30/07/2024	
Reviewed by:	L MacDonald	30/07/2024	
Approved by:	L MacDonald	30/07/2024	

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.

This document may contain confidential and legally privileged information, neither of which are intended to be waived, and must be used only for its intended purpose. Any unauthorised copying, dissemination or use in any form or by any means other than by the addressee, is strictly prohibited. If you have received this document in error or by any means other than as authorised addressee, please notify us immediately and we will arrange for its return to us.

Table of contents

Glossary.....	iii
1 Introduction	1
1.1 Background.....	1
1.2 Purpose of this EMS.....	1
1.3 Project overview	2
1.4 Proponent.....	4
2 Strategic framework	5
2.1 Objectives	5
2.1.1 Sustainability targets.....	5
2.2 Framework overview	7
2.3 Management plans and strategies.....	7
2.3.1 Construction	9
2.3.2 Operation.....	10
2.3.3 Decommissioning and rehabilitation	10
2.4 Competence and awareness	11
2.5 Continual improvement	11
3 Statutory context.....	12
3.1 Development Consent.....	12
3.2 Other approvals	12
4 Roles and responsibilities	13
4.1 Construction	13
4.2 Operation and decommissioning	15
5 Stakeholder and community engagement	16
5.1 Environmental performance updates.....	16
5.2 Community engagement.....	16
5.2.1 Identification of Stakeholders.....	16
5.2.2 Engagement with Community Stakeholders	17
5.3 Agency notification and engagement	18
5.3.1 Department of Planning and Environment.....	18
5.3.2 Other agencies	18
5.4 Complaints handling	18
5.5 Dispute resolution	19

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	21
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

List of tables

Table 1-1	Condition C1 and where the requirements are addressed in the EMS	1
Table 2-1	Sustainability initiatives.....	5
Table 2-2	Construction documents requiring approval under the Infrastructure Approval	9
Table 2-3	Operation documents requiring approval under the Infrastructure Approval	10
Table 3-1	Other permits and approvals required for the project	12
Table 4-1	Construction roles and responsibilities	13
Table 4-2	Operational roles and responsibilities.....	15
Table 5-1	Identified stakeholders.....	17
Table 7-1	Construction monitoring.....	25
Table 7-2	Operations Monitoring	30

List of figures

Figure 1.1	Project layout.....	1
Figure 2.1	Flow chart of environmental management system	8

List of appendices

Appendix A EMS approval

Glossary

BESS	Battery Energy Storage System
BMP	Biodiversity Management Plan
CEMP	Construction Environmental Management Plan
CPP	Consolidated Power Projects
CSSI	Critical State Significant Infrastructure
DPHI	NSW Department of Planning Housing and Infrastructure
EIS	Environmental Impact Statement
EMS	Environmental Management Strategy (this document)
EP&A Act	<i>Environmental Planning and Assessment Act 1979</i>
FRNSW	Fire and Rescue NSW
FSS	Fire Safety Plan
NSW	New South Wales
OEMP	Operation Environmental Management Plan
Planning Secretary	Secretary of the Department of Planning Housing and Infrastructure or their nominee
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

Akaysha Energy Pty Ltd (Akaysha Energy) proposes to develop a 415 megawatt (MW) / 1,600 MW-hour (MWh) battery energy storage system (BESS) approximately 2km north-east of Wellington, in the Central-West Orana Renewable Energy Zone (REZ). Akaysha Energy was granted Development Consent on 22 December 2023 to construct and operate a BESS with a new 300 m (overhead or underground) 330 kV transmission line connecting to the existing Wellington substation to the north.

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 Orana BESS.

The structure and scope of this EMS has been prepared to be meet the requirements of Condition C1 in Part C of the Development Consent. 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 Applicant 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:	
i. 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
(e) include:	
i. references to any strategies, plans and programs approved under the conditions of this consent; and	Section 2.3

Condition requirement	Location in this document
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 consent.	Section 7
Following the Planning Secretary's approval, the Applicant 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:

- approximately 2,660 containerised lithium-ion type batteries (up to 3 m high) with integrated control systems, inverters, transformers, ventilation and air conditioning units;
- a 330 kV substation and switchyard, including two high voltage transformers;
- site infrastructure, including site office, maintenance building, control rooms, access road, parking, lighting and fencing;
- a new 300 m (overhead or underground) 330 kV transmission line connecting to the existing Wellington substation to the north; and
- upgrades to existing site access off Goolma Road.

