Tallawarra-B Power Station

Construction Environmental Management Plan

EnergyAustralia Tallawarra Pty Ltd

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EnergyAustralia

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Glossary

Abbreviation	Meaning
ACHMP	Aboriginal cultural heritage management plan
CASA	Civil Aviation Safety Authority
CCGT	Combined cycle gas turbine
CEMP	Construction environmental management plan
CLG	Community Liaison Group
CoA	Conditions of Approval to Major Project MP07-0124
CSSI	Critical State Significant Infrastructure
DPIE	Department of Planning, Industry and Environment
EA	Environmental Assessment (SKM, 2009)
EMS	Environmental management strategy
EP&A Act	Environment Planning and Assessment Act 1979
EPA	NSW Environment Protection Agency
EPC	Engineering, procurement and construction
EPL	Environment protection licence
ER	Environmental representative
EWMS	Environmental work method statements
FFMP	Flora and fauna management plan
FID	Final investment decision
GECL	GE Clough, engineering, procurement and construction contractor
HSSE	Health, safety, security and environment
I&C	Instrumentation and control
kV	Kilovolts
KPI	Key performance indicators
Mod-1	Modification 1 to Major Project MP07-0124
Mod-2	Modification 2 to Major Project MP07-0124
MW	Megawatts
NAQMP	Noise and air quality management plan
OCGT	Open cycle gas turbine
OE	Owners engineer
OEMP	Operational environmental management plan
O&M	Operation and maintenance
SoC	Statement of Commitments within the Environmental Assessment and Submissions Report (SKM, 2009/2010)
SWMP	Soil and water management plan
TMP	Traffic management plan
WHS	Work, health and safety
WMP	Waste management plan

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1 Introduction

This Construction Environmental Management Plan (CEMP) provides the procedures, policies and processes that EnergyAustralia will apply to establish and maintain project compliance and to manage potential environmental impacts during the construction and commissioning phases of the Tallawarra B Power Station (the project).

2 Project overview

2.1 Project description

The project involves the construction and operation of an open cycle gas turbine (OCGT) power station and associated infrastructure. The project will be constructed adjacent to the existing Tallawarra A combined cycle gas turbine power station.

Construction of the project is defined as all physical works associated with the development, including but not limited to demolition and removal of buildings or works, erection or installation of buildings and infrastructure, and the carrying out of works, but excluding pre-construction minor works. Construction includes commissioning of the new power station prior to operation. References throughout the CEMP and associated plans to construction should be taken to include commissioning.

The operation of the project is defined as when the power station commences contributing electricity to the grid but excluding commissioning activities.

The project will use some existing infrastructure associated with the Tallawarra A Power Station. Natural gas for fuel to the project will be supplied from an extension to the existing lateral gas line at the Tallawarra A Power Station. The project will generate electricity at a voltage in the range of 11-22kV which will be stepped up to 132kV by a transformer.

The project will require construction of the new OCGT power station, a new transmission line, new gas receival station infrastructure, and new gas feeder pipeline infrastructure.

Construction of the project would require the temporary establishment of construction ancillary areas adjacent to the project site. This will include the use of some land associated with the Tallawarra A power station. Following construction, disturbed area will be rehabilitated, and landscaping will be established.

2.2 Project site and surrounds

The project is located adjacent to the existing Tallawarra A Power Station on Yallah Bay Road, Yallah approximately 80 kilometres south of Sydney and 13 kilometres southwest of Wollongong. The site is located on the western bank of Lake Illawarra and on the lower southern slopes of Mount Brown, which rises to about 130 metres. The project is positioned in a historically disturbed location on the foundations of a former coal power station, which was decommissioned in 1989. The project land is owned by EnergyAustralia.

The Tallawarra Lands surrounding the site are currently leased for low density cattle grazing and comprise of undulating grassy slopes.

Since the project approval, a new residential development has been constructed about 2.5 kilometres southwest of the project site at Haywards Bay. Additionally, there are plans to redevelop some of the Tallawarra Lands to the northeast and southwest of the site for residential development.

The land that the project applies to is (former) Lot 109, DP 1050302, (now) Lot 1092, DP 1140369 Yallah Bay Road, Yallah, Wollongong local government area.

Figure 2-1 shows the project location.

2.2.1 Project approval

The Project (MP07-0124) was granted approval by the then Minister for Planning on 21 December 2010. The Project was declared as Critical State Significant Infrastructure (CSSI) by the Minister for Planning on 26 February 2008 in accordance with section 5.13 of the *Environment Planning and Assessment Act 1979* (EP&A Act).

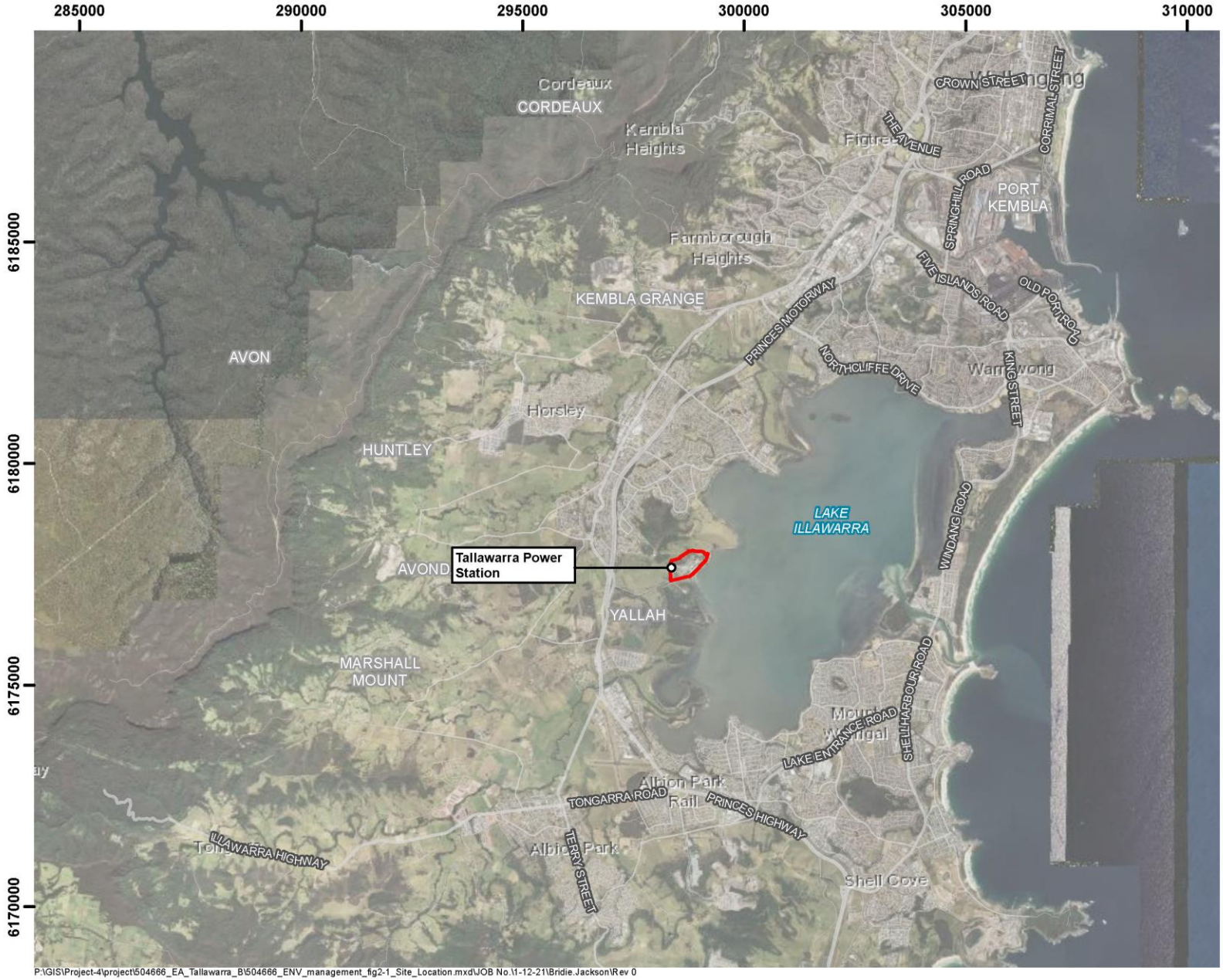
An approval modification (Mod-1) for extension of the lapse date was approved March 2016, which extended the Project Approval lapse date by five years to 21 December 2020. A second approval modification (Mod-2) was approved by the Department of Planning, Industry and Environment (DPIE) in December 2020. Mod-2 extended the Project Approval lapse date by a further two years to December 2022 and amended several conditions of approval, including allowing for a single OCGT to be used for the project.

2.3 Project delivery structure

The project will be delivered through various entities and contracts including:

- EnergyAustralia, as proponent / owner has overarching accountability for the project delivery. During construction, EnergyAustralia will manage delivery of certain owner directed works which may include access improvements, transmission line works or other ancillary works.
- GE Clough (GECL) has been awarded the Engineering, Procurement and Construction (EPC) main contract for construction and commissioning of the Tallawarra B Power Station. GECL will be responsible for the power station design, construction and commissioning, including the establishment of associated construction ancillary facilities.
- Sub-contractors may be engaged by EnergyAustralia or GECL, as required.
- EnergyAustralia would operate the project following construction.

This CEMP is applicable to all personnel including contractors and subcontractors associated with the delivery of the project.



Projection: GDA 1994 MGA Zone 56

Tallawarra B Power Station

FIGURE 2.1: Site location

3 Purpose and scope

This Construction Environmental Management Plan (CEMP) provides the procedures, policies and processes that EnergyAustralia will apply to establish and maintain project compliance and to manage potential environmental impacts during the construction phase of the Project.

Implementing this CEMP assists in demonstrating environmental due diligence under the Project and in meeting relevant legislative, regulatory, contractual and compliance requirements specifically meeting the requirements and demonstrating compliance with CoA 7.2.

Project construction is planned to commence in late 2021 and is scheduled to be completed in late 2023.

An Environmental Management Strategy (EMS) has been prepared for the project. The EMS provides the overarching environmental management framework for the project. This CEMP has been prepared to be consistent with the EMS.

Compliance with this CEMP enables the implementation of appropriate environmental management and mitigation measures, and a process for regular monitoring and auditing to assess their effectiveness. Changes to the controls will be undertaken if they are not achieving their objectives

This CEMP:

- Is consistent with the Guideline for the Preparation of Environmental Management Plans (*Department of Infrastructure, Planning and Natural Resources, 2004*).
- Has been prepared in accordance with the Department of Planning, Industry and Environment, Post Approval Documents, General Requirements.
- Has been prepared in accordance with the Department of Planning, Industry and Environment, Post Approval Documents, Environmental Management Plan, Guideline for Infrastructure Projects, April 2020.
- Provides an overarching environmental management framework governing all construction activities suitable for obtaining ER endorsement and Department of Planning, Industry and Environment approval.
- Has been designed to be simple to apply by the parties that contribute to the project construction, including EnergyAustralia (as owner/proponent), contractors, designers and sub-contractors.
- Provides a system to address environmental monitoring, compliance reporting, incident management, and related requirements to achieve compliance with the project planning approvals.
- Defines the roles and responsibilities for environmental management and compliance.
- Provides for a common approach to environmental risk assessment to inform risk mitigation.
- Is supported by CEMP sub-plans that provide a compliance framework for the management of specific environmental aspects (refer to Section 7.3).
- Will be publicly accessible.

4 Environment policy

4.1 Environmental management systems and policies

This CEMP reflects the principles of EnergyAustralia's corporate ISO14001 Environmental Management System. EnergyAustralia's environmental policy prepared as part of their corporate Environmental Management System includes a commitment to manage its activities in such a way that reduces their environmental impact. EnergyAustralia's environmental policy is consistent with this CEMP.

EnergyAustralia has considered GECL's environmental policy as part of the EPC contractor selection process. Accordingly, GECL as the Principal Contractor will construct the project in accordance with their own ISO14001 Environmental Management System.

The EnergyAustralia Health, Safety, Security and Environment Policy and the GECL Environment Policy are applicable to the CEMP and sub-plans. The policies will be:

- Displayed at prominent locations on the project site
- Communicated to site personnel during induction and training
- Made accessible to clients and concerned / interested members of the public.

See Appendix A for a copy of the EnergyAustralia Health, Safety, Security and Environment Policy and the GECL Environment Policy.

4.2 Environmental objectives and targets

The EMS Chapter 7.1 contains the project-specific environmental objectives and targets. These objectives and targets have been developed with the compliance requirements, contractual obligations, risks and opportunities taken into consideration.

If there are any changes and/or updates in the environmental objectives and targets, these would be updated in the EMS.

5 Contractual requirements and compliance obligations

5.1 Relevant legislation and guidelines

The relevant Commonwealth and State legislation and policies related to the project are detailed and maintained as part of the EMS. See Appendix G of the EMS for relevant legislation compliance responsibilities.

Changes may occur to legislation during construction of the project, requiring review and possible amendment of the relevant EMS, CEMP and sub-CEMPs. If any other legislation not identified becomes relevant throughout the course of the project, the HSSE Lead will identify these requirements and ensure compliance.

5.2 Licenses and permits

The licenses and permits relevant to the project include:

- EnergyAustralia holds an Environmental Protection Licence (EPL) number 555 under Section 58(5) of the *Protection of the Environment Operations Act 1997* for the project site. The EPL covers the operational licence requirements for the Tallawarra A project and construction requirements relevant to the construction of the Tallawarra B project.
- License for the storage, transport and use of dangerous goods (required under the *Dangerous Goods Act 1974* and Dangerous Good Regulation 1999).
- License to undertake works within a road reserve (required under Section 138 *Roads Act 1993*).

The construction relevant EPL requirements related to the project are detailed and maintained as part of the EMS. See Appendix H of the EMS for relevant EPL responsibilities.

Licences, permits or approvals not identified in this CEMP and deemed to be required through further consultation or legislative changes will be progressively obtained by EnergyAustralia during the course of the project. The specific conditions of any additional approvals will be incorporated into the CEMP and sub plans as required. Copies of all relevant environmental licences and permits will be kept on-site.

5.3 Conditions of approval

The CoA directly relevant to this CEMP are provided in Table 5-1. A cross reference is included to indicate where each CoA is addressed in this CEMP, CEMP sub-plans or associated documents.

This CEMP will be submitted for the approval of the Secretary of the Department of Planning, Industry and Environment no later than one month prior to the commencement of any construction works associated with the project, or within such period otherwise agreed by the Secretary. Construction works will not commence until written approval has been received from the Secretary.

EnergyAustralia must implement the approved CEMP for the project.

Table 5-1 CoA relevant to the development of the CEMP

CoA #	Condition requirement	How addressed
7.2	The Proponent shall prepare a Construction Environmental Management Plan (CEMP) to outline environmental management practices and procedures to be followed during construction of the project. The CEMP shall be consistent with *the Guideline for the Preparation of Environmental Management Plans* (Department of Infrastructure, Planning and Natural Resources, 2004), or its latest version, and shall include, but not necessarily be limited to:	CEMP, throughout

CoA #	Condition requirement	How addressed
	(a) a description of all activities to be undertaken on the site during construction including an indication of stages of construction;	CEMP, Section 6
	(b) statutory and other obligations that the Proponent is required to fulfil prior to and during construction including all approvals, consultations and agreements required from authorities and other stakeholders, and key legislation and policies;	EMS, Section 2 CEMP, Section 5
	(c) details of how the environmental performance of the construction works will be monitored, and what actions will be taken to address identified potential adverse environmental impacts. In particular, the following environmental performance issues shall be addressed in the Plan	EMS, Section 7 CEMP, Section 12
	(i) measures to monitor and manage dust emissions in consultation with the EPA,	CEMP Appendix E: Noise and Air Quality Management Sub Plan
	(ii) measures, prepared in consultation with Wollongong City Council, to reduce the visual impacts of the project, including landscape plans illustrating the proposed landscape planting and any embankment works,	EMS, Section 7. CEMP Appendix G: Flora and Fauna Management Sub Plan
	(iii) measures, prepared in consultation with Wollongong City Council, for managing and reducing potential flooding; and	CEMP Appendix H: Soil and Water Management Sub Plan
	(d) electricity transmission route alignment sheets identifying the exact location of the proposed transmission lines and the location of any threatened species, threatened species habitat and Aboriginal objects in the vicinity;	CEMP Figure 6-1 CEMP Appendix G: Flora and Fauna Management Sub Plan CEMP Appendix I: Aboriginal Cultural Heritage Management Sub Plan CEMP Section 7.4: Project GeoPortal CEMP Appendix B: Sensitive Area Maps
	(e) a description of the roles and responsibilities for key personnel involved in the construction of the project;	EMS, Section 4 CEMP, Section 8
	(f) the issue-specific management plans required under condition 7.3 of this approval; and	EMS, Section CEMP, Section 7.3 and Table 7-1 CEMP Appendix E to J
	(g) complaints handling procedures during construction consistent with condition 6.2 of this approval.	CEMP Section 11.1 to 11.3 EMS, Section 3.2
	The Plan shall be submitted for the approval of the Secretary no later than one month prior to the commencement of any construction works associated with the project, or within such period otherwise agreed by the Secretary. Construction works shall not commence until written approval has been received from the Secretary.	Section 5.3
	The Proponent must implement the approved CEMP for the project.	CEMP Section 5.3
7.7	Within 3 months, unless the Secretary agrees otherwise, of a) the submission of an incident report under condition 5.1 of this approval; b) the submission of an Independent Environmental Audit report under condition 5.11 of this approval c) the approval of any modification to the conditions of this approval; or d) a direction from the Secretary under condition 1.3 of this approval; the Proponent must review and, if necessary revise the studies, strategies or plans required under the conditions of approval to the satisfaction of the Secretary. Where this review leads to revisions in any such document, then within 4 weeks of the review the revised document must be submitted to the Secretary for approval, unless otherwise agreed with the Secretary.	CEMP Section 14

CoA #	Condition requirement	How addressed
App 1, Condition 1	A written incident notification addressing the requirements set out below must be submitted to the Secretary 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 5.1 or, having given such notification, subsequently forms the view that an incident has not occurred.	CEMP Section 10.6
App 1, Condition 2	Written notification of an incident must: a) identify the development and application number;	CEMP Section 10.4
	b) provide details of the incident (date, time, location, a brief description of what occurred and why it is classified as an incident);	
	c) identify how the incident was detected;	
	d) identify when the Proponent became aware of the incident;	
	e) identify any actual or potential non-compliance with conditions of approval;	
	f) describe what immediate steps were taken in relation to the incident;	
	g) identify further action(s) that will be taken in relation to the incident; and	
	h) identify a project contact for further communication regarding the incident.	
App 1, Condition 3	Within 30 days of the date on which the incident occurred or as otherwise agreed to by the Secretary, the Proponent must provide the Secretary and any relevant public authorities (as determined by the Secretary) with a detailed report on the incident addressing all requirements below, and such further reports as may be requested.	CEMP Table 13.1
App 1, Condition 4	The Incident Report must include: a) a summary of the incident;	CEMP Section 10.4
	b) outcomes of an incident investigation, including identification of the cause of the incident;	
	c) details of the corrective and preventative actions that have been, or will be, implemented to address the incident and prevent recurrence; and	
	d) details of any communication with other stakeholders regarding the incident.	

5.4 Statement of commitments

The relevant statement of commitments identified in the Environmental Assessment are detailed and maintained as part of the EMS. See Appendix F of the EMS for relevant statement of commitment compliance responsibilities. Statement of commitments relevant to each CEMP sub plan are detailed within those plans (Appendix E to Appendix J).

6 Construction works

The project will be constructed directly adjacent to the Tallawarra A power station. Ares subject to construction will include:

- Tallawarra B Power Station (turbine hall, transformer and associated infrastructure)
- Transmission line easement
- Gas receival station
- Gas feeder pipeline
- Construction ancillary sites, including site offices and laydown areas
- Construction vehicle carparking areas.

Removal of any redundant transmission towers would be subject to separate approvals that would be obtained by the authorised network operator.

Figure 6-1 identifies the proposed areas to be used for construction of the project.

6.1 Construction hours and duration of works

Works will generally be undertaken during standard construction hours, as required by CoA 3.1. Standard construction working hours are:

a) 7:00 am to 6:00 pm, Mondays to Fridays, inclusive;

b) 8:00 am to 1:00 pm on Saturdays; and

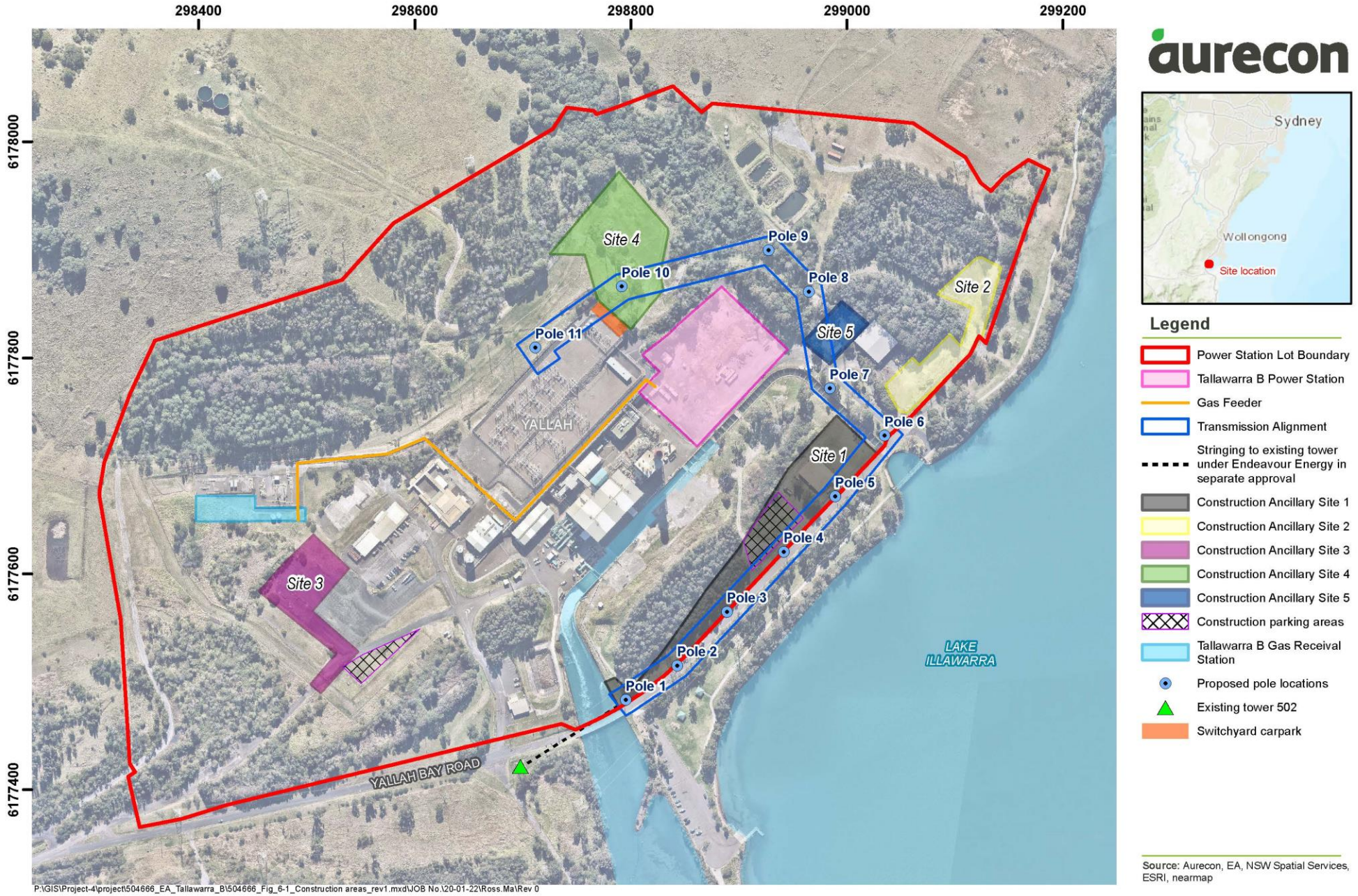
c) at no time on Sundays or public holidays.