Figure 1.1 shows the location of the project site.

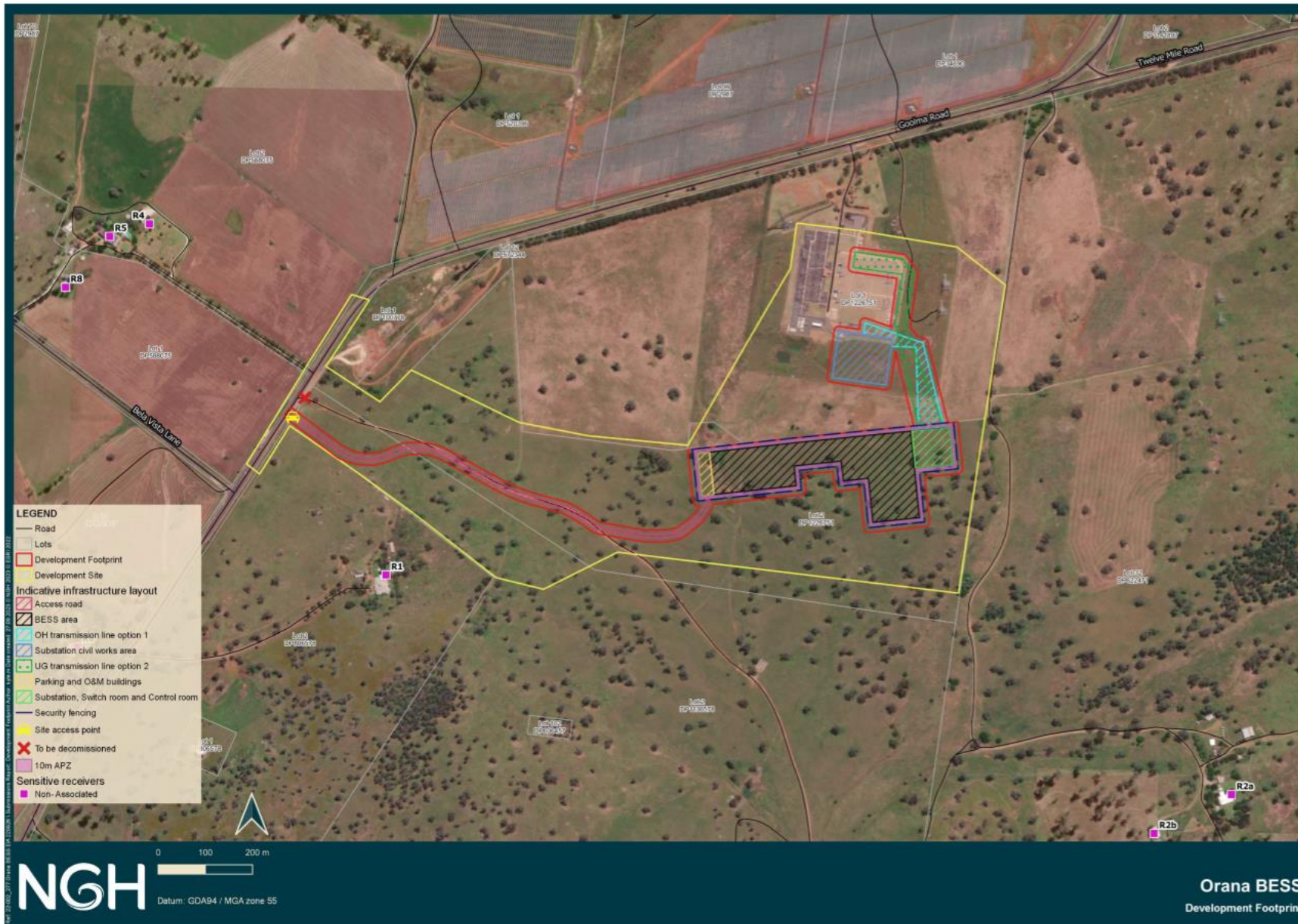


Figure 1.1 Project layout

1.4 Proponent

The proponent as identified in the Development Consent is Akaysha Energy and any other person carrying out any part of the development from time to time.

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 Development Consent 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.
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.

2.3 Management plans and strategies

The plans and strategies to be prepared and implemented for the project are shown in Figure 2.1. Further detail on the plans and strategies for each phase of the project is provided in the following sections.

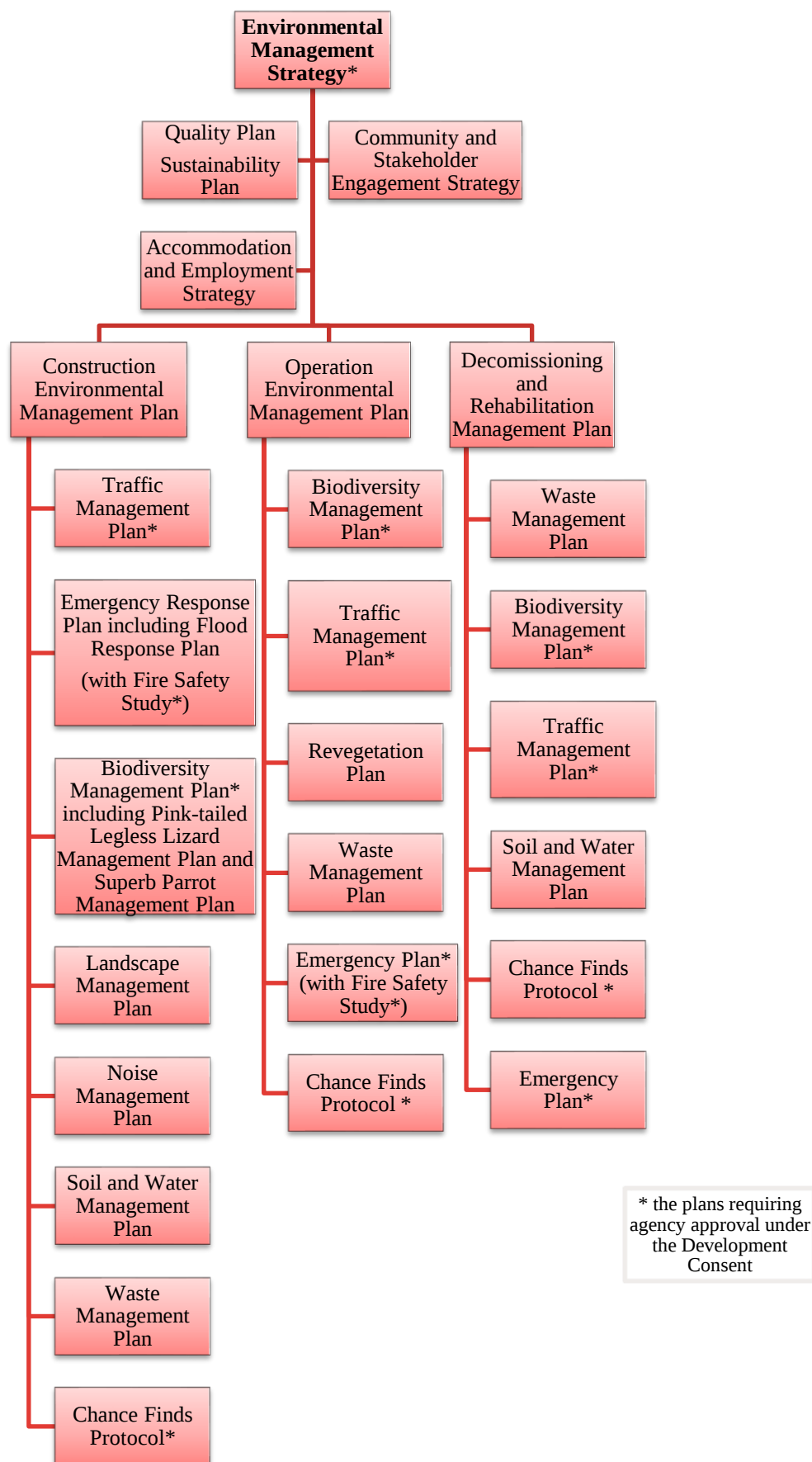


Figure 2.1 Flow chart of environmental management system

2.3.1 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 Development Consent and the objectives of the environmental strategic framework.