The above does not apply in the event of a direction from police or other relevant authority for safety reasons, or to prevent environmental harm, the loss of property or risk to life.

An Out of Hours Works Protocol has been prepared to comply with in accordance with Condition of Approval 3.2 and Condition E3.2 of the EPL. Should any noisy activities be planned to be undertaken outside of standard construction hours, the Out of Hours Works Protocol provided in Appendix E: Noise and Air Quality Management Sub Plan should be followed.

Construction activities will generally include the following steps and approximate durations noting that some activities may overlap and may change based on detailed construction planning, materials supply logistics and weather:

- Mobilisation of the construction site (about 3 months)
- Clearing of the site and bulk earthworks (about 4 months)
- Establishment and preparation of site foundations (about 6 months)
- Construction of buildings and plant (about 11 months)
- Commissioning (about 1 month)
- Demobilisation of the construction site (about 1 month).



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Projection: GDA 1994 MGA Zone 56

Tallawarra B Power Station

FIGURE 6.1: Construction areas

6.2 Construction workforce

It is expected that during construction of the project peak employment will be in the order of 200 personnel.

6.3 Wastewater management

The existing sewage treatment plant at the project site is a self-contained package plant associated with the Tallawarra A Power Station. The treatment plant was installed in 2004 to replace the previous system and to accommodate an increase in operational staff for the Tallawarra A Power Station.

In the existing treatment plant, wastewater is passed through a series of tanks which utilise anoxic and aerobic treatment. The treated effluent from the plant is discharged into existing effluent ponds and is utilised for irrigation on designated grassed areas adjacent to the Project site. Operation of the treatment plant is managed under the existing EPL for Tallawarra A (EPL 555).

The treatment plant is designed to cater for up to 35 existing staff during normal operations, which equates to the treatment of about 1500 litres of wastewater per day. During major maintenance, the treatment plant is designed to cater for about 85 people and up to 150 people during construction periods. This additional treatment volume is provided by a balance tank in the treatment system. During recent maintenance activities of Tallawarra A, the treatment plant adequately catered for about 200 maintenance staff.

During the project if the capacity of the existing wastewater treatment plant would be exceeded, wastewater would need to be collected and removed from site by a licenced contractor. Further details regarding wastewater management are provided in Appendix J: Waste management sub plan.

6.4 Construction activities and equipment

Key construction activities would include:

- **Establishment of construction ancillary sites**: Works to establish appropriate areas and facilities for Offices and meeting rooms for construction site personnel, amenity and first aid facilities, storage for light equipment and tools, material storage areas, equipment laydown areas, communication facilities and construction vehicle parking areas.
- **Bulk earthworks and site preparation**: During the development phase of Tallawarra A bulk earthworks, site preparation and the removal of asbestos containing materials was undertaken, including for the Tallawarra B power station site. Further earthworks and site preparation activities will be required for the project. These would be carried out in accordance with the EnergyAustralia Tallawarra A asbestos management plan HAZ009_AMP_FIN_280101 (provided as an appendix to the Soil and Water Management Sub Plan).
- **Preparing and establishing foundations**: Major plant items and buildings would be established on concrete foundations. The type of foundations would be determined following the detailed design process.
- **Construction of facility components**: Prefabricated components would be imported and erected on-site.
- **Gas feeder pipeline construction**: Works would be undertaken to construct the gas feeder pipeline. Construction would involve welding and securing the pipe. Once installed the pipeline would be pressure tested for leaks by filling it with clean water.
- **Transmission line installation**: Existing redundant transmission lines and towers would be removed where necessary. New prefabricated transmission poles will be installed along the transmission route in accordance with Endeavour Energy requirements. New transmission lines would be strung along the poles.

Table 6-1 Likely construction equipment

Equipment type	Purpose
Class 1 Restricted Access Vehicles (over size, over mass vehicles)	Equipment haulage (e.g. the gas turbine, generator and transformers)
Excavators and backhoes	Bulk excavations, excavation for drainage, site levelling, pipeline trenching and any sundry excavations required on site
Front-end loaders	Removal of excavated material
Graders	Site levelling and processing of layer works
Semi-tipper trucks	Equipment haulage, materials and equipment delivery
Scrapers	Excavation and site levelling (if required)
Bulldozers	Ground preparation
Compaction rollers	Surface compaction
Water trucks	Dust suppression, processing bulk fill and road or track construction
Cranes	Assembly of prefabricated building items, positioning of equipment, loading and offloading of delivery vehicles, etc
Elevated work platforms	Stringing of transmission lines and performing working at heights operations were required

6.5 Use of Tallawarra A facilities

One of the aims of the project is to maximise the use of EnergyAustralia's currently approved Tallawarra A CCGT power station equipment and infrastructure. Where possible the project will utilise the existing Tallawarra Stage A power station control room, wastewater treatment plant, substation, and heavy haulage road.

The Contractor will use temporary self-contained units for construction offices, ablution and crib facilities, and will provide for licensed ablution facilities with offsite waste disposal.

6.6 Site security and lighting

The project would be located within the broader Tallawarra power station site. The existing Tallawarra A power station includes security fencing and lockable gates at all site access points, including the main access road, to prevent unauthorised access. No modification to the existing outer permitter security fencing of the site is expected to be required, however some alteration of internal security fencing will be undertaken as part of the project.

During construction of the project temporary security fencing may be established by Contractors around work sites. Temporary fencing will be removed when construction is completed.

External lighting will be provided for the project in compliance with Condition of Approval 3.52. Lighting will be kept to the minimum required for operational needs and safety. All external lighting associated with the project will be mounted, screened, and directed in such a manner so as not to create a nuisance to the surrounding environment, properties and roadway. Installation will be designed to meet ASNZS 4282 – Control of Obtrusive Effects of Outdoor Lighting to ensure the fugitive light emissions are limited.

6.7 Site access and parking

The existing site access to the Tallawarra power station site will be from the Princes Highway via Yallah Bay Road. Yallah Bay Road is an asset controlled and maintained by Wollongong City Council.

The project will utilise existing site car park facilities and will prepare other suitably cleared areas for construction personnel light vehicle car parking. Construction ancillary sites will also be established so that they are suitable for construction heavy vehicle and construction light vehicle parking during the project.

Designated parking areas and construction ancillary sites are identified in Figure 6-1 and as described in detail in the Traffic Management Sub Plan (Appendix F).

6.8 Construction ancillary sites

Construction ancillary sites would be located at appropriate locations in the project area as identified in Figure 6-1. These will be established by contractors for the following uses:

- Offices and meeting rooms for construction site personnel
- Amenity and first aid facilities
- Storage for light equipment and tools
- Material storage areas
- Equipment laydown
- Communication facilities
- Heavy or light construction vehicle parking.

Fencing with security points to control access would enclose the construction ancillary sites.

Water will be supplied to construction ancillary sites as needed from existing utilities at the site. A new main switchboard will be installed to provide power to the construction ancillary sites as needed.

6.9 Emergency systems

The main firefighting pump for Tallawarra Stage A has been designed to provide for the additional capacity of firefighting water required for the project. The underground fire ring main for Tallawarra A has been equipped with two valves at the east side of the plant to allow the connection of an existing ring main for the project.

The control room will monitor emergency systems installed around the plant including:

- Comprehensive fire alarm system.
- Gas leak detection system.

During the construction of the project the GECL Emergency Response Plan will be used for incident response when incidents occur as a result of construction activities. This specifically includes incidents that occur on or in association with land that has been designated by the Project Director as part of the Tallawarra B construction area. As shown in Figure 6-1, the construction area includes the Tallawarra B Power Station, construction ancillary sites 1 to 5, the Gas Receival Station and construction parking areas.

EnergyAustralia will review the GECL Emergency Response Plan prior to construction to ensure that the appropriate separation of roles, responsibilities and approaches to emergency response are defined and coordinated between EnergyAustralia and GECL. The GECL Emergency Response Plan is shown in Appendix L.

For works outside the Tallawarra B construction area (and construction ancillary sites), EnergyAustralia will take ownership of all emergencies under their Emergency Response Plan. The EnergyAustralia TQMS12-HSE-L001 - Emergency Response Plan would typically apply to the broader project site outside of the GECL construction areas, including for Tallawarra A operations. If there is any doubt as to which Emergency Response Plan applies during an incident, the EnergyAustralia TQMS12-HSE-L001 - Emergency Response Plan will apply.

If an incident involves pollution or the threat of pollution, the EnergyAustralia TQMS12-HSE-L001-A02 - Pollution Incident Response Management Plan (PIRMP) must be followed. This plan is a component of the EnergyAustralia Emergency Response Plan.

7 Environmental management

7.1 Environmental aspects, risks and opportunities

Project wide environmental risks and opportunities are required to be assessed throughout the project and would be documented under the Environmental Work Method Statements (EWMS). EWMS will provide the appropriate management strategies to manage potential impacts and to comply with the CEMP and its subplans.

7.2 Environment risk assessment

To determine and identify the risks involved in construction activities, the process and risk matrix in EnergyAustralia's **WHS Hazards and environmental AspectsTQMS02-HSE-P003** should be applied (Figure 7-1). Environmental risk assessment must be undertaken as part of the development of any activity specific EWMS (refer to Section 7.5) and therefore will be undertaken for all construction activities associated with the project.

EnergyAustralia may approve alternate risk assessment matrix for use, provided they are appropriate and consistent with the EnergyAustralia matrix.

The process follows:

1. **Identifying the risk/aspect:** key risks for construction activities should be identified taking into consideration the outcomes from previous environmental assessments i.e. the EA, updated ecology information and updated Aboriginal heritage information.
2. **Analysing the risk/aspect (determining likelihood/consequence)**: each risk shall been assessed for potential unmitigated impact using a likelihood (i.e. the chance of something happening) and the consequence (i.e. outcome of an event affecting objectives) scoring system. An aspect has been deemed a "Significant Environmental Aspect" under ISO 14001:2004 Section 4.3.1 if the risk is greater than or equal to 16 in the risk matrix.
3. **Evaluating the risk/aspect:** The mitigated risk score shall be determined using the mitigated likelihood and consequence. Each impact is assigned a risk category which range from "Low" (low likelihood and consequence) to "extreme" (high likelihood and consequence). A risk category identified as having an extreme or high risk (a significant impact) may be downgraded if appropriate environmental controls and measures are implemented and maintained. Proactive planning, installation and maintenance of appropriate environmental controls and ongoing monitoring will reduce the risks associated with each environmental impact identified.
4. **Treating the risk:** after the initial risk assessment, environmental control measures have been determined using the environmental best practice and the recommendations mentioned in the EA and updated environmental information.

7.3 CEMP sub-plans

The CoA require five CEMP sub-plans to be developed in consultation with relevant government agencies to be undertaken. Additional to the CoA requirements, EnergyAustralia has prepared one additional CEMP sub-plans (Waste Management Plan) to ensure that all relevant aspects of environmental risk are appropriately managed.

Consultation has been undertaken with various parties including Public Authorities on the CEMP sub plans. Consultation issues that have been raised have been addressed within each CEMP sub plan. The CEMP sub plans prepared for the project are outlined in Table 7-1.

Table 7-1 CEMP sub-plan requirements / commitments

CoA reference	Details of sub plan prepared
■ CoA 7.3 (a) requires a noise management plan ■ CoA 7.2 (c) (i) requires measures to monitor and manage dust emissions	■ Appendix E to this CEMP provides a Noise and Air Quality Management Sub Plan ■ The noise management measures are designed to comply with the Interim Construction Noise Guideline (Department of Environment and Climate Change, 2009). ■ Measures to monitor and manage dust emissions have been prepared in consultation with the EPA.
■ CoA 7.3 (c) requires a Flora and fauna management plan ■ CoA 7.2 (c) (ii) requires a landscape plan	■ Appendix G to this CEMP provides the Flora and Fauna Management Sub Plan. ■ The Flora and Fauna Management Sub Plan includes a Landscape Plan developed in consultation with Wollongong City council. ■ The Flora and Fauna Management Sub Plan includes measures to manage flora and fauna impacts during construction developed in consultation with the BCS.
■ CoA 7.3 (b) requires a Traffic Management Plan	■ Appendix F to this CEMP provides the Traffic Management Sub Plan. ■ Construction traffic predictions made in the EA and other approvals documentation are used to generate traffic forecasts to design appropriate traffic management approaches. ■ The Traffic Management Sub Plan includes an outline of the process for obtaining road occupancy licences or similar third-party approvals. ■ Traffic Management Sub Plan includes measures to manage traffic and transport potential impacts that have been prepared in consultation with NSW Police, Transport for NSW and Wollongong City Council.
■ CoA 7.3 (d) requires a Soil and Water management plan ■ CoA 7.2 (c) (iii) requires measures for managing and reducing potential flooding	■ Appendix H to this CEMP provides the Soil and Water Management Sub Plan. ■ The Soil and Water Management Sub Plan includes management measures prepared in consultation with EPA, DPIE Water and Wollongong City Council. ■ The Soil and Water Management Sub Plan includes provisions for water quality management, erosion and sediment controls, flooding constraints management, soil treatments, contaminated land management approaches and soil-based hazardous materials management measures. ■ The Soil and Water Management Sub Plan includes soil loss calculations and a progressive erosion and sediment control plans for worksites.
■ CoA 7.3 (e) requires an Aboriginal cultural heritage management plan	■ Appendix I to this CEMP provides the Aboriginal Cultural Heritage Management Sub Plan ■ The Aboriginal Cultural Heritage Management Sub Plan includes provisions for the management of recorded sites or identified Aboriginal objects within the project area, an outline for an Aboriginal Cultural Education Program for the induction of personnel and contractors involved in the construction of the project, and an unexpected finds procedure. ■ The Aboriginal Cultural Heritage Management Sub Plan has been prepared in consultation with Heritage NSW and Registered Aboriginal Parties.
■ CoA 3.58 – 3.61 include requirements for project waste management	■ Appendix J to this CEMP provides a Waste Management Sub Plan ■ The sub plan includes provisions for the management of waste likely to be created by the project, including outlining the waste management approaches towards minimisation, categorisation, disposal or reuse and reporting.

ENERGYAUSTRALIA RISK MATRIX

Elements not required for JSEA or SWMS.

Frequency of Hazard

Historical

Likelihood of occurrence

Consequence (S)	People & Safety	Environment	Reputation	Production	Rank	Likelihood of occurrence (L) 1	2	3	4	5	6
						Less than one in 10,000 years	One in a thousand years	One in a hundred years	One in 10 years	Less than Once per year	More than one per year
						Never been known to occur in the industry	Has occurred in the industry	Has occurred in industry, but not in this Company/Group	Has occurred once or twice in the Company/Group	Has occurred frequently in the Company/Group	Has occurred frequently at this location
						An unlikely / unknown occurrence	A remotely possible but known occurrence	An occasional occurrence	A fairly frequent occurrence	A regular occurrence	A highly likely occurrence
	Multiple deaths or multiple severe permanent disablement and illness.	Massive pollution with significant onsite and offsite impact and significant recovery work.	Global media interest.	Planned Downtime of > 5 Days ; Unplanned Downtime of > 10 Days; >$10 million.	6	MEDIUM 6	HIGH 12	EXTREME 18	EXTREME 24	EXTREME 30	EXTREME 36
	Death or permanent severe disablement / illness of one person inl. major illness or disease (e.g. amputation, poisoning, cancer etc)	Massive pollution with significant onsite and offsite impact and recovery work.	Regional/ National media interest.	Planned Downtime of between 2 to 5 Days; Unplanned Downtime of > 5 Days; $1 - 10 Million.	5	MEDIUM 5	HIGH 10	HIGH 15	EXTREME 20	EXTREME 25	EXTREME 30
	Major injury / illness as below to more than one person	Significant pollution with offsite impact and recovery work.	Some local and regional media interest.	Planned Downtime of between 12 to 48 Hours; Unplanned Downtime of between 2 to 5 Days; $500,000 - $1million.	4	LOW 4	MEDIUM 8	HIGH 12	HIGH 16	EXTREME 20	EXTREME 24
	Major injury or illness to one person (e.g. broken bone, third degree burns, irreversible health damage, noise induced hearing loss, back injury etc)	Pollution with some onsite impact and recovery work.	Some local media interest.	Planned Downtime of between 3 to 12 Hours; Unplanned Downtime of between 12 Hours to 2 Days; $100,000 - $500,000.	3	LOW 3	MEDIUM 6	MEDIUM 9	HIGH 12	HIGH 15	EXTREME 18
	Minor injury or illness (e.g. laceration requiring stitches, second-degree burns or severe bruises, skin irritation etc)	Minor pollution, slight or negligible impact, negligible remedial/ recovery work.	Limited Impact	Planned Downtime of between 0 to 3 Hours; Unplanned Downtime of between 3 to 12 Hours; $10,000 - $100,000.	2	LOW 2	LOW 4	MEDIUM 6	MEDIUM 8	HIGH 10	HIGH 12
	Scratches, minor burns, bruises or abrasions, slight health effect.	Minimal pollution effect contained locally.	Slight Impact	No Planned Downtime; Unplanned Downtime of less than 3 Hours; < $10,000.	1	LOW 1	LOW 2	LOW 3	LOW 4	MEDIUM 5	MEDIUM 6

EnergyAustralia

Risk Matrix

Risk Band	Action
EXTREME	Highly hazardous and highly likely event. In all cases, the potential consequence is too high to allow the operation to commence/continue. Operations in this risk band must be eliminated, avoided or totally re-planned with additional control measures introduced.
HIGH	Consequence and likelihood are high and the work cannot be carried out until risk is reduced to an acceptable level. Mitigating the hazard can be via the provision of written procedures or work instructions, supervising the work, isolation or limiting exposure.
MEDIUM	Consequence and likelihood are medium, monitor and maintain strict control measures - it is acceptable to carry out the work within the appropriate SQMS procedures. i.e. PPE, Permit to Work - ensure a JSEA is completed in conjunction with Permit
LOW	Within this band, it is acceptable to carry out the work within the appropriate SQMS procedures. i.e. PPE, Permit to Work.

NOTE: This document has been designed to align with requirements of AS/NZS ISO31000 - Risk Management

NOMENCLATURE
Risk = Likelihood x Consequence
• Likelihood – Probability
• Consequence = Severity * Exposure

DEFINITIONS (AS/NZS ISO31000:2009 defined from ISO Guide 73:2009)	
Likelihood	**Consequence**
Chance of something happening Note: **1.** In risk management terminology, the word 'likelihood' is used to refer to the chance of something happening, whether defined, measured or determined objectively or subjectively, qualitatively or quantitatively, and described using general terms or mathematically (such as probability or frequency over a given time period) **2.** The English term 'likelihood' does not have a direct equivalent in some languages; instead the term 'probability' is often used. However, in English, 'probability' is often narrowly interpreted as a mathematical term. Therefore, in risk management terminology, 'likelihood' is used with the intent that it should have the same broad interpretation as the term 'probability' has in many languages other than English.	**Outcome of an event impacting objectives;** Notes: **1.** An event can lead to a range of consequences **2.** A consequence can be certain or uncertain and can have positive or negative effects on objectives **3.** Consequences can be expressed qualitatively or quantitatively **4.** Initial consequences can escalate through knock-on effects
Risk Band	
A measure of the magnitude of a risk, based on a combination of the likelihood and consequence of a risk.	

Subject Expert Matter: Lindsay Jahn (OHS Co-ordinator, Asset Services)

Figure 7-1 Risk Matrix (Source: WHS Hazards and environmental AspectsTQMS02-HSE-P003)

7.4 Project GeoPortal and sensitive area maps

An environmentally sensitive area may include Aboriginal and non-Aboriginal heritage sites, threatened species or populations, threatened ecological communities, retained threatened species habitat e.g. hollow-bearing trees, waters, wetlands, potential or actual sulfate soil areas and/or areas of contaminated soil.

The project environmentally sensitive areas are identified in the Environmental Assessment (EA) and since the EA have been further investigated by environmental specialists. To assist with identifying constraints relevant to specific activities, a project **GeoPortal** has been established. The GeoPortal is a web-based geospatial mapping tool that digitally identifies site environmentally sensitive areas and key project features and ancillary facilities.

Sensitive area maps can be exported from the GeoPortal as shown in Appendix B. The GeoPortal and any maps exported from it form the basis for project personnel awareness of the environmental constraints for the project. The GeoPortal is a 'working document' and will be updated throughout the project construction as required. Access to the project GeoPortal will be provided to all relevant personnel. Hard copy environmentally sensitive area maps will also be printed and displayed at the project site.