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

- Traffic Management Plan
- Biodiversity Management Plan incorporating Pink-tailed Legless Lizard Management Plan and Superb Parrot Management Plan
- Soil and Water Management Plan incorporating an Erosion and Sediment Control Plan
- Landscape Management Plan
- Noise Management Plan
- Asbestos Management Plan (if required)
- Emergency Response Plan incorporating a Flood Response Plan
- Waste Management Plan
- Chance Finds Protocol

The sub-plans and protocols requiring preparation and approval under the Development Consent prior to commencement of construction or road upgrades are outlined in Table 2-2. In accordance with condition B24 an unexpected finds procedure will be developed. The mitigation measures require a Community and Stakeholder Engagement Strategy, Industry Participation Plan (including a Local Procurement Policy and Accommodation and Employment Strategy) and a Voluntary Planning Agreement to be developed prior to construction commencing.

Table 2-2 Construction documents requiring approval under the Development Consent

Plan/protocol	Description	Relevant condition	Agency approval status
Strategic Concept Design	The strategic concept design details the design for the road upgrade intersection design.	B8	Approved by TfNSW on XX ¹
Traffic Management Plan (TMP)	The TMP identifies strategies to manage the impacts of project-related traffic and was prepared in consultation with TfNSW, Council and Mid-Western Regional Council.	B10	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.	B14	Approved by the Planning Secretary on XX ¹

Plan/protocol	Description	Relevant condition	Agency approval status
Chance Finds Protocol	A Chance Finds Protocol to be prepared prior to commencement of road upgrade works, in consultation with Aboriginal Stakeholders to provide a procedure in the event Aboriginal sites, objects or remains are found during project works.	B24	Approved by the Heritage NSW on XX ¹
Fire Safety Study (FSS)	The FSS describes the final design, includes bushfire management and identifies measures to eliminate the expansion of any fire incident. It must meet the requirements of the Department's Hazardous Industry Planning Advisory Paper No. 2 'Fire Safety Study' guideline.	B28	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.

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

2.3.2 Operation

An Operational Environmental Management Plan (OEMP) would be developed to manage the ongoing maintenance and operational activities and ensure compliance with the Development Consent and the objectives of the environmental strategic framework. The OEMP will be supported by issue-specific sub-plans as shown in Figure 2.1.

In accordance with condition C2, the strategies, plans or programs required under the Development Consent must be updated to the satisfaction of the Planning Secretary prior to carrying out any upgrading activities on site.

Table 2-3 Operation documents requiring approval under the Development Consent

Document	Description	Relevant condition	Agency approval
Emergency Plan	An Emergency Plan with detailed emergency procedures will be developed and implemented during operation.	B31	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.

2.3.3 Decommissioning and rehabilitation

A Decommissioning and Rehabilitation Environmental Management Plan would be developed to ensure compliance with the Development Consent and the objectives of the environmental strategic framework. The plan will be supported by issue-specific sub-plans as shown in Figure 2.1.

In accordance with condition C2, the strategies, plans or programs required under the Development Consent must be updated to the satisfaction of the Planning Secretary prior to carrying out any decommissioning activities on site.

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-compliance 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 State Significant Development (SSD) under section 4.36 of the EP&A Act as described in Clause 20 of Schedule 1 of State Environmental Planning Policy (Planning Systems) 2021.

3.1 Development Consent

Development Consent was granted on 22 December 2023 to construct and operate a new BESS, with a capacity of up to 400 MW / 1,600 MW-hour (MWh), including a new substation/switchyard and a 330 kilovolt (kV) transmission line approximately 300 metres (m) in length, which would connect to the existing Transgrid Wellington substation to the north of the site. On 4 March 2024, in accordance with Condition A5 of the Development Consent, a 15 MW increase in the project's deliver capacity was approved by a nominee of the Planning Secretary, bringing the total deliver capacity of the project to 415 MW.

In accordance with the Development Consent, the project may only be carried out:

- in compliance with the conditions of the Development Consent;
- in accordance with all written directions of the Planning Secretary;
- generally in accordance with the Environmental Impact Statement (EIS);
- generally in accordance with the Development Layout in Appendix 1 of the Development Consent.

3.2 Other approvals

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

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

Approval	Legislation	Authority	Project relevance
Use of roads	<i>Heavy Vehicle (Adoption of National Law) Act 2013</i>	National Heavy Vehicle Regulator	Requires approval for use for OSOM vehicles

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 Development Consent. 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

A contractor will be engaged by Akaysha Energy to construct and commission the project. The contractor will be managing compliance and environmental measures during the construction phase of the project. All employees, contractors and subcontractors will receive an environmental induction.

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

Table 4-1 Construction roles and responsibilities

Role	Responsibility	Accountability
Akaysha Energy	- Obtaining planning approvals for the project - Engaging suitably qualified contractor(s) to manage and carry out construction of the project	Accountable for obtaining and delivery of the project in accordance with the Development Consent.
Akaysha Energy project manager	- Ensuring the contractor is meeting relevant requirements for the project in accordance with the Development Consent - Notifying DPHI of an incident or non-compliance during construction	Accountable for overseeing the construction of the project and reporting to DPHI on the project.
Contractor Project manager	- Ensuring that the CEMP and associated sub-plans are fully implemented. - 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.	Accountable for management of construction of the project and reporting to Akaysha Energy.
Contractor Site Manager	- Ensuring that the requirements within the CEMP are fulfilled. - 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.	Accountable for ensuring all works and workers comply with all environmental management plans.

Role	Responsibility	Accountability
Contractor 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 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.	Accountable for implementing environmental management plans and reporting.
Contractor SQE Advisor	- Ensuring that the WHSE Management System is implemented on site according to organisational requirements. - 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 WHSE System.	Accountable for implementing environmental management plans.
Employees	- 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 prevent contamination from machinery being used onsite. - Participating where necessary in event investigations.	Undertaking activities in accordance with the environmental management plans
Subcontractors	- Ensuring that Contractors Management system meet or exceed standards. - Providing evidence 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 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.	Undertaking activities in accordance with the environmental management plans

4.2 Operation and decommissioning

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

Table 4-2 Operational and commissioning roles and responsibilities

Role	Responsibility	Accountability
Akaysha Energy	— Engage suitably qualified personnel to manage operation and decommissioning of the project — Revise any plans/strategies or programs required by the Development Consent and submit (as required) for approval to the Planning Secretary	Accountable for operation and decommissioning of the project in accordance with the Development Consent
Akaysha operations and maintenance manager	— Ensuring operations are meeting relevant requirements for the project in accordance with the Development Consent — Notifying DPPI of an incident or non-compliance during operation and decommissioning	Accountable for overseeing the operation of the project and reporting to DPPI on the project.
Site manager	— Ensure compliance with environmental management framework and associated plans — Maintaining complaints register and responding to complaints — Notify Akaysha Energy 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 Development Consent — 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 Development Consent, 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 development;
- current statutory approvals for the development;
- approved strategies, plans or programs required under the conditions of this consent (other than the Fire Safety Study and Emergency Plan);
- the proposed staging plans for the development if the construction, operation and/or decommissioning of the development is to be staged;
- 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 consent;
- how complaints about the development can be made;
- any independent environmental audit, and the Applicant'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 accordance with the project Community and Stakeholder Engagement Strategy 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 Orana BESS. 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 Orana BESS.

Table 5-1 Identified stakeholders

Stakeholder Group	Stakeholders
Government and Technical Stakeholders	
State Government Departments	Department of Planning, Housing and Infrastructure
	NSW Rural Fire Service
	Transport for NSW
	Heritage NSW
	Department of Climate Change, Energy, the Environment and Water - Biodiversity Conservation Directorate
	Fire and Rescue NSW
Local Government	Dubbo Regional Council
	Mid-Western Regional Council
Electricity Distributors	Transgrid
Key Energy Market Bodies	AEMO
Local organisations	Wellington Local Emergency Management Committee
Impacted Landowners	
Landowners	Private landowner
	Wellington Battery Project Co Pty Ltd
Wider Community	
Neighbours	Residents in surrounding lands
Indigenous Organisations	Wellington Valley Wiradjuri Aboriginal Corporation
	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:

oranabess@akayshaenergy.com.

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://akayshaenergy.com/projects/orana-bess>.

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 Development Consent, 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, Housing and Infrastructure (DPHI) 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 DPHI 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 DPHI in accordance with Development Consent.

5.3.2 *Other agencies*

The relevant Local Emergency Management Committee will be notified in accordance with condition B30 of the Development Consent 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 contact details are provided in Table 5-2.

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.

Table 5-2 Project contact details

Project contact number	+61 499 211 533
Email address	oranabess@akayshaenergy.com
Postal address	388 George St, Sydney NSW, 2000

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 DPHI of the dispute and seek input.

6 Incident, emergency and non-compliance 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 Development Consent 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 a non-compliance.