All works proposed to be undertaken are to be considered with reference to the environmental constraints identified in the environmentally sensitive areas identified in the GeoPortal. Works should consider avoidance, management and/or mitigation of these environmentally sensitive areas.

7.5 CEMP and EWMS

Each of the CEMP sub plans contains measures to avoid and/or control the environmental impacts associated with that aspect of the project. Activity specific EWMS will be prepared for construction activities associated with the project. The controls and safeguards provided in the CEMP sub plans would be used, where relevant, in the preparation of activity specific EWMS to:

- Control the occurrence of the identified environmental impacts
- Protect the environment from harm
- Safeguard the local community
- Satisfy the environmental requirements of the Project and relevant agencies
- Comply with relevant environmental laws and regulations.

The timing of installation of control measures will be critical to ensuring that environmental obligations are met within the required timeframe and that controls are effective in achieving their purpose.

A range of monitoring, measurement and reporting activities are required to be undertaken throughout the construction phase of the Project. Environmental monitoring will be undertaken to manage specific risks and is detailed and maintained by the Environmental Management Strategy.

Environmental Work Method Statements (EWMS) will be prepared by Contractors in consultation with EnergyAustralia and the ER as practical document to be actively used during construction to outline appropriate environmental management measures for a given activity. Examples of activities that may be addressed by activity specific EWMS could include:

- Clearing and grubbing.
- Work within waterways, watercourses and water bodies.
- Work within areas of potential and known heritage value.
- Temporary waterway crossings.
- Excavation in areas of potential acid sulphate soils.
- The use of pesticides and chemicals on site.
- Concrete works.

- Sediment basin management.
- Excavation and/or treatment of contaminated soils.
- Works within areas of ecological protection.

EWMS are to be approved by the Contractors HSE and Construction Team Representatives prior to implementation. Where required, the Contractor should refer EWMS to the HSSE Lead or the ER for comment prior to approval. Prior to commencing works, all project personnel will sign onto the EWMS.

The EWMS template is provided in Appendix C. Alternatively, a contractors EWMS template may be used once approved by the HSSE Lead.

8 Organisation structure, resources and responsibilities

8.1 Link to EMS

The organisational structure, resources as well as relevant roles and responsibilities for the project are detailed and maintained in the EMS. See Section 4 of the EMS for relevant roles and responsibilities.

If there are any updates or changes to the organisational structure, utilisation of resources and the roles and responsibilities, Section 4 in the EMS would be updated to reflect the required change.

8.2 Contracting arrangements

The project will be delivered through various entities and contracts including:

- EnergyAustralia, as proponent / owner has overarching accountability for the project delivery. During construction, EnergyAustralia will manage delivery of certain owner directed works which may include access improvements, transmission line works or other ancillary works.
- GE Clough (GECL) has been awarded the Engineering, Procurement and Construction (EPC) main contract for delivery and commissioning of power station. GECL will generally be responsible for the power station design, construction and commissioning, including the establishment of associated construction ancillary facilities.
- Sub-contractors may be engaged by EnergyAustralia or GECL, as required.
- EnergyAustralia would operate the project following construction.

This EMS is applicable to all personnel and subcontractors associated with the delivery of the project.

8.3 Structure

The EnergyAustralia Project Director is ultimately responsible for ensuring that the specific roles and responsibilities as well as lines of report for the project are clearly defined and communicated to all relevant personnel.

The EnergyAustralia Health, Safety, Security and Environment Leader (HSSE Lead) will be responsible for the implementation and monitoring of all relevant environmental controls, commitments and due-diligence requirements associated with this CEMP. The HSSE Lead directly reports to the Project Director.

The HSSE Lead is also responsible for induction, briefing and advising of all staff and contractors of their obligations and requirements. The Tallawarra B Project delivery organisational chart is presented in Figure 8-1.

This CEMP provides minimum standards for environmental management to be applied throughout the project. During construction, elements of a Contractor's ISO14001 Environmental Management System may be used, provided they meet the minimum requirements of, and are consistent with, this CEMP.

Contractors, subcontractors, employees and subcontractor systems, will need to comply with the approved EA, CoAs as well as the requirements of this CEMP. Contractors and subcontractors are required to adopt the same responsibilities including the requirement to report environmental incidents and issues to the HSSE Lead.

EnergyAustralia may delegate responsibilities of certain roles to other parties. When responsibilities under this CEMP are delegated, any changed requirements under the CEMP or CEMP sub plans must be clearly communicated in writing to all personnel with environmental management accountabilities in Table 8-1.

Delegation of responsibilities of certain roles to other parties must be recorded in updated versions of the management plans or sub-plans that include management actions for the delegated role. Updating any management plans or sub-plans under this EMS must be undertaken in accordance with condition of approval 7.8.

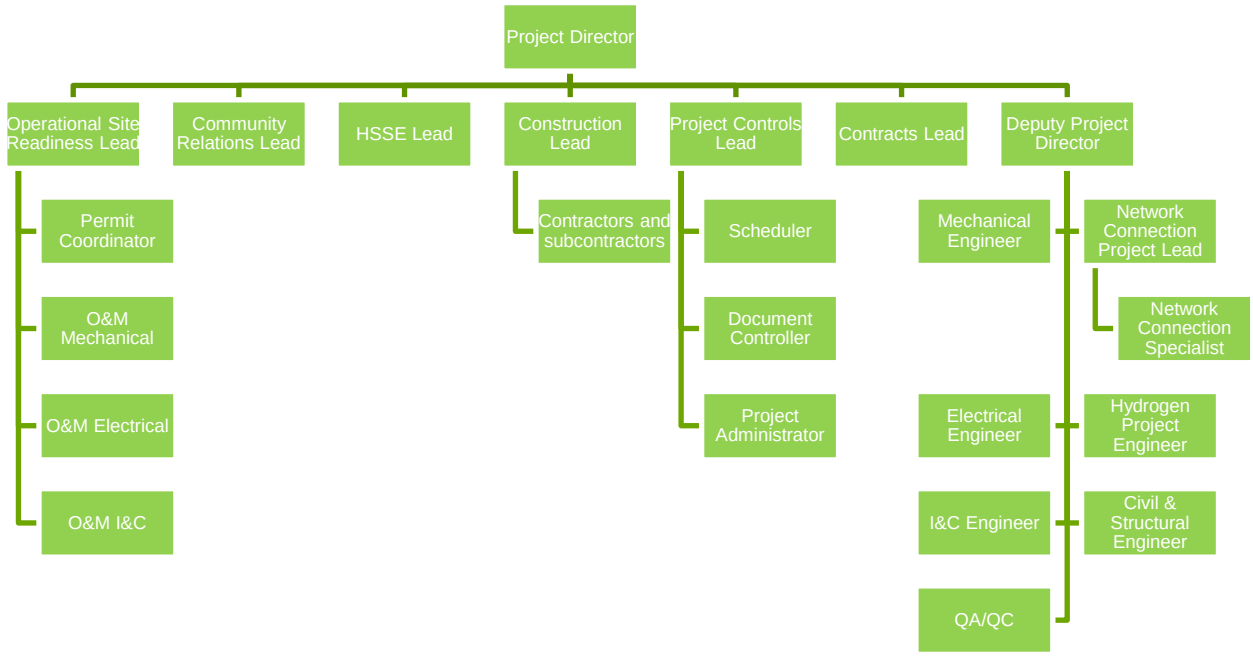


Figure 8-1 Project Organisation Chart

Table 8-1 provides further detail on the roles and responsibilities for key personnel with environmental management accountabilities during project delivery.

8.4 Staging

EnergyAustralia proposes to revise the transmission line alignment compared to the existing alignment as shown in the original EIS. To ensure that we incorporate the measures to improve the environmental performance of the project associated with the clearance of vegetation for the transmission line, EA proposes to stage the approval of the relevant management plans.

Table 8-1 Roles and responsibilities

Organisation / authority	Role	Responsibilities
EnergyAustralia	Project Director	■ Ensures delivery of the design and construction phase of the Project. They are ultimately responsible for ensuring that impacts are minimised, and obligations are met. ■ Ensure adequate resources are assigned to the site ■ Overall site responsibility for Health, Safety, Security and Environmental Compliance (some delegated authority to the HSSE Lead) ■ Day to day management of the project site ■ Responsibility for liaison with property owners and general community on site matters such as complaints and incident management ■ Ensuring that task activities are planned, implemented, controlled and their progress monitored in accordance with the EMS, CEMP and related plans ■ Reviewing the results of internal audits (including the delegation to action owners to respond to corrective action requests) ■ Ensures that incidents requiring investigation are followed up and effective ■ Provide monthly Operational Reports to EnergyAustralia Management ■ Auditing site activities to ensure compliance with the specifications, drawings, contract requirements, statutes, approval standards environmental commitments and sound engineering practice ■ Liaison with EnergyAustralia and government authorities as required ■ Ensure Leaders are completing training scheduling as per the Training Report received from the Business Operations Coordinator ■ Responsible for ensuring sufficient resources are allocated to install, inspect, maintain and repair environmental controls particularly after wet weather
EnergyAustralia	Construction Lead	■ Assisting the HSSE Lead ■ Ensuring adequate knowledge transfer during shift handover ■ Participating in plant walk downs to ensure work area issues are identified and rectified ■ Assist in risk assessments reviews to ensure hazards are identified and appropriate controls are in place ■ Ensuring that all personnel under the team's control comply with HSSE Lead requirements ■ Oversee management of the day to day environmental aspects of the site ■ Manage the works, including management of sub-contractors ■ Leads the investigation of environmental incidents and near misses ■ Ensures all personnel are aware of environmental compliance requirements and environmental controls ■ They are responsible for ensuring that the engineers take into consideration the requirements detailed within the CEMP and that there are sufficient resources in the field to meet these commitments. ■ EWMS collection, assessment, monitoring and review ■ Ensure that all workers have signed onto and off EWMS ■ Manage day to day works in the field. Ensure activities are undertaken in accordance with the EMS, CEMP and EWMS ■ Reporting all environmental incidents to the HSSE Lead

Organisation / authority	Role	Responsibilities
		■ Checking the site on a regular basis and ensuring that regular maintenance is undertaken to minimise environmental impacts ■ Ensure that personnel are provided with appropriate environmental “toolbox” training ■ Ensure that appropriate scheduling of works is undertaken to enable meeting environmental requirements ■ Ensure that the requirements associated with erosion and sediment controls are implemented
EnergyAustralia	HSSE Lead	■ Implement the project environmental management strategy ■ Review the CEMP ■ Close liaison with the Environmental Representative (ER) ■ Consult with the Stakeholder Manager regarding regulatory requirements and environmental design issues ■ Ensure that all project environmental obligations are met and prepare reports on compliance ■ Obtain relevant pre-construction licences, permits and approvals ■ Provide input and advice to others preparing activity specific EWMS ■ Manage environmental consultants ■ Consultation with regulatory agencies ■ Ensure that all project environmental obligations are met ■ Obtain relevant licences, permits and approvals necessary during construction ■ Identify and prepare environmental induction and training materials ■ Liaise with government agencies and relevant stakeholders ■ Respond to environmental incidents ■ Supports the investigation of environmental incidents and near misses ■ Maintain environmental documents.
EnergyAustralia	Deputy Project Director (and subordinates)	■ Responsible for ensuring that environmental considerations are integral to the decision making for all design and construction activities ■ Liaise closely with the HSSE Lead to ensure that the environmental controls and procedures contained in the EMS and CEMP are implemented ■ Conduct regular checks of the site to ensure environmental controls such as sediment fences and dust suppression are functioning effectively.
Contractors and subcontractors	All employees / sub-contractors	■ Comply with all HSSE procedures, including adopted procedures from approved environmental management systems ■ Conducting Safe work observations ■ Reporting all safety and environmental incidents ■ Complying with the requirements of the EMS, the CEMP and sub-plans ■ Preparing activity specific EWMS that comply with the EMS and CEMP ■ Undertaking activities in accordance with approved EWMS ■ Maintaining environmental records.

9 Training and competency

9.1 Training requirements

Requirements for training, awareness and competency for environmental risks, impacts and controls are outlined in this section of the CEMP. Environmental requirements would be communicated to personnel through a variety of communication methods. Some training will be provided by EnergyAustralia (i.e. site induction) and some will generally be the responsibility of Contractors (i.e. project induction, pre-start briefings, toolbox talks).

9.2 Site induction

Site induction will be managed and delivered by EnergyAustralia. All personnel are to be safety and environmental inducted prior to site entry. Site induction and/or training session content may include:

- Roles and responsibilities in achieving conformance with the Environment Policy and procedures
- Requirements of the Tallawarra B EMS
- Location of environmentally sensitive areas
- Requirements of community involvement and engagement with other Project stakeholders
- Due diligence and duty of care requirements
- Incident management procedures (e.g. the action to be taken in emergencies, communication lines and contact details for emergency services and site representatives)
- Reporting procedure for environmental hazards, incidents and “near-miss” events
- Knowledge of regulatory requirements
- Communication protocols
- CEMP Sub Plan requirements, including but not limited to:
  - Unexpected finds procedures
  - Vegetation clearing and biodiversity management measures
  - Construction exclusion zones
  - Construction vehicle code of conduct.

Training records for EnergyAustralia training will be maintained by the HSSE Lead.

9.3 Project induction

A project induction will be prepared and delivered by the contractor for all personnel undertaking construction works. Project induction and/or training session content may include:

- Purpose, objectives, and key issues of the project
- Roles and responsibilities
- Project specific requirements of the contractor’s Environmental Management Strategy
- The CEMP and consequences of non-compliance with the CEMP
- Location of environmentally sensitive areas
- Processes for assessing environmental risk and preparing EWMS
- Protocols for engagement with project stakeholders or community members

- Significant environmental risks and impacts (actual or potential) associated with work activities
- Applicable procedures and documents for managing the environment
- Due diligence and duty of care requirements
- Relevant conditions of environmental licences and relevant conditions of approval
- Incident management procedures (e.g. the action to be taken in emergencies, communication lines and contact details for emergency services and site representatives)
- Reporting procedure for environmental hazards, incidents and “near-miss” events.

Training records for Contractor training will be maintained by the Contractor.

9.4 Pre-start briefings

Pre-start briefings are daily discussions that should be undertaken before work commences. These discussions should include types of work being completed, task breakdown, safety and environmental risks associated with the work, and measures to manage safety and environmental risks.

Pre-start briefings should consider the EWMS prepared for the activities planned to be undertaken. Pre-start briefings should also consider any additional environmental or heritage-related hazards that might arise during the undertaking of the work and discussions about any lessons learnt from previous incidents or near misses.

Attendance at pre-start briefings will be recorded with worker sign off.

9.5 Toolbox training and targeted environmental training

Toolbox training is targeted training designed to help relevant information be communicated to the workforce and to provide a forum for feedback on issues of interest or concern. Toolbox training will generally be prepared and delivered by a representative of the Contractor, by EnergyAustralia or by other authorised persons.

Specific topics for toolbox training may include:

- Management of Aboriginal heritage risks during construction and the unanticipated finds protocol.
- Management of erosion and sediment risks during construction.
- Management of asbestos and the unanticipated finds protocol.
- Lessons learnt from near misses or incidents.
- Any other relevant aspect of environmental risk or environmental management.

9.6 Competency requirements

Contractors are responsible for the selection, screening, training, and verifying competency of personnel, as well as maintaining and providing (when requested) all records of inductions and training of personnel.

All project personnel are required to have the following as a minimum for working on the site:

- General construction induction card
- Drivers licence
- Site induction
- Project induction
- Relevant licences or tickets for plant and machinery use
- Relevant tickets for project specific activities (i.e. working at heights permit, confined space entry permits, etc).

Copies of certificates of competency for the operation of plant will need to be provided and retained by the Contractor. Tickets and licences would need to be kept with relevant personnel and be made available for inspection if requested.

All records of inductions, licences, tickets, certificates and permits, should be recorded by the Contractor and be made available to EnergyAustralia on request.

10 Emergency preparedness and response

10.1 Incident identification

An incident is defined by the project conditions of approval as an occurrence or set of circumstances that causes or threatens to cause material harm and which may or may not be a non-compliance. 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).

10.2 Incident preparedness

Activities that are associated with potential or major environmental incidents are identified in respective CEMP Sub Plans. CEMP sub plans include management actions and mitigation measures designed to avoid incidents from occurring.

The EnergyAustralia **TQMS12-HSE-L001 - Emergency Response Plan** applies to the broader project site and incidents that may occur in relation to Tallawarra A operations, and the surrounding Tallawarra Lands. If there is any doubt as to which Emergency Response Plan applies during an incident, the EnergyAustralia **TQMS12-HSE-L001 - Emergency Response Plan** will apply.

EnergyAustralia will review the GECL Emergency Response Plan prior to construction to ensure that the appropriate separation of roles, responsibilities and approaches to emergency response are defined and coordinated between EnergyAustralia and GECL.

During the construction of the project the GECL Emergency Response Plan will be used for incident response when incidents occur as a result of construction activities. This specifically includes incidents that occur on or in association with land that has been designated by the Project Director as part of the Tallawarra B construction area, including construction ancillary sites.

A list of key internal contacts, phone (business and after hours) will be maintained and displayed at the site office (Appendix A). The HSSE Lead will maintain and regularly update the list of key contacts. Table 10-1 details important emergency contacts that may need to be notified in the instance of pollution incidents that constitute material harm.

Table 10-1 Emergency contacts

Authority	Contact number
Fire and Rescue NSW	000 / 1300 729 579
EPA environment line	131 555
Ministry of Health	1300 066 055
SafeWork NSW	131 050
Wollongong City Council	(02) 4227 7111

10.3 Incident response

Emergency response would follow the procedures detailed in the EnergyAustralia **TQMS12-HSE-L001 - Emergency Response Plan** or the GECL Emergency Response Plan (refer to Section 10.2).

If the incident involves pollution or the threat of pollution, the EnergyAustralia **TQMS12-HSE-L001-A02 - Pollution Incident Response Management Plan** (PIRMP) must be followed. This plan is a component of the EnergyAustralia Emergency Response Plan.

A summary of the main steps to follow in the event of an incident are provided in Figure 10-1.

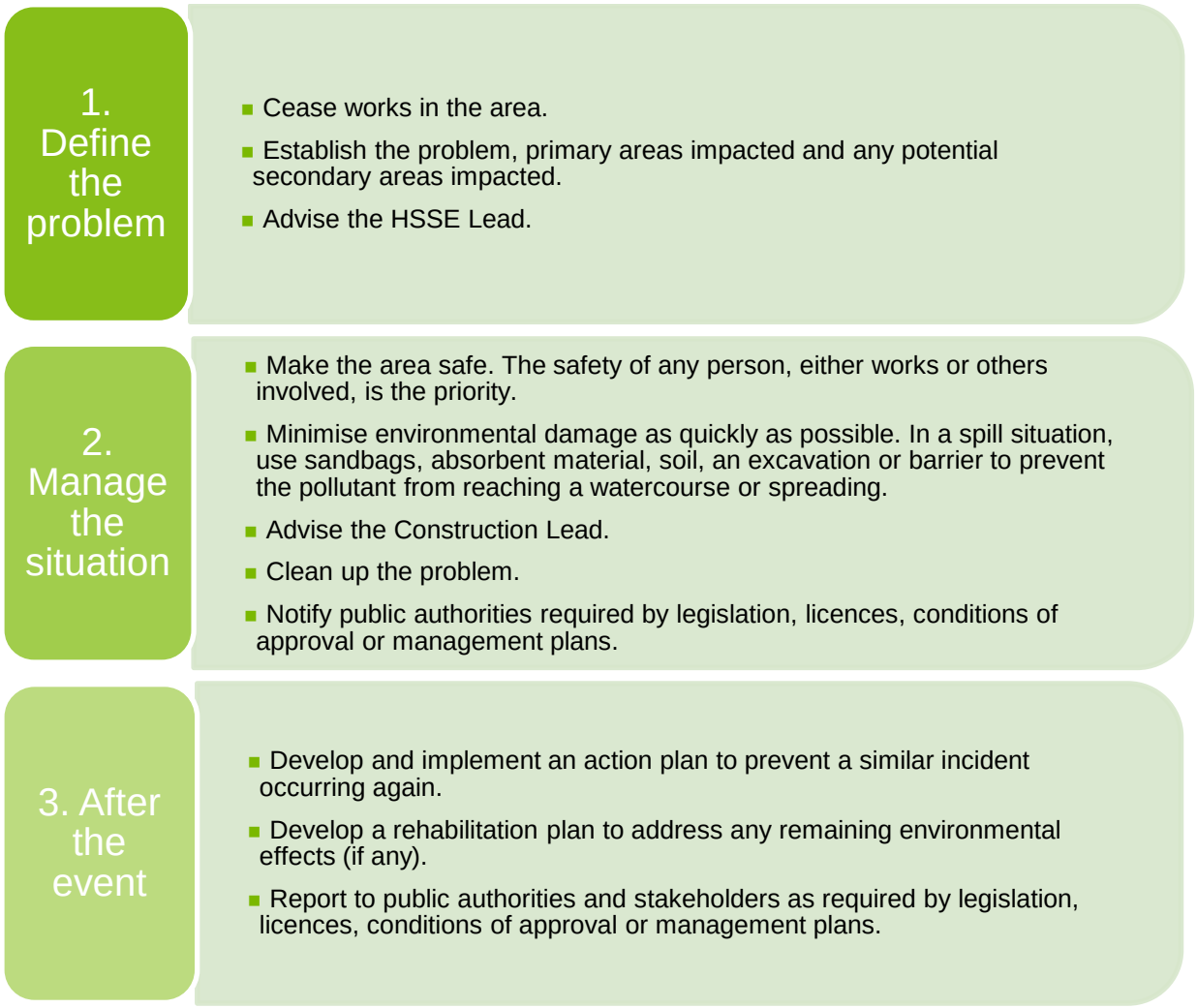


Figure 10-1 Emergency response procedure

10.4 Incident notification and reporting

The notification and reporting process for environmental incidents is to be undertaken in accordance with:

- Conditions of Approval incident reporting requirements
- EPL 555 requirements
- EnergyAustralia Emergency Response and Preparedness Plan **TQMS12-HSE-L001 - Emergency Response Plan**, or the GECL Emergency Response Plan (whichever applies, refer to Section 10.2).