6.1.2.2 Within seven days

The proponent will notify the DPHI in accordance with condition C11 to C13 of the Development Consent. The DPHI 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 Development Consent, 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 8 of the Development Consent.

6.2.2.2 *Within seven days*

A written incident notification addressing the requirements set out below must be submitted to DPHI via the Major Projects website within seven days after the Proponent becomes aware of an incident. This notification is required to be given even if the Proponent fails to give the notification required under condition C10 of Schedule 2 (refer to section 6.2.2.1) or, having given immediate 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 DPHI 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 in the CEMP and the Fire Safety Study (in accordance with condition B28 of the Development Consent).

An Emergency Plan describing the emergency procedures for operation of the project will be prepared and implemented in accordance with condition B31 of the Development Consent. 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 Development Consent.

7.1 Independent audits

Independent audits will be undertaken in accordance with condition C14 to C19 in the Development Consent. 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 Development Consent. 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 Development Consent, or condition C16 of the Development Consent where notice is given by the Planning Secretary
- submit the response to DPHI 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 DPHI, 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 Development Consent 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 Development Consent 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 Development Consent.

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). The monitoring plan for construction will need to be updated following the completion of the CEMP. 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 6 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 — Inspect environmental controls in place — Inspect storage of fuels, chemicals and hazardous substances — 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 Site Manager Project Manager
Internal audits	Regularly including: — 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 contractors certified system. — Contractor 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 Site Manager Project 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 Development Consent	This EMS CEMP and all supporting plans	Project Manager Akaysha Energy

Category	Frequency	Actions and requirements	Relevant plans or strategies	Reported to
		— Review evidence of compliance with environmental management framework and associated plans — Reporting in accordance with section 7.1 of this document.		DPHI
Traffic (Road conditions)	Continuously and directly in response to complaints	— 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	TMP	SQE Manager
Traffic (road tracking)	Continuously and directly in response to complaints	— 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
Traffic (vehicle movements)	Continuously and directly in response to complaints	— Monitor vehicle movements and traffic flows to ensure compliance — Monitor effectiveness of shuttle bus program	CEMP TMP	SQE Manager
Noise	As relevant to the plant and equipment on site and in response to noise complaints	— 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.	CEMP TMP Construction Noise and Vibration Plan	SQE Manager
Air quality (dust)	Continuously and directly in response to complaints	— 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	CEMP	SQE Manager

Category	Frequency	Actions and requirements	Relevant plans or strategies	Reported to
		dust and/or particulate matter. Monitoring may be carried out at a place(s) relevant to the potentially affected dust sensitive receptor.		

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 — 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.	BMP	SQE Manager
Biodiversity (weeds)	Monthly	— Undertake visual assessments of weeds — The presence of weeds and their extent will be noted	BMP	Contractor Project Manager
	Biannually (Spring and Autumn)	— Walk-over inspection by bush regeneration contractor — Check weed control methodologies	BMP	Contractor Site manager
Biodiversity (other)	As required	— Protection of vegetation outside disturbance boundary, including appropriate signage	BMP	SQE Advisor
Accommodation and Employment	Monthly	— Review the effectiveness and consider feedback from businesses and stakeholders	Accommodation and employment strategy	Contractor Project Manager Akaysha Energy
	Fortnightly	— Monitoring complaints related to accommodation and employment	Accommodation and employment strategy	Contractor Project Manager

Category	Frequency	Actions and requirements	Relevant plans or strategies	Reported to
Flood Risk	As required	— Identification of roles and responsibilities — Identification of actions	Emergency Response Plan	Contractor Project Manager

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 — Inspect weed coverage	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 Development Consent — Review evidence of compliance with environmental management framework and associated plans — Reporting in accordance with section 7.1 of this document.	OEMP	Site Manager Akaysha Energy DPHI
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, maintenance activities which is likely to have an impact on noise emissions or in response to noise complaints.	— Ensure project noise trigger levels outlined in 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
Rehabilitation	Quarterly (first year) post rehabilitation and then five yearly for a minimum of 15 years (at years 1, 5, 10 and 15).	— Success of revegetation measures of temporary disturbance areas to assess effectiveness and need for amendment	BMP	Akaysha Energy
Accommodation and Employment	Six monthly or until the Accommodation and employment strategy no longer applies	— Review the effectiveness	Accommodation and employment strategy	Akaysha Energy

Appendix A

EMS approval



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