Incident notification and reporting will be in accordance with Appendix 1: Incident Notification and Reporting Requirements (Project Approval 07_0124 Appendix 1, Conditions 1-4). These include:

- All personnel are required to report all incidents. Environmental incidents must be immediately reported to the HSSE Lead and Construction Manager. Verbal notification must occur immediately on becoming aware of the incident or non-compliance.
- EnergyAustralia will notify the ER within 24 hours of becoming aware of the incident and will provide full written details of the incident to ER within 7 days of the date on which the incident occurred. This requirement does not take away the responsibilities to report incidents 'immediately' to NSW EPA or other relevant agencies.
- The Secretary must be notified in writing via the Major Projects website immediately after EnergyAustralia becomes aware of an environmental incident following the requirements of Condition of Approval 5.1 and Appendix 1 of the major project approval. The notification must include the following requirements (as replicated in Appendix K of this CEMP):
  - Identify the development 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.
  - Identify a project contact for further communication regarding the incident.
- Relevant public authorities (as determined by the Secretary) must be notified in writing within 30 days of the date on which the incident occurred or as otherwise agreed with the Secretary, and in accordance with the requirements set out in Part 3 of Appendix K of this CEMP.
- The Secretary must be notified in writing via the Major Projects website within seven days after EnergyAustralia becomes aware of any non-compliance. A non-compliance notification must identify the development and the application 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. A non-compliance which has been notified as an incident does not need to also be notified as a non-compliance.
- The NSW EPA must be notified immediately of all pollution incidents that cause or threaten material harm to the environment. Notification would need to include details on:
  - The time, date, nature, duration and location of the incident
  - The location of the place where pollution is occurring or is likely to occur
  - The nature, the estimated quantity or volume and the concentration of any pollutants involved
  - The circumstances in which the incident occurred (including the cause of the incident, if known)
  - The action taken or proposed to be taken to deal with the incident and any resulting pollution or threatened pollution
  - Other information prescribed by the regulations.

Environmental incidents relating to the EPBC Act must be notified to the Secretary of the Department within 7 days of the event.

- An Incident Report must be provided in writing to relevant public authorities (as determined by the Secretary) within 30 days of the date on which the incident occurred or as otherwise agreed to by the Secretary, in accordance with the requirements set out in Part 3 of Appendix K (as prescribed by Appendix 1 of the CoA). The Incident Report must include the following:

- 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.
- Details of any communication with other stakeholders regarding the incident.

11 Communication and community engagement

Communication and community engagement for the project is detailed and maintained as part of the EMS. See Section 6 of the EMS for communication and community engagement requirements.

If there are any updates or changes to internal or external communication, the Community Consultation Program, community consultation, complaint management and dispute resolution, Section 6 in the EMS would be updated to reflect the required change.

All agency consultation undertaken in relation to CEMP compliance is recorded in the appendices of the relevant sub plans (Appendix E to Appendix J Waste Management Sub Plan).

11.1 Complaints

To comply with CoA 6.2 and EPL requirement M6, before construction commences, EnergyAustralia will ensure that the following are available for community complaints for the life of the project (i.e. construction and operation):

- A telephone number on which complaints about construction and operational activities at the site may be registered; 1800 574 947.
- A postal address to which written complaints may be sent; The Tallawarra B Project Team, PO Box 20, Dapto NSW 2530.
- An email address to which electronic complaints may be transmitted; **Tallawarra.Community@energyaustralia.com.au**.

The telephone number, the postal address and the email address will be displayed on a sign near the entrance to the site, in a position that is clearly visible to the public, and which clearly indicates the purpose of the sign.

The telephone number, postal address and email address will be published in a newspaper circulating in the local area prior to the commencement of construction of the project and prior to the commencement of operation. The telephone number, postal address and email address will also be made publicly available on EnergyAustralia's website.

11.2 Complaints register

To comply with CoA 6.3 and EPL requirement M5 a complaints register will be established and maintained by the Community Relations Lead and who will receive, log, track and respond to complaints within specified timeframes.

The following details will be recorded in the register:

- Date, time and nature of the complaint
- The means by which the complaint was made (i.e. telephone, letter, meeting etc)
- Any personal details of the complainant that were provided, or if no details were provided, a note to that effect
- Nature of complaint
- Any action(s) taken by the Proponent in relation to the complaint, including any follow-up contact with the complainant
- If no action was taken by the Proponent in relation to the complaint, the reason(s) why no action was taken.

The Complaints Register will be made available on the EnergyAustralia website which will be updated monthly. The Complaints Register will be made available for inspection by the DPIE Secretary upon request

or any authorised officer of the EPA who asks to see them. All records of complaint will be kept for at least 4 years after the complaint was made.

11.3 Dispute resolution

Within 7 days of receiving a complaint, the HSSE Lead and/or the Community Relations Lead will investigate and respond with an appropriate resolution. The resolution of the issue will be documented in the complaints register and will be communicated to the complainant.

In the event of an environmental complaint or other matter of concern associated with the project is unable to be satisfactorily resolved, a meeting with HSSE Lead and Construction Lead will be convened. The meeting will assess whether all practicable actions have been undertaken to resolve the matter. All relevant stakeholders will be advised in writing of the meeting outcomes and on any further actions able to be undertaken to resolve the matter. EnergyAustralia will always endeavour to resolve disputes with neighbours and members of the local community without the need for third party intervention.

However, should the matter not be resolved directly with EnergyAustralia, landowners have the option to initiate an Independent Review process as per the Project Approval. If required to do so by the Department, the ER will liaise with DPIE, EnergyAustralia, the Project Director and HSSE Lead. The decision made resulting from this process will be final.

12 Monitoring, measurement, analysis and evaluation

Monitoring, measurement, analysis and evaluation for the project is detailed and maintained as part of the EMS and as specified in CEMP sub-plans. See Section 7 of the EMS and Appendix E-J for these requirements.

If there are any updates or changes to environmental objectives and targets, internal and external audit requirements, internal and external inspections, non-conformance management, environmental performance tracking and monitoring, and reporting requires, Section 7 in the EMS and the relevant CEMP sub plan would be updated to reflect the required change.

12.1.1 Internal inspections

Internal environmental inspection activities are to be carried out as per the schedule summarised in Table 12.1.

Table 12-1 Internal inspections

Type	Purpose	Frequency	Responsibility
Site inspections	Daily inspection of active work sites	Daily	Contractor Project engineers HSSE Lead
Environmental Inspection	A weekly inspection undertaken by the Contractor. Areas for inspection would include the site to determine additional areas that require mitigation measures, the environmentally sensitive areas and delineated areas and to determine if they are working effectively, and also if correct work practices have been implemented.	Weekly	Contractor
EnergyAustralia Environmental Inspection	Formal site inspections conducted by EnergyAustralia, in conjunction with Contractor supervisory staff, to evaluate work practices against CEMP requirements.	Monthly	HSSE Lead Contractor
Design Criteria Inspection	Assessment of construction in accordance to EA Environmental Standards.	As required	HSSE Lead Contractor

12.1.2 External inspections

External environmental inspection activities are to be carried out as per the schedule summarised in Table 12-2.

Where inspections are undertaken by an external party an inspection report or debriefing will be requested by the HSSE Lead and documented. Details of the inspection will be provided to relevant site personnel or discussed in site meetings with a request to act.

Table 12-2 External inspections

Type	Purpose	Frequency	Responsibility
ER inspections	Environmental inspection undertaken by the ER, an Energy Australia representative and primary contractor representative to assess implemented environmental controls	Fortnightly	HSSE Lead ER Contractor
External organisation inspections	Inspections may be conducted by external organisations such as NSW EPA, DPIE and other organisations/agencies	Where advised	HSSE Lead Contractor

13 Reporting

Environmental reporting for project will be undertaken to track and record environmental management and compliance for the life of the project. Reporting requirements for the project are summarised in Table 13-1 and further detailed within this Section.

Table 13-1 Reporting requirements

Type	Purpose	Frequency and details	Responsibility	Recipient
Contractor Environmental Compliance Report (refer to Section 13.1 below)	Contractor to provide monthly summary to EnergyAustralia inclusive of: waste, clearing of native vegetation, incidents and any records of demonstrating compliance with CoA requirements.	Monthly, report submitted within 10 days of end of month	Contractor	HSSE Lead Project Director
Project Environmental Audit Report	Contractor to provide to EnergyAustralia results from any internal and/or external Environmental/CEMP audits.	Internal audits at least 6-monthly. External audits at least annually.	Contractor	HSSE Lead
Environmental Incidents Report	To report incidents to appropriate people and agencies	Immediately to HSSE Lead and Project Director Immediately to NSW EPA for pollution incidents that cause or threaten material harm to the environment. Immediately notify the Secretary in writing via the Major Projects website after the Proponent becomes aware of the incident. Within 24 hours to the ER verbally and then provide full written details of the incident to ER within 7 days of the date on which the incident occurred. Within 7 days to DPIE after the Proponent becomes aware of an incident a written incident notification (see Appendix K) must be submitted to the Secretary via the Major Projects website. Within 30 days to DPIE of the date on which the incident occurred or as otherwise agreed to by the Secretary, the Proponent must provide the Secretary and any relevant public authorities (as determined by the Secretary) with a detailed report on the incident , and such further reports as may be requested.	Contractor	HSSE Lead Contractor Project Director DPIE EPA (if required) Other Public Authorities (if required by DPIE)
DPIE Compliance Reporting (refer to Section 13.2 below)	To monitor and report on the compliance status of a project as well as to communicate the status of a project's performance (in relation to compliance	Monthly reporting to DPIE Audits as per audit schedule DPIE must be notified in writing via the Major Projects website within seven days after the Proponent becomes aware of any non-compliance.	ER Independent Auditor	DPIE

Type	Purpose	Frequency and details	Responsibility	Recipient
	with the conditions of consent).			
Noise reporting	To assess compliance with noise management levels at sensitive receivers, to adjust operations to manage noise impacts or to response to complaints., if required.	Attended noise monitoring in accordance with the procedure outlined in the NAQMP (Section 6.2) should be undertaken at the nearest sensitive receiver to construction works: ■ Monthly during construction ■ During out of hours activities as required by an out of hours work activity approval (refer to NAQMP Appendix B) In response to any construction noise complaints.	Contractor	DPIE
Water Monitoring Report	Report to EnergyAustralia on surface water quality in response to an incident or due diligence requirement.	As required	Contractor	HSSE Lead
Soil testing and monitoring Report	Report to EnergyAustralia on soil testing results.	As required	Contractor	HSSE Lead
Biodiversity offset reporting	Report to EnergyAustralia on all clearing of vegetation amounts to inform the final vegetation offset requirements.	Following clearing of any vegetation, the location and number of native trees, non-native trees and area of vegetation cleared must be reported.	Contractor	HSSE Lead
Environmental Representative reporting	The DPIE approved ER will undertake site inspections and review documentation for compliance.	Monthly	ER	Contractor and HSSE Lead

13.1 Contractor environmental compliance report

Monthly performance reports will be provided to the HSSE Lead in relation to compliance with the CEMP, CoA requirements and environmental performance by the contractor. The report would be provided to the Project Director for review.

The report will be useful in helping the HSSE Lead to identify any recurring issues or impacts, to develop environmental training programs, identify areas of the CEMP or related documents that may require review and to prepare DPIE compliance reporting.

These performance reports will include:

- Performance against objectives and targets, monitoring results, any incidents occurring within the period, including comments on response procedures and remedial actions.
- Results from any internal and/or external audits, including any environmental management compliance and monitoring results.
- Environmental performance outcomes, improvement initiatives or corrective measures.
- Stakeholder feedback on project environmental performance.

13.2 DPIE compliance reporting and auditing

EnergyAustralia has engaged an independent Environmental Representative as per Condition of Approval 7.1 to provide oversight of environmental and planning performance and communicate this to the Department (refer to Appendix D). Monthly reporting will be provided by the ER to the HSSE Lead and Contractor.

An Independent auditor has been engaged by EnergyAustralia to meet the requirements of Conditions of Approval 5.9 to 5.13 inclusive. EnergyAustralia and the Environmental Representative will assist with the Independent Auditor in their activities.

14 Review and improvement of the CEMP

The HSSE Lead will review the CEMP and its operation and implementation at least every six months from construction commencement. Between the scheduled reviews, a register of issues will be maintained to ensure that any issue raised by internal and external personnel associated with the project is recorded.

The purpose of the review is to ensure that the system is meeting the requirements of the standards, policies and objectives and if not to amend the CEMP to meet the 'short falls'. A report will be provided to the Project Director with any recommendations for change to the system. The Project Director will review and approve changes to the system.

The review will consider:

- Site personnel comments
- Agency comments
- Audit findings
- Environmental monitoring records
- Complaints
- Inspections
- Details of corrective and preventative actions taken
- Environmental non-conformances
- Incident reports
- Changes in organisation structures and responsibilities
- The extent of compliance with objectives and targets
- The effect of changes in Standards and legislation.

Acting on the advice of the Project Director, the HSSE Lead will review the various policies and objectives and approve any changes.

The HSSE Lead will implement any changes arising from the reviews of the policies and/or the Management Plan. Records of such reviews will be maintained.

Review of this CEMP is required to comply with Condition of Approval 7.7. This condition requires that within 3 months, unless the Secretary agrees otherwise, of:

a) the submission of an incident report under condition 5.1 of this approval;

b) the submission of an Independent Environmental Audit report under condition 5.11 of this approval;

c) the approval of any modification to the conditions of this approval; or

d) a direction from the Secretary under condition 1.3 of this approval;

EnergyAustralia must review and, if necessary, revise the studies, strategies or plans required under the conditions of approval to the satisfaction of the Secretary.

Where this review leads to revisions in any such document, then within 4 weeks of the review the revised document must be submitted to the Secretary for approval, unless otherwise agreed with the Secretary.

In accordance with project condition of approval 7.8, to ensure the studies, strategies and plans for the project are updated on a regular basis and incorporate any required measures to improve the environmental performance of the project, EnergyAustralia may submit revised studies, strategies or plans required for the project under the conditions of approval at any time. In accordance with condition of approval 7.8 EnergyAustralia will review the EMS every six months.

With the agreement of the Secretary, EnergyAustralia may also submit any study, strategy or plan required under the conditions of this approval on a staged basis. The Secretary may approve a revised strategy or plan required under the conditions of approval, or the stage submission of these documents, at any time. EnergyAustralia is not intending to stage the submission of any study, strategy or plan required under the conditions of approval.

With the approval of the Secretary, EnergyAustralia may prepare the revised or staged strategy or plan without undertaking consultation with all parties nominated under the applicable condition in this approval.

15 Document control

During construction environmental documents will be stored at the main site office and will be available for access on request by relevant stakeholders.

Documents and data that are to be issued and liable to change will be controlled to ensure that they are approved before issue and that the current issue or revision is known to and available to those requiring them. This document would be made publicly available in accordance with CoA

A register and distribution list will identify the current revision of documents or data and who has been issued with a copy.

After several changes have been made to a document it will be withdrawn and reissued as a new revision. Data will be issued on a revision basis only. Obsolete documents and data will be kept for legal and other reasons but will be clearly marked “superseded”.

The record keeping system will be implemented, identifying how records will be managed and maintained during the Project. Records systems to be established which are directly relevant to environmental and social management include:

- Induction register.
- Public consultation (including grievance complaints and responses).
- Environmental and social incidents, non-conformances and complaints.
- Inspection reports, checklists, diary entries.
- Environmental and social monitoring results (including calibration records).
- Meeting minutes.
- Formal letters and correspondence.
- Waste measurement and tracking records.
- Activity specific EWMS.

Appendix A: Environmental policies

Health, Safety, Security and Environment Policy

EnergyAustralia[1] is one of Australia's largest energy companies, operating as both an energy retailer and energy generator.

EnergyAustralia is committed to providing a safe, healthy and secure work environment for all people at our workplaces, and those affected by our operations and to meet all of its environmental obligations. EnergyAustralia is also committed to the principles of sustainable development and environmental stewardship – the value of balancing our responsibility to meet the needs of our customers with the environmental, social and economic needs of our people, communities and other stakeholders.

We will eliminate all potential sources of workplace incidents, injuries and ill health. We will sustain our commitment to our Health, Safety, Security and Environment (HSSE) performance through a proactive and systematic identification of hazards and management of risks to as low as reasonably practicable.

This policy applies to all of EnergyAustralia's workers, including employees and contractors. We will work together to manage our operations and associated activities in a safe, secure and sustainable manner. HSSE performance is the responsibility of all workers.

EnergyAustralia will:

- Commit to leading and accelerating the clean energy transformation for all;
- Comply with all applicable HSSE laws, regulations and other obligations;
- Minimise adverse impacts of our operations on the environment and community, including the prevention of pollution;
- Continue to identify and report hazards and risks and seek to eliminate them from our operations and activities;
- Establish, monitor and report on measureable HSSE targets, objectives and performance;
- Ensure that knowledge and learnings related to HSSE performance are shared within the workplace, community and industry;
- Consult with our workers and those with whom we share HSSE duties to identify hazards and improve safe work practices;
- Engage effectively with local communities;
- Promote and support initiatives to improve HSSE performance and ensure that continuous improvement is built into how we work;
- Provide sufficient resources, including supervision, training, instruction and information, to support all activities to ensure that HSSE risks are well understood and mitigated;
- Support and implement a HSSE Management System, including worker participation;
- Encourage behaviours which demonstrate a commitment to HSSE; and
- Empower all workers to protect themselves and others from injury.

Catherine Tanna
Managing Director, EnergyAustralia **May 2019**

[1] For the purpose of this policy, EnergyAustralia includes EnergyAustralia Holdings Limited, its wholly owned subsidiaries and controlled entities. This policy is reviewed every two years, or when business strategy, structure, practices or legislation changes, whichever occurs first.

HSSE POLICY

GE-Clough (GE-CL) Consortium is committed to delivering project excellence by embedding Health Safety Security and Environment into our culture.

OUR PRINCIPLES

GE-CL values a safe and healthy workplace. GE-CL ensures that employees and subcontractors are dedicated to a process of planning and preparation, which identifies and mitigates risk to all personnel, the environment and the community across the GE-CL managed sites and throughout the projects' lifecycle. GE-CL will ensure human, financial and technological resources are provided for the active management and maintenance of the project Management System, which will also align with the requirements of ISO45001.

MAKING IT PERSONAL

GE-CL project employees and subcontractors demonstrate their commitment to health and safety by: Sharing a belief in a culture of zero harm where harm to people or the environment is unacceptable; Regularly reviewing performance, activities undertaken and the associated risks; Planning effective responses to incidents and emergency events; Reporting and investigating all incidents to identify and implement corrective actions; Assessing changes in design, organisation and the workplace to identify and mitigate health and safety risks

ACCOUNTABILITY

At all levels of the project organization, GE-CL will pursue continual improvement, leading to enhanced health and safety performance and the achievement of the objectives and targets established for the project success.

RISK MANAGEMENT

GE-CL will apply robust risk management principles and allocate sufficient time and resources to effectively identify, control and eliminate workplace, Major Accident Event hazards and project design hazards that may cause injury and illness.

LEARNING CULTURE

GE-CL will actively promote open communication, consultation and continuous learning, based on employee input, conduct comprehensive investigation and provide ongoing training and information on health and safety matters.

ONE CONSISTENT APPROACH

GE-CL will implement procedures and apply them consistently to achieve the health and safety objectives and targets across all operations throughout the project.

The Consortium Project Director is accountable for ensuring that this Policy is implemented throughout organisation. The Consortium undertakes to communicate this policy to all persons working for or on its behalf and to the public and interested parties as required. The policy will be reviewed annually by the senior management to ensure relevance and effectiveness to business activities.

Signed on behalf of GE Power;

[add position of signee]
Dated:

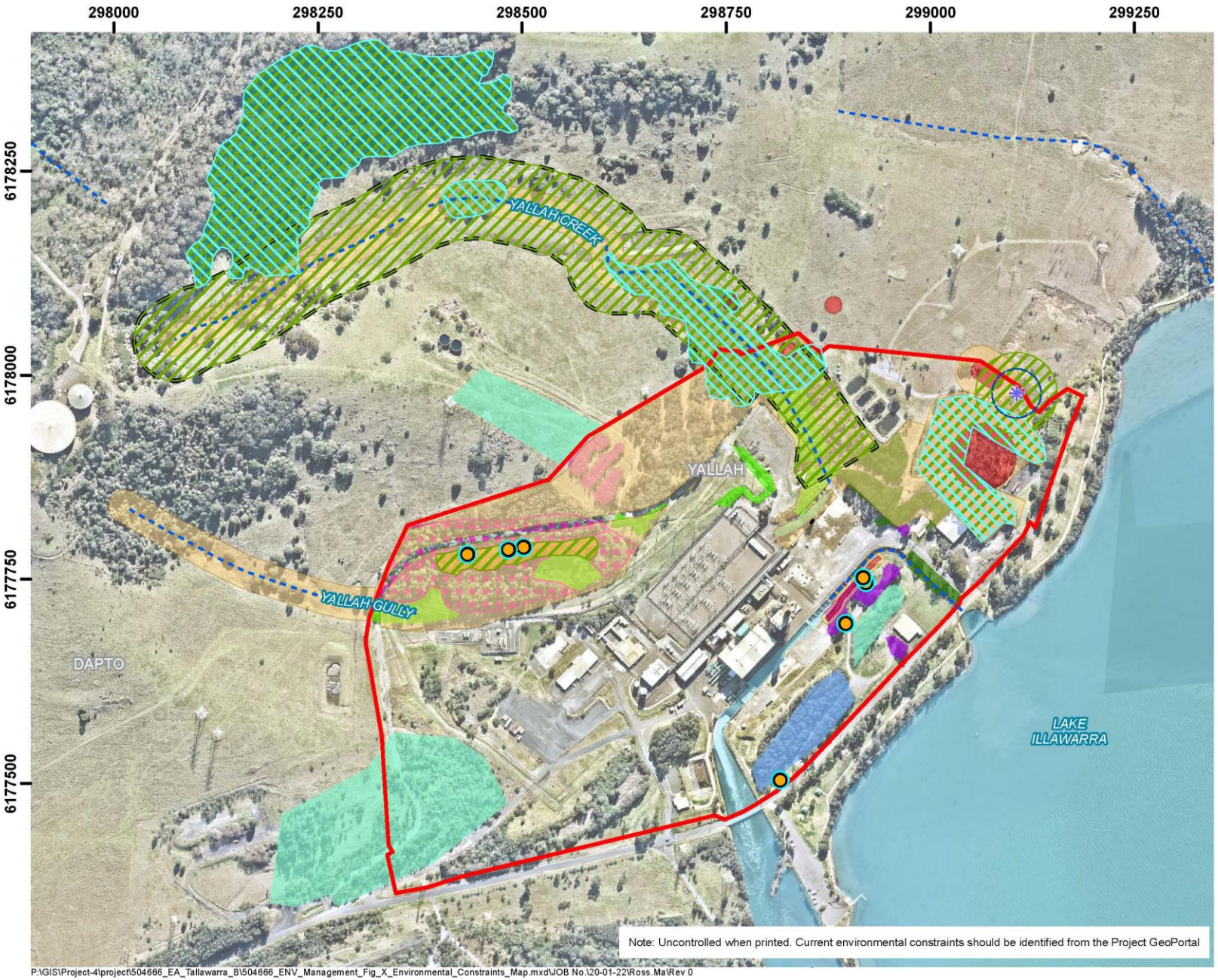
Signed on behalf of Clough;

[add position of signee]
Dated:

GE Power CLOUGH

Appendix B: Environmental constraints map (sensitive area drawing)

Note: Sensitive area drawings are uncontrolled when static or printed. For current versions of constraints maps, refer to the project **GeoPortal**.



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Legend

- Power Station Lot Boundary
- Hollow bearing trees
- Osprey nest
- 30m ground Osprey buffer
- Watercourse
- Riparian 50m buffer - No Go Area
- Exclusion zones
- Archaeological sensitivity zone - High
- Archaeological sensitivity zone - Moderate

Threatened ecological communities

- EPBC and BC Act

Vegetation community (Aurecon 2021)

- Acacia scrub
- Coastal Swamp Oak Forest (TEC)
- Eucalypt and casuarina grassy woodland
- Forest red gum and paperbark forest
- Grey gum and forest red gum woodland
- Ironbark forest
- Lowland Dry-Subtropical Rainforest (TEC)
- Planted natives and weeds
- Radiata pine forest
- Weeds and exotics

Source: Aurecon, EA, LPI, ESRI, Nearmap

1:6,500

0 100 200m

Projection: GDA 1994 MGA Zone 56

Tallawarra B Power Station

FIGURE: Environmental Constraints Maps - SADs

Appendix C: Environmental Work Method Statements Template

Tallawarra-B Power Station

Environmental Work Method Statement (EWMS) – Minor vegetation removal activities

EnergyAustralia Tallawarra Pty Ltd

2021-12-03

aurecon

Bringing ideas to life

1 Introduction

1.1 Objective

The objective of this Environmental Work Method Statement (EWMS) is to ensure that the environmental impacts that may be caused by a defined construction activity are minimised and managed in accordance with the project approvals. The EWMS will ensure that works are undertaken in accordance with the planning approval, in a safe, systematic, efficient manner in compliance with the statutory and environmental due diligence requirements.

1.2 Content

A completed EWMS must include:

- Description of the works/activities and sequence of the work/activities
- Identification of potential environmental impacts due to the works/activities e.g. air, noise, water, waste, community, heritage, flora and fauna
- Consideration of the relevant conditions of approval and statement of commitments
- An environmental risk assessment
- Mitigation measures and safeguards to reduce environmental risks
- Approval sign off by EnergyAustralia
- Sign on section by all relevant construction personnel.

1.3 EMS, CEMP, and environmental assessments

EWMS are to be prepared to be consistent with the project Construction Environmental Management Plan (CEMP) and relevant CEMP Sub Plans.

1.4 Approvals

EnergyAustralia must approve the relevant activity specific EWMS prior to any construction work commencing. In approving an EWMS, EnergyAustralia may consult with the ER.

2 Activity details

2.1 Summary description of the activity

Provide a summary of the key activities being proposed under this EWMS. Note the activity described should be defined in the EWMS table by the sequence of individual work activities proposed.

2.2 Area of the activity

Identify the area of works and areas of disturbance that would be associated with set up, undertaking works, staging and clean up.

2.3 Timing of the works and expected duration

Describe the timing and expected duration of the proposed work. Identify if the works would be undertaken within standard working hours, or if out of hours works would be required.

2.4 Plant and equipment

Describe the plant and equipment that will be used during the work.

2.5 Relevant maps

Refer to the GeoPortal for constraints and constraint maps. These should be appended to the EWMS.

3 Risk assessment

3.1 Risk assessment process

To determine and identify the risks involved in construction activities, the process and risk matrix in **WHS Hazards and environmental Aspects TQMS02-HSE-P003** should be applied.

The process follows:

1. **Identifying the risk/aspect:** key risks for construction activities should be identified taking into consideration the outcomes from previous environmental assessments i.e. the environmental assessment, updated ecology information and updated Aboriginal heritage information.
2. **Analysing the risk/aspect (determining likelihood/consequence)**: each risk shall be assessed for potential unmitigated impact using a likelihood (i.e. the chance of something happening) and the consequence (i.e. outcome of an event affecting objectives) scoring system. An aspect has been deemed a “Significant Environmental Aspect” under ISO 14001:2004 Section 4.3.1 if the risk is greater than or equal to 16 in the risk matrix.
3. **Evaluating the risk/aspect:** The mitigated risk score shall be determined using the mitigated likelihood and consequence. Each impact is assigned a risk category which range from “Low” (low likelihood and consequence) to “extreme” (high likelihood and consequence). A risk category identified as having an extreme or high risk (a significant impact) may be downgraded if appropriate environmental controls and measures are implemented and maintained. Proactive planning, installation and maintenance of appropriate environmental controls and ongoing monitoring will reduce the risks associated with each environmental impact identified.
4. **Treating the risk:** after the initial risk assessment, environmental control measures have been determined using the environmental best practice and the recommendations mentioned in the environmental assessment and updated environmental information.

3.2 Selection of environmental controls

The appropriate controls and safeguards to apply must comply with:

- Project conditions of approval
- Project statement of commitments
- Construction environment management plan (CEMP)
- Relevant CEMP sub-plans
- Legislative requirements.

Where the above documents and references do not appropriate controls to manage the impacts of an activity, suitable additional and standard environmental controls and safeguards should be prepared to avoid and minimise environmental impacts in consultation with an appropriately qualified person.

ENERGYAUSTRALIA RISK MATRIX

Elements not required for JSEA or SWMS.

Frequency of Hazard

Historical

Likelihood of occurrence

Consequence(s)	People & Safety	Environment	Reputation	Production	Rank	Likelihood of occurrence (L): Less than one in 10,000 years	One in a thousand years	One in a hundred years	One in 10 years	Less than Once per year	More than one per year
						Never been known to occur in the industry	Has occurred in the industry	Has occurred in industry, but not in this Company/Group	Has occurred once or twice in the Company/Group	Has occurred frequently in the Company/Group	Has occurred frequently at this location
						An unlikely / unknown occurrence	A remotely possible but known occurrence	An occasional occurrence	A fairly frequent occurrence	A regular occurrence	A highly likely occurrence
						1	2	3	4	5	6
	Multiple deaths or multiple severe permanent disablement and illness.	Massive pollution with significant onsite and offsite impact and significant recovery work.	Global media interest.	Planned Downtime of > 5 Days ; Unplanned Downtime of > 10 Days; >$10 million.	6	MEDIUM 6	HIGH 12	EXTREME 18	EXTREME 24	EXTREME 30	EXTREME 36
	Death or permanent severe disablement / illness of one person inl. major illness or disease (e.g. amputation, poisoning, cancer etc)	Massive pollution with significant onsite and offsite impact and recovery work.	Regional/ National media interest.	Planned Downtime of between 2 to 5 Days; Unplanned Downtime of > 5 Days; $1 - 10 Million.	5	MEDIUM 5	HIGH 10	HIGH 15	EXTREME 20	EXTREME 25	EXTREME 30
	Major injury / illness as below to more than one person	Significant pollution with offsite impact and recovery work.	Some local and regional media interest.	Planned Downtime of between 12 to 48 Hours; Unplanned Downtime of between 2 to 5 Days; $500,000 - $1million.	4	LOW 4	MEDIUM 8	HIGH 12	HIGH 16	EXTREME 20	EXTREME 24
	Major injury or illness to one person (e.g. broken bone, third degree burns, irreversible health damage, noise induced hearing loss, back injury etc)	Pollution with some onsite impact and recovery work.	Some local media interest.	Planned Downtime of between 3 to 12 Hours; Unplanned Downtime of between 12 Hours to 2 Days; $100,000 - $500,000.	3	LOW 3	MEDIUM 6	MEDIUM 9	HIGH 12	HIGH 15	EXTREME 18
	Minor injury or illness (e.g. laceration requiring stitches, second-degree burns or severe bruises, skin irritation etc)	Minor pollution, slight or negligible impact, negligible remedial/ recovery work.	Limited Impact	Planned Downtime of between 0 to 3 Hours; Unplanned Downtime of between 3 to 12 Hours; $10,000 - $100,000.	2	LOW 2	LOW 4	MEDIUM 6	MEDIUM 8	HIGH 10	HIGH 12
	Scratches, minor burns, bruises or abrasions, slight health effect.	Minimal pollution effect contained locally.	Slight Impact	No Planned Downtime; Unplanned Downtime of less than 3 Hours; < $10,000.	1	LOW 1	LOW 2	LOW 3	LOW 4	MEDIUM 5	MEDIUM 6

Risk Matrix

Risk Band	Action
EXTREME	Highly hazardous and highly likely event. In all cases, the potential consequence is too high to allow the operation to commence/continue. Operations in this risk band must be eliminated, avoided or totally re-planned with additional control measures introduced.
HIGH	Consequence and likelihood are high and the work cannot be carried out until risk is reduced to an acceptable level. Mitigating the hazard can be via the provision of written procedures or work instructions, supervising the work, isolation or limiting exposure.
MEDIUM	Consequence and likelihood are medium, monitor and maintain strict control measures - it is acceptable to carry out the work within the appropriate SQMS procedures. i.e. PPE, Permit to Work - ensure a JSEA is completed in conjunction with Permit
LOW	Within this band, it is acceptable to carry out the work within the appropriate SQMS procedures. i.e. PPE, Permit to Work.

NOTE: This document has been designed to align with requirements of AS/NZS ISO31000 - Risk Management

NOMENCLATURE

Risk = Likelihood x Consequence

- Likelihood ~ Probability
- Consequence = Severity * Exposure

DEFINITIONS (AS/NZS ISO31000:2009 defined from ISO Guide 73:2009)

Likelihood	Consequence
Chance of something happening Note: **1.** In risk management terminology, the word 'likelihood' is used to refer to the chance of something happening, whether defined, measured or determined objectively or subjectively, qualitatively or quantitatively, and described using general terms or mathematically (such as probability or frequency over a given time period) **2.** The English term 'likelihood' does not have a direct equivalent in some languages; instead the term 'probability' is often used. However, in English, 'probability' is often narrowly interpreted as a mathematical term. Therefore, in risk management terminology, 'likelihood' is used with the intent that it should have the same broad interpretation as the term 'probability' has in many languages other	**Outcome of an event impacting objectives;** Notes: **1.** An event can lead to a range of consequences **2.** A consequence can be certain or uncertain and can have positive or negative effects on objectives **3.** Consequences can be expressed qualitatively or quantitatively **4.** Initial consequences can escalate through knock-on effects

Risk Band

A measure of the magnitude of a risk, based on a combination of the likelihood and consequence of a risk.

Subject Expert Matter: Lindsay Jahn (OHS Co-ordinator, Asset Services)

3.3 Work methods

Activity (Basic Job Steps)	Hazards and Potential consequences (What can go wrong?)	Initial Risk Score	Control Measures (What can be done to prevent someone being hurt?)	Residual Risk Score	Who will implement the control measures?	Reference / document

4 Sign off sheets

Qualifications and Competencies Record	
Print your name	*List your relevant qualifications*

Acknowledgement		
I have read the above EWMS and I understand its contents. I confirm that I have the skills and training, including relevant certification to conduct the task as described. I agree to comply with safety requirements within this EWMS including risk control measures as described.		
Date:	*Print your name:*	*Signature:*

5 EWMS approval

EWMS endorsed and approval by EnergyAustralia		
Name	***Role***	***Signature and date***

Document prepared by

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Bringing ideas to life

Appendix D: Environmental Representative and DPIE endorsement

Planning, Industry & Environment

Mr Paul Farnworth
Project Director
EnergyAustralia Pty Ltd
697 Collins Street
Docklands, VICTORIA, 3008

18/12/2020

Dear Mr Farnworth

Tallawarra B Power Station (MP07_0124)
Environmental Representative

I refer to your request (MP07_0124-PA-1) for the Planning Secretary's approval of a suitably qualified and experienced person to undertake the role of Environmental Representative for the Tallawarra B Power Station (MP07_0124).

Energy Australia has nominated Tony Hobbs as the Environmental Representative and Susannah Price as an alternate Environmental Representative, should Tony not be available.

The Department has reviewed the nominations and information provided and is satisfied that these experts are suitably qualified and experienced. Consequently, I can advise that the Planning Secretary approves the appointment of Tony Hobbs as the Environmental Representative for the Tallawarra B Power Station, with Susannah Price as nominated alternate.

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

Yours sincerely

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

Appendix E: Air quality, noise and vibration management sub plan

Appendix F: Traffic management sub plan

Appendix G: Flora and fauna management sub plan

Appendix H: Soil and water management sub plan

Appendix I: Aboriginal cultural heritage management sub plan

Appendix J: Waste management sub plan

Appendix K: Written incident notification and reporting requirements

Written incident notification requirements in accordance with Condition of Approval (Appendix 1):

1. A written incident notification addressing the requirements set out below must be submitted to the Secretary 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 5.1 or, having given such notification, subsequently forms the view that an incident has not occurred.

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

3. Within 30 days of the date on which the incident occurred or as otherwise agreed to by the Secretary, the Proponent must provide the Secretary and any relevant public authorities (as determined by the Secretary) with a detailed report on the incident addressing all requirements below, and such further reports as may be requested.

4. The Incident Report must include:
    a. a summary of the incident;
    b. outcomes of an incident investigation, including identification of the cause of the incident;
    c. details of the corrective and preventative actions that have been, or will be, implemented to address the incident and prevent recurrence; and
    d. details of any communication with other stakeholders regarding the incident.

Appendix L: GECL Emergency Response Management Plan

Emergency Response Management Plan

Project	Tallawarra B Power Plant		
Customer	EnergyAustralia LIGHT THE WAY		
Contractor(s)	GE Power CLOUGH		
Stamping (review & validation status – if needed)		**Client Document Number**	TBA
		GE Document Number	TBC
		Clough Document Number	45762-HSE-PL-G-1003

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Revision History	
Rev.	**Detailed Description**
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Contents

1 Introduction

Clough delivers an integrated Engineering, Procurement and Construction Management service to projects in the oil and gas, mineral and infrastructure sectors throughout Australia and the world. We deploy an integrated management system and are committed to achieving our vision of zero harm to our people, the environment and the communities in which we work.

1.1 Purpose

The purpose of the Emergency Response Plan is to establish guidelines for the effective management of emergencies that may be encountered on the Tallawarra B Project.

1.2 Scope

The GECL Emergency Response Plan (ERP) has been developed to provide guidance to the Project personnel, including subcontractors and other Project visitors when dealing with emergency situations that may occur during the Tallawarra B works.

When works cross interface onto Energy Australia's (EA) site, Energy Australia will take ownership of all emergencies under there Emergency Response Plan

This ERP shall include and define the process for:

- Incident Response **(Section 3.1)** and Reporting **(Section 5)**
- Emergency Management **(Section 4)**
- Assessing Risk **(Section 6)**
- Communication **(Section 7)**
- Roles and Responsibilities **(Section 4.1)**
- Incident Procedures **(Appendix 2)**

The ERP does not include for environmental emergencies including flood and major spills. These events will be managed as per the Pollution Incident Response Management Plan (PIRMP) and Construction Environmental Management Plan (CEMP) **Note: Any environmental event must be reported immediately**

1.3 Objectives

Clough has a policy of prudent over-reaction and subsequent de-escalation when considering the level of activation required in response to an incident, as it is easier and usually more effective to scale down a response than it is to ramp up an under reaction.

The key priorities in any emergency or crisis situation are to:

- Save life and ensure well-being through a strong focus on the ability to account for people;
- minimize damage to the environment;
- protect Clough, <CLIENT> and third party assets and information from further damage;
- minimise business interruptions and maximise business opportunities;
- minimise financial and legal liability; and
- protect and where possible enhance reputation.

The aim is to protect our people and those affected by our work, to maintain and/or enhance reputation, minimise loss of commercial position and meet statutory obligations.

Measures are in place to ensure a high level of readiness is maintained through regular programmed training exercises which include Senior Management members with specific funding in place to support this.

1.4 Definitions and Abbreviations

Unless noted otherwise, definitions listed in ISO 9000:2000, Quality Management System – Fundamentals and Vocabulary shall apply.

1.4.1 Definitions

Competent Person	A person who has acquired through training, qualification, or experience, or a combination of these, the knowledge and skills qualifying that person to perform specified tasks.
Duty of Care	A statutory legal obligation that places a clear responsibility on organisations to ensure the health and safety of their employees and to prevent harm to the environment.
Incident	An event or situation that results in damage or has the potential to cause injury, illness, financial loss or liability, or an environmental impact.
Major Event or Crisis An event where:	[a] there has been (or possibility will be) loss of life or permanent disability or a serious impact on people's health [b] the surrounding environment has been seriously damaged [c] the situation has potential to result in community outrage or organised action by major interest groups [d] the matter is likely to provoke intense state wide or national media interest [e] significant state or federal regulations have been broken [f] GE or Clough financial performance will be seriously compromised [g] GE or Clough corporate reputation will be adversely impacted [h] GE or Clough relationship with Government or Energy Australia is at risk
Notification to the Regulator	A notification to the regulator is required of any incident in relation to a workplace that exposes an employee or any other person to a serious injury or illness.

1.4.2 Abbreviations

2PIC	2ND Person In Charge
BC	Business Continuity
CEMP	Construction Environmental Management Plan
CMS	Clough Management System
DRABCDE	Danger Response Airway Breathing Circulation Disability Exposure
JHA	Job Hazard Analysis
EMT	Emergency Management Team
EPC	Engineering, Procurement, Construction
EPRP	Emergency Preparedness and Response Plan
ERT	Emergency Response Team
HAZID	Hazard Identification
HAZOB	Hazard Observation
HSSE	Health, Safety, Security and Environment
HSSEMP	Health, Safety, Security and Environment Management Plan
HRWL	High Risk Work Licence
IMT	Incident Management Team
ICT	Incident Coordination Team
ISOS	International SOS
MD	Managing Director
PCBU	Person Conducting a Business or Undertaking
PIC	Person in Charge
PST	People Support Team
SMT	Strategy and Marketing Team
SWMS	Safe Work Method Statement

2 Supporting Documents

Document Title	Document Number
GECL Documents	
HSE Management Plan	45762-HSE-PL-G-1001
Security Management Plan	45762-HSE-PL-D-1005-Security Management Plan and Site Rules Rev A
Major Accident Event Hazard Management Procedure	CORP-HSE-PR-G-0068
Health and Safety Management Operating Standard	CORP-HSE-OS-G-0001
Assurance Procedure	CORP-RA-PR-G-0003
HSE Incident Notification, Investigation and Review	CORP-HSE-PR-G-0066
HSE Risk Management Procedure	CORP-HSE-PR-G-0072
Major Accident Event Hazard Management Operating Standard	CORP-HSE-OS-G-0004
Marketing & Communications Team Support Plan	CORP-CM-PL-G-0001
Major Incident Management Plan	CORP-HSE-PL-G-0001
Major Incident Coordination Team Plan	CORP-HSE-PL-G-0002
Transfer of Personnel Work Instruction	CORP-HSE-WI-G-0025
Policy for Health and Safety	CORP-GOV-POL-G-0012
Pandemic Influenza Planning Checklist	CORP-HSE-FO-G-0007
Pre-Shift Safety Briefing	CORP-HSE-FO-G-0057
First Aid and Emergency Assessment Form	CORP-HSE-FO-G-0169
GE Documents	GE to provide/IMT CMT plans
Energy Australia Documents	
Pollution Incident Response Management Plan (PIRMP)	
Emergency Response Procedure	

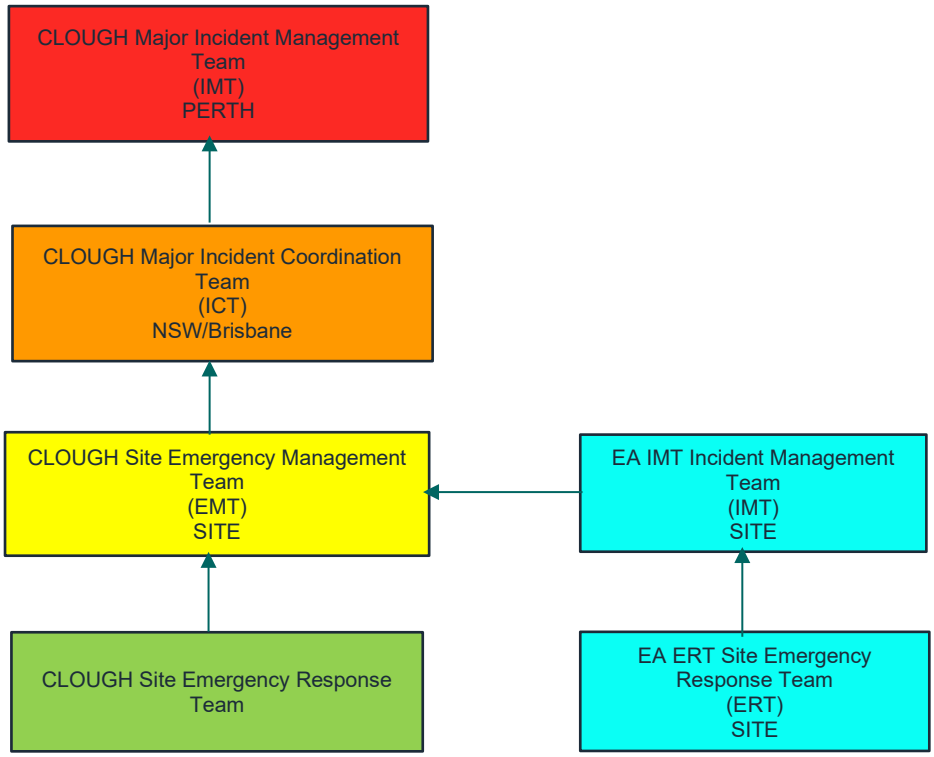
2.1 Incident Response Structure

The incident response organisation has a three-tiered structure as shown in Figure 2-1 with;

1. Major Incident Management Team (Clough)
2. Major Incident Coordination Team (Clough)
3. Site / Project specific Site Emergency Management Team (EMT)

The structure ensures the capability to effectively always manage any potential incident, and to ensure that the overarching Contractor objectives of prevention of harm to our people, stakeholders and the environment are upheld, in conjunction with the Company requirements.

Figure 2-1 GECL Incident Response Structure



2.2 Major Incident Management Team

The priority of the GECL Incident Management Team (IMT) is to focus on strategic issues affecting future operability, profitability, and reputation. The structure and actions associated with the team are described within the Major Incident Management Team Plan (CORP-HSE-PL-G-0001).

2.3 Major Incident Coordination Team

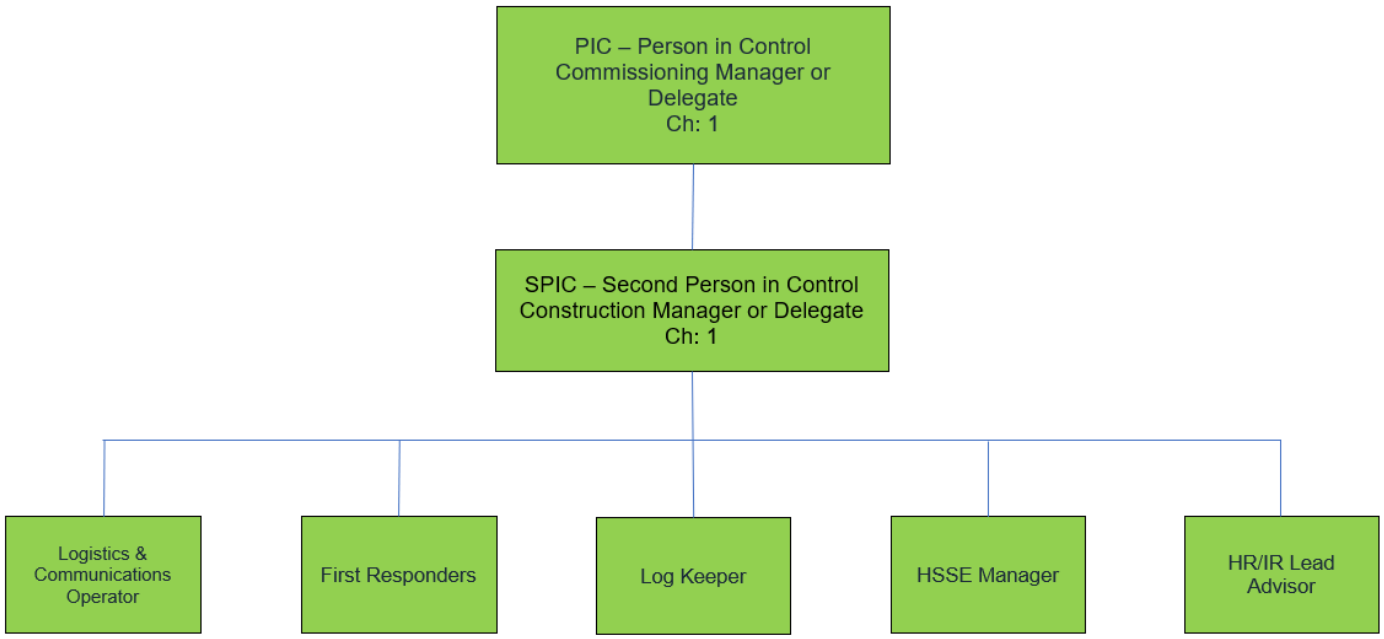
The priority of the ICT is to provide support to Site Emergency Management Team in any form necessary for them to manage the actual incident onsite. The ICT will also identify strategic issues that may need to be referred to the IMT.

The operation of the ICT including activation and detailed roles and responsibilities of members will be captured in Major Incident Coordination Plan (CORP-HSE-PL-G-0002).

2.4 Site Emergency Management Team

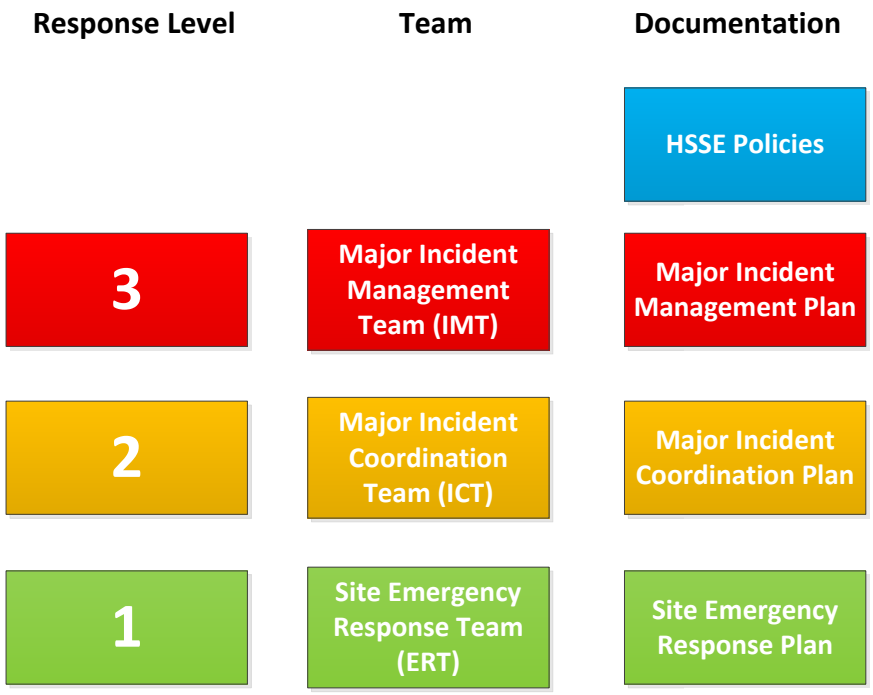
The Site EMT is the onsite response organisation responsible for physically responding to and controlling any emergency situation that develops on a site. Each site will have developed a specific Emergency Response Plan that describes emergency response actions and the roles and responsibilities of the Site EMT personnel for each potential scenario.

2.4.1 Site Emergency Management and Response Team



2.5 Major Incident Response Documentation

Figure 2-2 Team Hierarchy and Relevant Documentation



2.6 Response Levels

The levels of response for major incident situations shall be determined in accordance with the:

- Actual outcome of the situation and measurement of actual risk, and;
- Potential escalation of the incident situation and measurement of potential risk.

The activation and notification level of response depends upon the incident classification.

Major incidents are classified as Level 1, 2 or 3 according to severity. Table 2-1 describes the incident classification and the subsequent response team(s) activation and notification requirements.

The Clough ICT and IMT shall comply with the following activation and notification requirements as detailed in Table 2-1 in the event of an incident situation.

2.7 Clough Incident Classification Levels

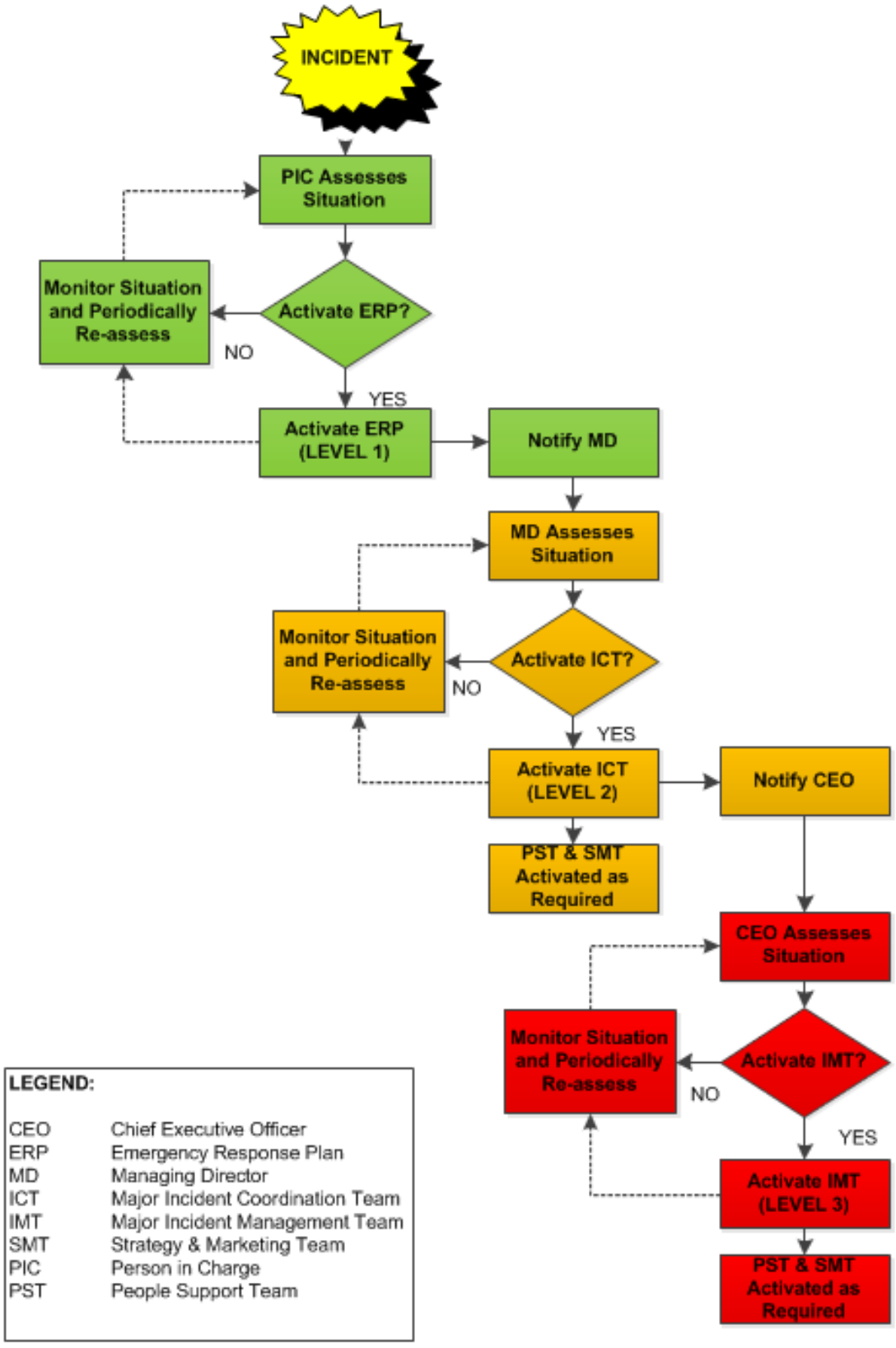
Incident classifications (Level 1, 2 or 3) shall be determined in accordance with Table 2-1.

Incident classification levels are then used to determine notification and subsequent team activation as per Figure 2-3.

Table 2-1 Incident Classification Levels

	TABLE 1: INCIDENT CLASSIFICATION LEVELS		
	LEVEL 1 – Site ERP	**LEVEL 2 – ICT Activation**	**LEVEL 3 – IMT Activation**
Definition	An Emergency situation that is contained on site, where potential for escalation and external existence may exist	The response exceeds capacity of site resources, considerable risk to life, environment and property and a significant commitment of resources required to control the situation.	The incident the potential to or has impacted the business in terms of, reputation, liability, commercial and continuity.
Examples	• Requirement for casualty evacuation • Fire and / or explosion • Major release of hazardous substance as defined by legislation • Activation of cyclone management plan • Loss / damage project critical equipment • Identified potential for local unrest / violence, armed conflict, attack, civil war / uprising, coup. • Aircraft overdue up to 15 minutes with no contact established.	• Single fatality. • Multiple casualty events. • Site impacted by natural disaster event. • Aircraft crash. • Aircraft over due by more than 15 minutes with no contact established. • Local unrest / violence, armed conflict, attack, civil war / uprising, coup. • Arrest or detention of personnel.	• Single / multiple fatalities. • Requirement for significant re-allocation of assets for continued operation. • Potential for significant harm to Clough reputation, liability, business continuity and commercial impact. • Lost / missing Aircraft. • Aircraft crash with multiple fatality / no survivors. • Loss of access to country and personnel. • Compulsory acquisition of major Clough assets by government. • Decision to evacuate personnel from country. • Kidnap &Ransom. ***Any event that has the potential to limit the capability of Clough in all areas of operation.***
Action	1. Assess the situation 2. Identify support that may be required and the potential level of incident (1, 2 or 3). 3. Activate the ERP. 4. Notify the BD MD. 5. Manage the Incident.	1. Assess the situation; 2. Establish the site support requirements; 3. Establish BD capability; 4. Identify incident level (1, 2 or 3); 5. Monitor; OR 6. Activate the ICT / notify the CEO.	1. Assess the situation; 2. Establish the BD support requirements; 3. Monitor; OR 4. Activate the IMT; 5. Establish vulnerabilities to be managed; 6. Manage the crisis.
Action Plan	**ERP ACTIVATION = NOTIFY MD**	**ICT ACTIVATION = NOTIFY CEO**	**IMT ACTIVATION – NOTIFY M&R CEO**

Figure 2-3 Clough Incident Notification and Activation

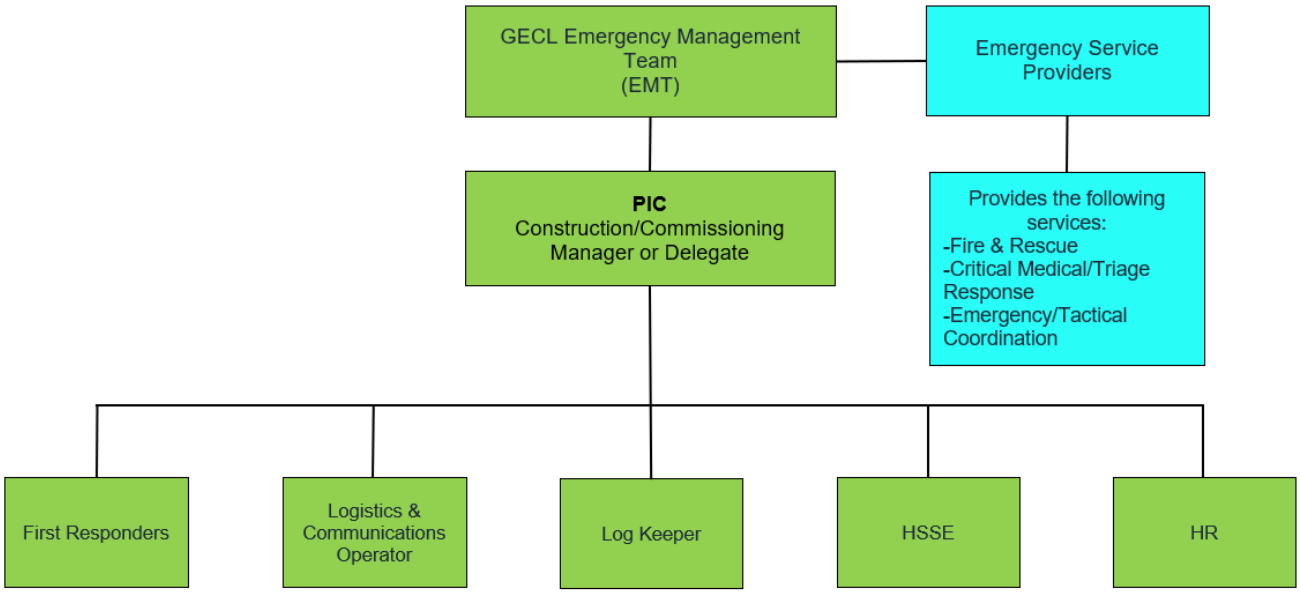


3 Structure of the Site Emergency Management Team

Clough will rely on mutual arrangements with the emergency services at the <PROJECT SITE> to provide emergency response support as shown in Figure 3-1.

The site emergency response organisation may vary depending upon the nature and duration of the emergency event.

Figure 3-1 Organisational Structure Chart



3.1 Roles and Responsibilities

3.1.1 Person in Charge

The Person in Charge (PIC) of the project/site will retain local command of emergency response operations throughout the duration of the emergency.

The Person in Charge should inform the Clough ICT Leader or Delegate of incidents that require the activation of the EMT and if required, the ICT can be activated to support the site. The PIC will remain the focal point for communications with the ICT until the incident has been resolved.

The PIC will notify the EA representative immediately of an emergency event and shall continue to always liaise with the Energy Australia (EA) representative until the event is resolved.

The PIC in conjunction with the Site HSSE Manager are to ensure that all Site EMT members have undergone Emergency Response training, as required by their role/function.

The responsibilities of the PIC are detailed in the functional checklist at Appendix 1

3.1.2 Second Person in Charge

The 2nd Person in Charge (2PIC) will carry out the role and responsibilities of the PIC when the PIC is not able to be contacted, out of communications or another situation where they cannot be raised.

The responsibilities of the 2PIC are detailed in the functional checklist for the PIC at Appendix 1.

3.1.3 Site HSSE Manager

The Site HSSE Manager provides specialist HSSE advice and general support to the Site EMT. Maintains appropriate contact with external agencies and ensures, with the PIC, that the processes and intent of this ERP are met.

The Site HSSE Manager in conjunction with the PIC is to ensure that all Site EMT members have undergone Emergency Response training as required by their role/function.

The responsibilities of the HSSE Manager are detailed in the functional checklist at Appendix 1.

3.1.4 Logistics Coordinator / Radio Operator

The primary role of the Logistics Coordinator is to organise and coordinate provision of transport, emergency and ancillary services. The Logistics Coordinator shall also organise contract services only as required by the PIC following consultation with the EA representative.

The responsibilities of the Logistics Coordinator/Radio Operator are detailed in the functional checklist at Appendix 1.

3.1.5 Log Keeper

The Log Keeper is responsible for ensuring that all information collected is in a format suitable for analysis, interpretation and dissemination and that records and information are accurately recorded and filed.

The responsibilities of the Log Keeper are detailed in the functional checklist at Appendix 1.

3.1.6 First Responders

Project emergency first responders, specialist work at heights, confined space entry, Low Voltage switchboard rescue responders will triage the area and inform the site emergency response team on the nature of the event and the type of emergency response required. First aid can only be performed if the area is secure and safe to do so.

4 Event Reporting

All incidents that occur on the Tallawarra B project including near miss incidents, regardless of how minor, must be reported to a supervisor by personnel involved or witnesses to the event as soon as practicable after the incident occurs.

For any High Potential / High Consequence Event, Medical Treatment, Restricted Work Case, Lost Time Incident, or any incident with a potential to escalate including reputational or media influenced **– A phone Call or text message within 1 hour or as soon as practical, of the Incident occurring. (This only needs to be a quick initial call with main points)**

- **Phone call / Message / Text**: from the Project Manager or delegate onsite to John Guyer (Senior VP Operations) who will report up to John Galvin (Executive VP APAC)
- **Phone call / Message / Text**: from the Project HSSE Manager / Regional HSSE Manager or delegate to Nev Warwick (HSSE Manager APAC) who will report up to Roberta Selleck (Clough Head of HSSE)
- **Phone call / Message / Text**: from the Project HSSE Manager or delegate to their respective Regional HSSE manager

The notification of events will be as per the Project HSE Incident Notification, Investigation and Review Procedure. The Energy Australia representative will be verbally notified within 1 hour of an event an in alignment with the Project ***Health and Safety Management Plan***

5 Client Event Notification

5.1 Tallawarra B Emergency Event Affecting Tallawarra A

The following process should be followed in the case of an emergency where construction works at the Tallawarra B site have the potential to cause significant impacts to Tallawarra A plant operations. An immediate alarm shall be raised with the Tallawarra A control room by the following means

- Portable UHF radio Channels 5 to 16 Emergency Channels
- Dialling (02) 4231 0810 on a site land line;
- Dialling (02) 4231 0810 on a mobile telephone (ONLY from a secure location)
- Once an alarm has been raised communications between client and GECL should be conducted as set out in section 4.1.1 Person in Charge (PIC)

6 Risk Assessment

A risk assessment (HAZID) shall be conducted to identify and assess potential emergency incidents to foster understanding of what can go wrong and develop contingency plans. The risk assessment shall define control measures and must address on-site and off-site scenarios (e.g. transit to site).

The process of identifying potential incident and emergency situations at the Project site must be undertaken by persons who are trained and subject matter experts regarding the definition and criteria which constitute an emergency situation.

7 Emergency Response Training

To ensure the process described in the ERP is effective and to identify further opportunities for the improvement of the process. Quarterly exercises will be conducted on site. These activities should be scheduled by the Project HSSE manager in conjunction with the Project construction team. The Project will also schedule conjointly simulated emergencies with Energy Australia and local emergency responders

The objectives of these activities are to not only test response arrangements to a simulated emergency incident but to also:

- practice call out of all involved staff and associated elements;

- test the adequacy of facilities;
- exercise members of the various supporting government agencies; and
- test the adequacy of appropriate contingency plans.

Each activity will be planned with specific objectives in mind with the view to assess the current proficiency level and to identify areas for improvement. Upon completion of the drill or exercise the Site HSSE Manager should present the findings to the management team and discuss any arrangements that need to be put in place to deal with any deficiencies that may have been identified. The Site HSSE Manager is to ensure that all results and findings that emanate from drills and exercises are properly recorded and retained in a secure area for the life of the Project.

8 Emergency Response Equipment

The following emergency response equipment will be made available to all work areas on site:

- Suitable and up to date fire extinguishers (by type);
- First aid equipment including cardiac defibrillators, kits, located strategically within the site;
- Fire blankets;
- Megaphones or other loud speaker devices;
- Location of the Energy Australia warning sirens and flashing lights in strategic areas within the site;
- Spill kits and appropriate waste bins (refer to CEMP);
- This ERP;
- Emergency contacts list.

GECL will conduct periodical audit assurance regarding emergency equipment. Quarterly mock emergency response evacuations will be conducted to verify and test effectiveness of the audit process and that equipment is compliant

Tallawarra A will at a minimum test the operation and effectiveness of the audible Alarm and evacuation sirens on a weekly basis as per site **PM: 11-CYE-P-001 Friday Emergency and Evacuation Alarm Test.**

9 Muster Points

Each work site will have designated muster points and all personnel new to that area or visitors will be given a brief of the location and procedures.

10 Communication

10.1 Communication of the Emergency Response Plan (ERP)

This plan shall be formally communicated to the following stakeholders:

- Project / Site Personnel During induction or when changes are made to the ERP
- Energy Australia representative/ERT

- Subcontractors

- Contractor Incident Coordination Team (ICT) & Management Team (IMT).
- Emergency Services (if required)

Should any subsequent reviews and amendments of this plan be undertaken the above-mentioned stakeholders must be provided with an updated copy. Copies are to be stored in HAZMAT boxes and in main office.

10.2 GECL Emergency Methods of Communication

The telephone system is the primary means of communication to the affected site and other sources of assistance external to Contractor. This is supplemented by the normal tools of business communication (i.e., email, intranet, internet, website, radio). In the event of an incident, telephone usage must be restricted to emergency use only. This will ensure lines are available when required. If one of the methods of communication fails or becomes unworkable, then all other available methods of communication between the affected site and the EMT are to be utilised.

When GECL site personnel are providing the location of emergencies to emergency response providers, the following must be given

Energy Australia Tallawarra Power Station
Yallah Bay Road,
Yallah New South Wales

2530 *(Entry via Old Princes Highway)*

The GECL site personnel must then meet the emergency personnel at the Main Gate (Gate 12) to direct them to the event/incident.

10.2.1 Table 1: GECL Site Emergency Team Contact List

GECL Tallawarra B Site Emergency Team Contact List

Name	Role	Phone	Email	Channel
Regan Jones	PIC (alternates with Stephen Lee)	+61427167786	regan.jones@cloughgroup.com	Ch 1
Stephen Lee	SPIC	+61420774786	Stephen.Lee3@clough.com.au	Ch 1
Ken Axford	Logistics & communication Op	+61404674314	Kenneth.Axford@cloughgroup.com	Ch 1
Stewart Wallace	HSSE Manager	+61410212089	Stewart.Wallace@cloughgroup.com	Ch 1
Natasha Kelly	Log Keeper	+61480344002	Natasha.Kelly@cloughgroup.com	Ch1
David Sproule	IR Manager	+61409675065	David.Sproule@cloughgroup.com	Offsite

Name	Role	Phone	Email	Channel
Lawrie MacIntosh	**SMP Superintendent**	+61439955035	Lawrence.McIntosh@clough.com.au	Ch 1
Roger Henningsen	**SMP Superintendent**	+61428880563	roger.henningsen@cloughgroup.com	Ch 1
Leon Homes	**Electrical Superintendent**	TBA	TBA	Ch 1
Justin Hofman	**(Contract Elec Supt)**	+61488056411	Justin.Hofman@ceqgroup.com	Ch 1
Terence Kemp	**Civil Supervisor**	+61410446403	Terence.Kemp@cloughgroup.com	Ch 1

10.2.2 External Communications during / following a Major Incident

All external health and safety communications, including with government authorities, shall be undertaken by the Project team in conjunction with the Clough communications team. Social media output will be monitored by Clough communications team. Notification of communications will be made to Energy Australia representative as soon as it is practicable

10.2.3 Regulators and Media

Where an event takes place under the Projects responsibility, external communications with the regulator will be performed by the Project in conjunction with IMT. In the event of media communications Clough Strategy and Marketing Team (SMT) will be made aware of these communications in advance. That function will be performed by the Project PIC. Please refer to the Marketing and Communications Team Support Plan (CORP-CM-PL-G-0001) for information pertaining to external communications

10.3 Communications Responsibility of EA Events

Where an event takes place on Energy Australia's work area under their responsibility external communications are delegated from Energy Australia's Operations representative to the Project PIC, the MCT is responsible for those external communications. When providing the location of emergencies to emergency response providers, the following must be given-

Energy Australia Tallawarra Power Station
Yallah Bay Road,
Yallah New South Wales

2530 (Entry via Old Princes Highway)

11 Site EMT Stand Down Process

The EMT is responsible in consultation with senior management and the Company, to declare the crisis or emergency incident over and give the “all clear” and have all affected employees, subcontractors and visitors informed of the status.

Once the “all clear” is in effect, the EMT is to commence the following actions:

- Ongoing management of incident as necessary;
- Ensure adequate resources are allocated to on-going management;
- Draft the final information releases to:
    - Employees;
    - Regulators;
    - Media;
    - Stakeholders;
    - Local communities;
    - Subcontractors;
    - Suppliers;
    - Insurers;
    - Legal;
    - Police; and
    - Emergency services.
- Debrief all EMT members;
- Ensure welfare and counselling arrangements are in place;
- Compile and file all documentation relating to the response;
- Arrange for full incident investigation and analysis;
- Review EPRP for effectiveness; and
- Capture lessons learned.

Note: all employees involved in any incident are to log their actions and provide a copy to the line Manager once the incident is over.

All incidents will be reported, documented, investigations conducted and action plans (if required) established in order to prevent or reduce a reoccurrence of the incident, in accordance with the Health and Safety, Environment and Quality Management Plans.

12 Major Incident Guidelines

A list of incident events deemed most likely to affect Project operations are described in Appendix 2. The list is preliminary and will be further developed after contact award when the risk assessment has been completed.

13 Roles & Responsibilities Checklists

Functional checklists are provided in Appendix 1 for each project/site functional head who are required to attend the Site EMT.

Each functional head checklist provides guidance on their respective roles, responsibilities and actions during any Level 1, 2 or 3 incident. The checklist is not designed to be prescriptive and simply provides a base line from which each functional head is required to complete their initial actions and then contribute to the management of the crisis under the direction and control of the Company Operations representative so that the major incident is de-escalated, as soon and is reasonably practicable.

14 Review and Audit

14.1 Review of the Procedure

Post emergency event de-brief and review shall be initiated by the Project HSSE Manager. Notification of the intended review activity will be communicated to site management. The results of the review shall be communicated to the Project team, internal stakeholders and Energy Australia where directed.

When conducting a review or amending the existing plan consideration should be given to the following significant deviations:

- Previous audit and review results,
- Changes in legislation or regulations or amendments in policy,
- Incident statistics,
- Areas for improvement,
- Training needs and records,
- Exercise/drill schedules and,
- Lessons learned from incidents and drills.
- Energy Australia, emergency services or other key stakeholders feedback
- Change of Project scope or conditions
- Review or update of the Project Risk Register

Any amendments or change to the existing plan must first be consulted with key project and business stakeholders. Further subsequent peer and stakeholder review process must be undertaken and change management process followed prior to any amendment being implemented.

15 Key Supporting Documents

Document Title	Document Number
Project HSSE Management Plan Template	CORP-HSE-TPL-G-0037
Environmental Management Plan Template	CORP-HSE-TPL-G-0030
Health Management Plan	CORP-HSE-TPL-G-0032

Security Management Plan	CORP-HSE-TPL-G-0031
Major Accident Event Hazard Management Procedure	CORP-HSE-PR-G-0068
Health and Safety Management Operating Standard	CORP-HSE-OS-G-0001
Assurance Procedure	CORP-RA-PR-G-0003
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Policy for Health and Safety	CORP-GOV-POL-G-0012
Pandemic Influenza Planning Checklist	CORP-HSE-FO-G-0007
Pre-Shift Safety Briefing	CORP-HSE-FO-G-0057
First Aid and Emergency Assessment Form	CORP-HSE-FO-G-0169

Appendix 1 - Site Emergency Management Team Functional Checklists

Person In Charge / Second Person in Charge (PCI/2PIC) Role

Site Person in Charge Functional Checklist		
TASK	**TIME**	**COMPLETE (✓) / NA**
• Upon notification of any major incident, proceed to the Site Emergency Response Room (ERR) located at: ***"insert location here".***		
• Upon notification of Level 2 or 3 incident from the <CLIENT> Operations IMT, make contact with the Clough Corporate ICT Leader using the Major Incident Contacts List CORP-HSE-SCH-G-0001 (Perth) confirm the incident on site as a Level 2 or Level 3, utilising Table 1.		
• If first to arrive in ERR, follow "First Person to arrive functional checklist, at Appendix 1.5.		
• On arrival at the ERR check that all functional roles have been filled.		
• Liaise with <CLIENT> Operations IMT and where / if necessary deploy a liaison officer to the <CLIENT> Incident Control Centre.		
• Coordinate overall incident response operations in conjunction with the Clough ICT Operations Coordinator / ICT Leader.		
• Coordinate with the Clough ICT Operation's Coordinator, the need for any external support services required, i.e. ISOS etc.		
• Maintain a personal log of events, decisions and actions and pass copies to the Log Keeper; CORP-HSE-FO-G-0122 - Message Taking Form CORP-HSE-FO-G-0121 – Event / Action Log Sheet		
• Ensure that the Clough ICT Leader is regularly updated and briefed. Level 2 – every 2 hours. Level 3 every 30 minutes.		
• In conjunction with the EMT, ensure all resources have been stood down and demobilised.		
• Ensure that all records have been collected and passed to the Log Keeper for lodging on InControl.		
Time Concluded		
Name:	Date:	Signature:

Site HSSE Manager Role

Contractor HSSE Manager Functional Checklist		
TASK	**TIME**	**COMPLETE (✓) / NA**
• Upon notification of any major incident, proceed to the Site Emergency Response Room (ERR) located at: ***"insert location here".***		
• Obtain a briefing about the current status of the incident from the PIC.		
• Identify & define resources required for this incident.		
• Obtain sufficient information to allow evaluation of the HSSE issues involved.		
• Liaise with PIC to ensure a risk assessment of the presenting incident and treatment options is conducted prior to the EMT proposing a course of action.		
• Provide advice, as required, on the implementation of any oil spill response requirement and provide specialist advice as appropriate.		
• Ensure that appropriate information for notification to regulatory bodies (e.g. NOPSA) are made in a timely manner to the Clough ICT and in consultation with the <CLIENT> Operations representative.		
• For ongoing operations (if the team needs to remain activated beyond 8 hours) ensure that rosters are in place to ensure a rotation of team members. Provide advice to the PIC on changeover of EMT members. Obtain time functional heads arrival and time of arrival checklist from "first person in the room".		
• Monitor EMT members for signs of fatigue; ensure that sufficient food and water is available to team members for extended operations.		
• Make arrangements for the Incident Investigation (CORP-HSE-PR-G-0006) and formal debriefing and analysis of the incident response – all of which should be fully documented.		
• Maintain a personal log of events, decisions and actions and pass copies to the Log Keeper. CORP-HSE-FO-G-0122 - Message Taking Form CORP-HSE-FO-G-0121 - Event/Action Log Sheet		
• Ensure that all records have been collected and passed to the Log Keeper for lodging in 'InControl'.		
Time Concluded		
Name:	Date:	Signature:

Site Logistics Coordinator / Radio Operator

Contractor Logistics Coordinator / Radio Operator Functional Checklist		
TASK	**TIME**	**COMPLETE (✓) / NA**
• Upon notification of any major incident, proceed to the Emergency Response Room (ERR) located at: ***"insert location here".***		
• If first to arrive in ERR, follow "First Person to arrive functional checklist, at Appendix 1.5.		
• Obtain a briefing about the incident, subsequent actions taken and identify immediate logistic requirements as directed by the PIC		
• Take any immediate action required (under direction from PIC), e.g. helicopter mobilisation,		
• Establish contact with the Clough ICT and coordinate provision of emergency services & other resources as required by the PIC.		
• Formulate a communications / logistics plan (if required)		
• Note and keep up-to-date the key logistics information and provide to the PIC.		
• Obtain up-to-date weather forecasts.		
• Arrange for passenger manifests to be passed to the Clough ICT and Human Resources Manager.		
• Compile all relevant information on finalisation of incident.		
• Maintain a personal log of events, decisions and actions and pass copies to the Log Keeper. CORP-HSE-FO-G-0122 - Message Taking Form CORP-HSE-FO-G-0121 - Event/Action Log Sheet		
• Ensure that all records have been collected and passed to the Log Keeper for lodging on InControl.		
Time Concluded		
Name:	Date:	Signature:

Site Log Keeper Role

Site Log Keeper Functional Checklist		
TASK	**TIME**	**COMPLETE (✓) / NA**
• Upon notification of any major incident, proceed to the Emergency Response Room (ERR) located at: ***"insert location here".*** Bringing a laptop and laptop charger.		
• Collate all significant decisions, activities, events and times on CORP-HSE-FO-G-0145 Major Incident Correspondence and Action Log (chart). This shall be done electronically (file to be stored on the laptop desktop of all Log Keepers) and kept in chronological order.		
• Remind all EMT members to use personal logs. One event / action per sheet is sufficient. CORP-HSE-FO-G-0121 – Event / Action Log Sheet		
• Highlight actions to be completed in red text.		
• Ensure that any actions requiring follow-up are addressed in a timely manner.		
• File all records and information accurately.		
• Collate all information and provide copies to the PIC when the Clough ICT stands down for follow up investigation, compensation, insurance and litigation purposes. Lodge copies of all logs, debriefing notes etc. onto InControl for further review.		
Time Concluded		
Name:	Date:	Signature:

First Person to Arrive in the Emergency Response Role (ERR) Role

First Person to Arrive in the ERR Functional Checklist		
TASK	**TIME**	**COMPLETE (✓) / NA**
• Ensure sufficient telephone and radios / other communications devices are available as a minimum: o 1 x Incoming telephone line o 1 x Outgoing telephone line o Two radios – 1 for each channel being used o Phone and radio chargers o Laptop with internet / 3G connection		
• Provide butcher's paper and relevant map and post on the walls.		
• Ensure each functional head has a copy of their functional checklists and log keeping papers.		
• Ensure a whiteboard is clean and ready to use.		
• Notify Reception that an incident has required activation of the Site EMT and advise them to deal with enquires as per their training and functional checklist.		
• Check off functional heads arrival with time of arrival, hand to site HSSE Manager on his/her arrival.		
• Brief PIC of operational status of the ERR on their arrival.		
• Hand control of ERR to the PIC and stand down or act as otherwise instructed.		
Time Concluded		
Name: Date: Signature:		

Appendix 2 – Incident Guidelines

Bomb Threat

Scenario description	Persons who wish to cause disruption to the organisation to which they are made usually commit bomb threats. Bomb threats must be taken seriously.	
General outline of Emergency Response	Every telephone should have a bomb threat checklist to facilitate correct procedures and minimise stress to the person receiving the call. With many outside telephone lines located within Project site complexes there is a requirement for a consistent response to a bomb threat made by telephone. In the event that a telephone bomb threat is made the person receiving the phone call shall: Record all details of the threat on the Bomb Threat Checklist by your phone. Refer to Appendix 3. Immediately notify HSSE Manager who will notify the Project PIC. HSSE personnel shall ensure the Bomb Threat Checklist is kept by all. Telephones on the site. Any person who receives a telephone call purporting to be a threat directed at the Construction Area or the Operations Area shall follow the steps on the checklist.	
Disciplines required (indicate) – Guide only	Fire fighting ☒	First Aid ☐
	Vehicle extrication ☐	Breathing apparatus ☐
	Hazmat ☒	Rescue ☐
	Specialist ☒	Police ☒
Emergency Response resources and their location	**Site**	ERT, Site based Paramedics
	External support	Police

Action Required	Role Responsible	Comment
“Emergency, emergency, emergency”	Bystander/Witness	Radio (to be confirmed)
“Emergency, emergency, emergency” acknowledged		ERT Leader responds to incident
ERT team called		ERT muster
PIC advised		Site Project Manager
Ambulance to scene as appropriate	Paramedic	Paramedic to standby until scene made safe
Site assessed	ERT Leader	360°
ERT respond to scene	Team members	
Priorities set and engaged	ERT Leader	
Police notified if required	<CLIENT>/Clough	Cordon off area
Scene made safe	All members on site	Preserve evidence
Investigation commenced and debrief	HSSE Manager	All involved personnel

Electric Shock or High Voltage Incident

Scenario description	Any and ALL electrical shock, high voltage incident regardless of severity			
General outline of Emergency Response	Generally limited to paramedic response but could entail rescue or fire but with additional requirements to isolate source of shock as a priority. All electrical shocks, regardless of voltage or severity are to be reported All persons receiving an electrical shock, regardless of severity, are to be transported by a supervisor to the Paramedic or medical facility for 12-lead ECG monitoring and clearance by a medical practitioner.			
Disciplines required (indicate) – Guide only	Fire fighting	☒	First Aid	☒
	Vehicle extrication	☒	Breathing apparatus	☒
	Hazmat	☐	Rescue	☒
	Specialist	☒	Other	☒
Emergency Response resources and their location	**ER internal support**	ERT leader, High Voltage supervisors, Site based Paramedics.		
	ER External support	Immediate Hospital,		

Action Required	Role Responsible	Comment
"Emergency, emergency, emergency" called	Bystander/Witness	Radio (to be confirmed)
"Emergency, emergency, emergency" acknowledged	Paramedic/ERT Leader	Paramedic responds to incident
ERT advised	Paramedic	ERT Leader responds to incident and puts in place 100metre cordon of incident
Power isolation	Electrical High Voltage isolator	ERT leader responds to electrical High Voltage operators to attend incident
Power isolation	Electrical High Voltage isolator	
Power isolation	Electrical High Voltage isolator	Advise ERT leader all clear of power isolated to incident area
Vehicle / Personnel rescue	ERT leader	Once power confirmed and tested isolated by electrical High Voltage isolator rescue to take place.
DRABCDE	Paramedic on scene	Severity of event determined
Casualty stabilised	Paramedic on scene	Extrication of casualty as directed
Evacuate casualty to medical assistance	As directed by Paramedic	As per medical evacuation procedures

Collisions Involving Heavy Equipment, Light Vehicles & Others

Scenario description	Any collision involving the above			
General outline of Emergency Response	When an alarm is raised of a collision the emergency response organisation will respond. The scene will be assessed and made safe, any casualties assessed and stabilised. Extrication of casualties and transfer to treatment facility. Scene to be secured and investigation commenced. Participants to be debriefed.			
Disciplines required (indicate) – Guide only	Fire fighting	☒	First Aid	☒
	Vehicle extrication	☒	Breathing apparatus	☐
	Hazmat	☒	Rescue	☒
	Specialist	☐	Other	☐
Emergency Response resources and their location	**Site**	ERT, Site based Paramedics.		
	ER External support	Paramedics, Fire Rescue		

Action Required	Role Responsible	Comment
"Emergency, emergency, emergency" called	Bystander/Witness	Radio (to be confirmed)
"Emergency, emergency, emergency" acknowledged		ERT Leader responds to incident
ERT called		ERT muster
PIC		Site Manager
Ambulance to scene as appropriate	Paramedic	Ambulance to scene as appropriate
Site assessed	ERT Leader	360°
ERT respond to scene	Team members	
Priorities set and engaged	ERT Leader	
DRABCDE	All members on site	Triage as necessary
Casualties stabilised	All members on site	Extrication of casualties
Evacuate casualties to medical assistance	As directed by Paramedic	As per medical evacuation procedures
Scene made safe	All members on scene	Preserve evidence for investigation

Falls from Heights - Rescue

Scenario description	Falling from height.			
General outline of Emergency Response	ERT Leader will secure the area. Casualties to be stabilised, first aid administered and evacuated as required. Involve appropriate external agencies if required.			
Disciplines required (indicate) – Guide only	Fire fighting	☐	First Aid	☒
	Vehicle extrication	☐	Breathing apparatus	☐
	Hazmat	☐	Rescue	☒
	Specialist	☐	Other	☐
Emergency Response resources and their location	**Site**	ERT, Site based Paramedics.		
	ER External support	Paramedics, Fire Rescue		

Action Required	Role Responsible	Comment
“Emergency, emergency, emergency” called	Bystander/Witness	Radio Channel (to be confirmed)
“Emergency, emergency, emergency” acknowledged		ERT Leader responds to incident
PIC advised		HSSE Manager
Ambulance to scene as appropriate	Paramedic	Paramedic to standby at scene until scene made safe
DRABCDE	All members on scene	Triage as necessary
Casualties stabilised	All members on scene	Extrication of casualties as directed
Evacuate casualties to medical assistance	All members as directed by Paramedic	As per medical evacuation procedures
Contact external services as required	ERT Leader	Immediate Hospital,
Scene made safe	All members on scene	Preserve evidence for investigation
Investigation commenced	HSSE Manager	All involved personnel
Debrief	ERT Leader	All involved personnel

Flooding – Inclement Weather

Scenario description	Local flooding from Cyclones and or rain deluge.			
General outline of Emergency Response	ERT Leader will secure the area. Casualties to be stabilised, first aid administered and evacuated as required. Involve appropriate external agencies if required.			
Disciplines required (indicate) – Guide only	Fire fighting	☐	First Aid	☒
	Vehicle extrication	☐	Breathing apparatus	☐
	Hazmat ☐		Rescue ☒	
	Specialist	☐	Other	☒
Emergency Response resources and their location	**Site**	ERT, HSSE Manager		
	ER Internal support	Fire Rescue, SES		
	ER External support			

	Y/N	
Can work be relocated to a drier area?		If Y, then work can proceed
Is there alternative work available at a direr location?		If Y, then work can proceed
Can tarps/enclosures be erected to keep out the rain?		If Y, then work can proceed
Can truck unloading be performed in a dry area?		If Y, then work can proceed
Can non-electrical work be performed?		If Y, then work can proceed if workers remain dry
Is the rain only light? i.e. drizzle, mist, light shower		If Y, then work can proceed if workers remain dry
Will wet weather gear keep the user dry?		If Y, then work can proceed if work can be done safely
Will wearing of wet weather gear cause additional hazards, excessive sweating, heat stress, etc?		If Y, then wet weather gear not suitable, alternative work required
Can slings/chains be prevented from slipping, can lift be performed safely?		If Y, then work can proceed if workers remain dry
Is work to be performed within an excavation?		If Y, then alternative work is required
Is lightning & thunder evident?		If Y, then personnel must work under cover
Are high winds present?		If Y, then crane lifts and work from EWPs may have to be postponed. Ensure equipment, materials and structure is secured.
Is the area likely to flood?		If Y, then consider damming area, temporary sump pump or alternative work.

Fire in Equipment / Plant

Scenario description	Any event of a fire in equipment or plant			
General outline of Emergency Response	Operator attempted to extinguish fire if safe to do so. ERT responded and assisted with extinguishing fire, and secured area. ERT First Responders provide First-Aid. HSE site based Paramedics respond and provide advanced care. Transport casualties to receiving medical facility as required via land or vessel transport. Involve external agencies if required.			
Disciplines required (indicate) – Guide only	Fire fighting	☒	First Aid	☒
	Vehicle extrication	☒	Breathing apparatus	☒
	Hazmat	☒	Rescue	☒
	Specialist	☐	Other	☐
Emergency Response resources and their location	**Site**	ERT, Site based Paramedics. Internal Clough personnel and External Ambulance and Paramedics. (Off shore activities)		
	ER External support	Fire Rescue		

Action Required	Role Responsible	Comment
"Emergency, emergency, emergency" called	Bystander/Witness	Radio (to be confirmed)
"Emergency, emergency, emergency" acknowledged		ERT Leader responds to incident
ERT called		ERT muster
PIC advised		Site Manager
Ambulance to scene as appropriate	Paramedic	Paramedic to standby until scene made safe
Site assessed	ERT Leader	360°
If on vessel, vessel master to call all personnel to muster point.	Vessel Master	POB checked to confirm all personnel are accounted for.
ERT respond to scene	Team members	
Priorities set and engaged	Team Leader	
If fire on vessel is uncontrollable and/or evacuation is deemed required, vessel is be abandoned as per each vessel's evacuation plan.	Vessel Master	Via gangplank, rope ladder etc. to life raft or rescue/transfer vessels etc. Emergency evacuation drills to be conducted on regular basis.
DRABCDE	All members on scene	Triage as necessary
Casualties stabilised	All members on scene	Extrication of casualties as directed
Evacuate casualties to medical assistance	As directed by Paramedic	As per medical evacuation procedures
Contact external services as required	ERT Leader	Immediate Hospital, etc.
Scene made safe	All members on site	Preserve evidence
Investigation commenced	HSSE Manager	All involved personnel
Debrief	ERT Leader	All involved personnel

Fatalities – Confirmed or Suspected.

Scenario description	Suspected/Confirmed Fatality.	
General outline of Emergency Response	Only a registered medical practitioner can confirm a death. If not at the scene, arrangements should be made as soon as possible for a doctor to attend the incident. Until this occurs, or confirmation is received, the circumstance should be referred to as a possible or suspected death.	
Disciplines required (indicate) – Guide only	Fire fighting ☐	First Aid ☒
	Vehicle extrication ☐	Breathing apparatus ☐
	Hazmat ☐	Rescue ☐
	Specialist ☐	Other ☐
Emergency Response resources and their location	**Site**	ERT, Site based Paramedics. Preservation of scene is paramount. No movement to occur unless authorised by Police and/or WorkSafe.
	ER External support	Police, work safe, Paramedics, Doctor

Action Required	Role Responsible	Comment
"Emergency, emergency, emergency" called	Bystander/Witness	Radio (to be confirmed)
"Emergency, emergency, emergency" acknowledged		ERT Leader responds to incident
In the event that an employee is seriously and or suspected to have received fatal injuries, the Paramedic shall record the employees name and ID number and pass onto the Onsite response team leader	Paramedic	The casualty shall be referred to as a casualty until such time that a medical practitioner has certified the death
The Onsite response team leader shall contact HSSE Manager and request their attendance.	ERT Leader	The casualty shall be referred to as a casualty until such time that a medical practitioner has certified the death.
On arrival of HSE Manager, the PIC shall pass on the recorded personal detail of the casualty and request that it be transported confidentially to the SC.	ERT Leader	The casualty shall be referred to as a casualty until such time that a medical practitioner has certified the death
During this assignment, the HSE Manager shall not in any way, unless it is unsafe, carry out any act or allow any act that may mitigate the above process.	HSSE Manager	The casualty shall be referred to as a casualty until such time that a medical practitioner has certified the death
Every effort shall be made to secure and seal off the incident area and machinery involved in the suspected fatality, until <CLIENT> officials, police and Work-Safe arrive. The immediate area surrounding the casualty should not be disturbed in any way other than to cover the casualty, to protect from weather/screen from	HSSE Manager	Preserve evidence for investigation
public view/documented and photographed by police and Work Safe.		

Police and Work-Safe shall be notified as soon as possible		Preserve evidence for investigation
Police are responsible for notifying the next of kin. In some cases, it would be appropriate for the employer's personnel to accompany the police.	Police	Notification to next-of-kin is not carried out until a medical practitioner confirms official confirmation of death.
Investigation commenced	HSSE Manager	All involved personnel
Debrief	ERT Leader	All involved personnel
Counselling provided to all personnel involved in incident as well as next-of-kin and the employees <CLIENT> personnel.	HSSE Manager	Project Peer Support Teams / Counselling Services EAP Providers

Fire - In Office / Accommodation / Site Infrastructure

Scenario description	Any event involving fire in an office, accommodation or infrastructure building.			
General outline of Emergency Response	Initial response using equipment on hand, e.g. fire extinguishers, fire hose reels. Personnel will not expose themselves to smoke or fumes. Supplementary fire-fighting to be upwind and remote from building.			
Disciplines required (indicate) – Guide only	Fire fighting	☒	First Aid	☒
	Vehicle extrication	☐	Breathing apparatus	☒
	Hazmat	☐	Rescue	☒
	Specialist	☐	Other	☐
Emergency Response resources and their location	**Site**	ERT, Site based Paramedics.		
	ER External support	Fire Rescue		

Action Required	Role Responsible	Comment
“Emergency, emergency, emergency” called	Bystander/Witness	Radio (to be confirmed)
Acknowledgement of automated fire alarm activation by HSE Manager personnel		Automated fire alarm activation
“Emergency, emergency, emergency” acknowledged		ERT Leader responds to incident
ERT called		ERT muster
PIC advised		HSSE Manager
Ambulance to scene as appropriate	Paramedic	Paramedic to standby at scene until scene made safe
Site assessed	ERT Leader	360°
ERT respond to scene	Team members	Emergency response vehicle
Priorities set and engaged	ERT Leader	
DRABCDE	All members on scene	Triage as necessary
Casualties stabilised	All members on scene	Extrication of casualties as directed
Evacuate casualties to medical assistance	All members as directed by Paramedic	As per medical evacuation procedures
Contact external services as required	ERT Leader	Immediate Hospital
Scene made safe	All members on scene	Preserve evidence for investigation
Investigation commenced	HSSE Manager	All involved personnel
Debrief	ERT Leader	All involved personnel

Hazardous Spills / Fires

Scenario description	Any land and/or water based spill / fire involving hazardous/biological materials, e.g. hydrocarbons (diesel, oil), chemicals, and waste water at the construction area of operations.			
General outline of Emergency Response	The initial response is to be by personnel at the scene of the spill, using spill kits or earth bunds to contain the spill if safe to do so, or designated Spill contractor. If the MSDS calls for additional PPE or evacuation, then all personnel are to remove themselves upwind from the scene and await the arrival of the ERT. Generally, no material that has a requirement for additional PPE or evacuation in the event of a spill will be permitted onto site without first having the necessary equipment and controls in place. In this case, specific procedures will be developed. In all hazardous materials spills the <CLIENT> Environmental Manager will be immediately contacted.			
Disciplines required (indicate) – Guide only	Fire fighting	☒	First Aid	☒
	Vehicle extrication	☐	Breathing apparatus	☒
	Hazmat	☒	Rescue	☒
	Specialist	☒	Other	☐
Emergency Response resources and their location	**Site**	ERT and Site Based Paramedics		
	ER External support	Hazardous spill contractor, Fire Rescue		

Action Required	Role Responsible	Comment
“Emergency, emergency, emergency” called	Bystander/Witness	Radio (to be confirmed)
“Emergency, emergency, emergency” acknowledged		ERT Leader responds to incident
MSDS consulted		ERT Leader responds to incident
ERT called		ERT muster
PIC advised		HSE Manager
Environmental specialist notified	ERT Leader	Any specialist advice noted
Site assessed	ERT Leader	360°
ERT respond to scene	Team members	Emergency response vehicle
Priorities set and engaged	ERT Leader	
Scene made safe	All members on scene	Preserve evidence for investigation
Investigation commenced	HSE Manager	All involved personnel
Debrief	ERT Leader	All involved personnel

Influenza (Pandemic / High Risk)

Scenario description	*Influenza pandemic* is an epidemic influenza that has spread worldwide infecting manage people in the population. For project-based FIFO workforce the challenges of a severe pandemic are likely to be compounded by multi-national workforce residing in construction camps with reduced medical capacity and / or quarantine facilities able to segregate infected workers.			
General outline of Emergency Response	Regardless of severity immediate public health messages to contain spread will be instituted as follows: • Communication of basic hygiene information across all areas of the project including notification of personnel off site on R&R • Daily reporting of events and briefing of supervisors as required • Cleaning – review of all offices, facilities and managed camp accommodation including escalation of hygiene controls (use of gloves, disinfecting common areas etc.) and use of P2 masks. • Identification of personnel with risk factors for severe disease – morbid obesity, chronic diseases (diabetes, cancer, respiratory and cardiac diseases) or conditions (e.g. pregnancy) and arrange for early demobilization • People with flu like symptoms at camp – isolate and to remain in rooms with meals delivered until illness symptoms have passes. • Avoid travel through affected regions (e.g. China) and where travel has occurred isolate individual from the workplace until the incubation period has passed or the individual has been cleared by a doctor. Activate Pandemic Influenza Planning checklist (CORP-HSE-FO-G-0007) and monitor ongoing situation as detailed in the Project Health Management Plan (CORP-HSE-TPL-G-0032Q).			
Disciplines required (indicate) – Guide only	Fire fighting	☐	First Aid	☒
	Vehicle extrication	☐	Breathing apparatus	☒
	Hazmat	☐	Rescue	☐
	Specialist	☒	Other	☐
Emergency Response resources and their location	**Site**	Site Based Paramedics		
	ER External support	Clough Medical Service Provider		

Action Required	Role Responsible	Comment
Paramedic and HSE notified	Unwell person / supervisor	Radio (to be confirmed)
Patient quarantined	Supervisor	Camp manager to make arrangements
PIC advised	Paramedic	HSE Manager
Medical service provider notified	PIC / HSE	Any specialist advice noted
Patient demobilised	Supervisor	Under medical direction and infection protocols
Investigation into others potentially exposed / to be isolated or at risk	HSE	Personnel identified as coming into close contract to be isolated and / or demobilised.
Monitor and report ongoing status	PIC	Report status to MIC team
Daily debrief until all cases resolved	PIC	MIM Team, MIC Team

Lightning

Scenario description	Impending storm where lightning is expected			
General outline of Emergency Response	Monitor and issue alerts. Respond to any emergency incidents only if safe to do so. Actions as per standard operating procedures for identified incident.			
Disciplines required (indicate) – Guide only	Fire fighting	☒	First Aid	☒
	Vehicle extrication	☐	Breathing apparatus	☐
	Hazmat	☐	Rescue	☐
	Specialist	☐	Other	☒
Emergency Response resources and their location	**Site**	ERT,		
	ER External support	Paramedics		

Action Required	Role Responsible	Comment
Monitor impending storm and issue alerts as appropriate.	ERT Leader	Lightning will be monitored within 50km. Clough will be notified through <CLIENT>'s Lightning Warning System when it is within 50km
Respond to alert	ERT Leader	'Cease Work' procedures
PIC advised	ERT Leader	HSSE Manager
Continually monitor for actual or potential Emergency Incident	ERT Leader	Maintain safe communication procedures
Respond appropriately to incident only if safe to do so	ERT Leader	Determine HSSE of incident site before mobilising.
Site assessed -360°	ERT Leader	Dangers to crew and casualties, etc.
Priorities set and engaged	ERT Leader	RECEO VS
DRABCDE	All members on scene	Triage as necessary
Casualties stabilised	All members on scene	Extrication of casualties as directed
Evacuate casualties to medical assistance	All members as directed by Paramedic	As per medical evacuation procedures
Contact external services as required	ERT Leader	Immediate Hospital
Scene made safe	All members on scene	Preserve evidence for investigation
Investigation commenced	HSSE Manager	All involved personnel
Debrief	ERT Leader	All involved personnel

Medical Emergency

Scenario description	Any medical emergency affecting an individual, e.g. chest pain, asthma attack, acute abdominal pain.			
General outline of Emergency Response	Generally the initial response will be by the Paramedic. If the event is determined by the Paramedic to be serious and requiring further medical assistance.			
Disciplines required (indicate) – Guide only	Fire fighting	☐	First Aid	☒
	Vehicle extrication	☐	Breathing apparatus	☐
	Hazmat	☐	Rescue	☐
	Specialist	☒	Other	☒
Emergency Response resources and their location	**Site**	ERT, Site based Paramedics.		
	ER External support	Paramedics		

Action Required	Role Responsible	Comment
“Emergency, emergency, emergency” called	Bystander/Witness	Radio (to be confirmed)
“Emergency, emergency, emergency” acknowledged	First Response – First Aider arrives	First Aider should be at the seen
ERT Leader	Paramedic	ERT Leader responds to incident
PIC advised	ERT Leader	HSSE Manager
DRABCDE	Paramedic on scene	Severity of event determined
Casualty stabilised	Paramedic on scene	Extrication of casualty as directed
Evacuate casualty to medical assistance	As directed by on site doctor	As per medical evacuation procedures
Contact external services as required	Injury Case File Manager	Immediate Hospital

Rescue from Confined Space

Scenario description	To be determined from confined space Rescue Plan			
General outline of Emergency Response	To be developed in response to requirement determined by JHA and Rescue Plan. Generally will be a response involving the ERT and Paramedic The use of on-site cranes, man cages and elevated work platforms (EWP) may be considered in the rescue plan. Specialist support may be identified as a requirement and the personnel and expertise contracted for the duration of the risk. This may be specialist rope rescue, B.A. or other as required.			
Disciplines required (indicate) – Guide only	Fire fighting	☐	First Aid	☒
	Vehicle extrication	☐	Breathing apparatus	☒
	Hazmat	☐	Rescue	☒
	Specialist	☒	Other Gas Monitor	☒
Emergency Response resources and their location	**Site**	ERT, Site based Paramedics.		
	ER External support	Paramedics, Fire Rescue		

Action Required from rescue plan	Role Responsible	Comment
"Emergency, emergency, emergency" called	Bystander/witness	Radio (to be confirmed)
"Emergency, emergency, emergency" acknowledged		ERT Leader responds Paramedic responds
Secure the area without putting themselves at risk	Bystander/witness	Do not enter the confined space
Provide assistance only if safe to do so	Bystander/witness	Do not enter the confined space
Reassure the trapped person/s that help is on the way	Bystander/witness	Do not enter the confined space
DO NOT enter the confined space	Bystander/witness	Do not enter the confined space
Send a spotter to guide Emergency Response to the incident	Bystander/witness	Do not enter the confined space
Ensure clear access to the incident site is available for Emergency Response	Bystander/witness	Do not enter the confined space
Do not crowd or enter the incident area without prior approval from the ERT leader	ERT Leader	Do not enter the confined space
ERT respond to scene	Team members	
Priorities set and engaged	ERT Leader	
Scene made safe	All members on scene	Preserve evidence for investigation
Investigation commenced	HSSE Manager	All involved personnel
Debrief	ERT Leader	All involved personnel

Rescue from Trench

Scenario description	Personnel caught in an entrapment or collapsed in trench.			
General outline of Emergency Response	To be developed in response to requirement determined by JHA and rescue plan. Generally will be a response involving the ERT and Paramedic with site based equipment. The use of on-site cranes, man cages and EWPs may be considered in the rescue plan. Specialist support may be identified as a requirement and the personnel and expertise contracted for the duration of the risk. This may be specialist rope rescue or other as required.			
Disciplines required (indicate) – Guide only	Fire fighting	☐	First Aid	☒
	Vehicle extrication	☐	Breathing apparatus	☐
	Hazmat	☐	Rescue	☒
	Specialist	☒	Other Earth moving equipment with competent operators, Hand Tools (shovels, rakes, etc)	☒
Emergency Response resources and their location	**Site**	ERT, Site based Paramedics.		
	ER External support	Paramedics, Fire Rescue		

Action Required	Role Responsible	Comment
“Emergency, emergency, emergency” called	Bystander/witness	Radio (to be confirmed)
“Emergency, emergency, emergency” acknowledged		ERT Leader responds Paramedic responds
Secure the area without putting themselves at risk	Bystander/witness	Do not attempt rescue unless trained and equipped to do so
Provide assistance only if safe to do so	Bystander/witness	Do not attempt rescue unless trained and equipped to do so
Reassure the trapped person/s that help is on the way	Bystander/witness	Do not attempt rescue unless trained and equipped to do so
Send a spotter to guide Emergency Response to the incident	Bystander/witness	Do not attempt rescue unless trained and equipped to do so
Ensure clear access to the incident site is available for Emergency Response	Bystander/witness	Do not attempt rescue unless trained and equipped to do so
Do not crowd or enter the incident area without prior approval from the ORT leader	ERT Leader	Do not attempt rescue unless trained and equipped to do so
ERT respond to scene	Team members	Emergency response vehicle
Priorities set and engaged	ERT Leader	
Scene made safe	All members on scene	Preserve evidence for investigation
Investigation commenced	HSSE Manager	All involved personnel
Debrief	ERT Leader	All involved personnel

Suspicious Package

Scenario description	Suspicious package.			
General outline of Emergency Response	It is appropriate that people handling mail remain vigilant and cautious at this time, but it should be remembered that most reports of suspicious packages are false alarms. All people handling mail items in a work or business situation should be aware of the emergency procedures for responding to and reporting a suspicious article. Where possible, the sorting and processing of mail and packages should be conducted in an area that is separate from the main organisation and which can be easily contained.			
Disciplines required (indicate) – Guide only	Fire fighting	☐	First Aid	☒
	Vehicle extrication	☐	Breathing apparatus	☒
	Hazmat	☒	Rescue	☐
	Specialist	☐	Other	☐
Emergency Response resources and their location	**Site**	ERT.		
	ER External support	Police		

Action Required	Role Responsible	Comment
"Emergency, emergency, emergency" called	Bystander/Witness	Radio (to be confirmed)
"Emergency, emergency, emergency" acknowledged		ERT Leader responds to incident
Do not disturb the item any further. Do not pass it around. If any material has spilt from the item, do not try to clean it up, or brush it from your clothing.	Bystander/Witness	Do not panic, follow procedure
Keep your hands away from your face to avoid contaminating your eyes, nose and mouth.	Bystander/Witness	Do not panic, follow procedure
Contact your Area Warden or nearest non-effected person and request assistance. Warn them not to enter your immediate area.	Bystander/Witness	Do not panic, follow procedure
If possible, have the building ventilation system shut down and turn off any fans or equipment that is circulating air around your workplace.	Bystander/Witness	Do not panic, follow procedure
DO NOT touch the suspicious package until rendered safe to do so by the ERT Team leader or specialist.		Do not panic, follow procedure
Stay in your office or immediate work area. This also applies to Co-workers in the same room. Prevent others from entering the area and becoming contaminated. Remember you are not in immediate danger	Bystander/Witness	Do not panic, follow procedure
Wait for help to arrive and follow instructions.	ERT Leader	
ERT respond to scene	Team members	
Priorities set and engaged	ERT Leader	
Scene made safe	All members on scene	Preserve evidence for investigation

Appendix 3 - Bomb Checklist

BOMB THREAT CHECK LIST							
Time:		Date:		Place:			
Name of person receiving call:							
Question to Ask the Caller:							
Who are you?							
When is the bomb going to explode?							
Where is it right now?							
What does it look like?							
What kind of bomb is it?							
What will cause it to explode?							
Did you place the bomb?							
Why are you doing this?							
What is your address?							
Note down demand word for word							
Did the caller appear familiar with the area, which is threatened? Yes: ☐ No: ☐							
CALLER IDENTIFICATION							
Type of Call:		**Voice:**		**Speech:**		**Language:**	
Standard	☐	Male	☐	Fast	☐	English	☐
Local	☐	Female	☐	Slow	☐	Asian	☐
Public Phone Box	☐	Child	☐	Slurred	☐	Other-Please specify	☐
Mobile	☐	Angry	☐	Nasal	☐		
Inter local	☐	Stammer	☐	Distorted	☐		
International	☐	Calm	☐	Stutter	☐	**Accent:**	
		Obscene	☐	Distinct	☐	Australian	☐
		Giggling	☐	Other	☐	English	☐
		Other	☐			Other-Please specify	☐
Command of language:		**Background Noise:**					
Excellent	☐	None	☐	Children	☐	Other	☐
Good	☐	Radio/TV	☐	Construction	☐		
Fair	☐	Train	☐	Traffic	☐		
Poor	☐	Aircraft	☐	Sirens	☐		
Comments by the person receiving the call :							

Appendix 4 – Emergency and Key Contacts

EMERGENCY CONTROL ORGANISATION (ECO) & FIRST RESPONDERS		
ECO Position	**Name**	**Contact Number**
GECL Person in Control (PIC)	Stephen Lee Regan Jones	0420 774 786 or 0427 167 786
GECL Emergency Response Team (First responders)	Lawrence MacIntosh Roger Henningsen Leon Homes Justin Hoffman Terence Kemp	0439 955 035 0428 880 563 TBA 0488 056 411 0410 446 403
EA Operations Control Room	On shift operator	02 4231 0810/0821 or 0432 751 617
EA Project Emergency Contact	Lyell Blackman Glen Cowling	0417 883 470 0418 425 780

KEY PROJECT CONTACTS		
Position	**Name**	**Contact Number**
Project Director	Jason Westerbrink	0439 424 755
Senior Project Manager	Giuseppe Gaudiello	0409 584 895
Construction Manager	Steve Lee	0420 774 786
Commissioning Manager	Regan Jones	0427 167 786
Superintendent	Roger Henningsen	0428 880 563
Superintendent	Lawrence McIntosh	0439 955 035
Engineering Manager	Brett Pratt	0407 799 030
Lead Engineer	Tristan Lewis	0416 211 305
HSE Manager	Stewart Wallace	0410 212 089
Environmental Advisor	Nicola Fraser	0400 675 298
Safety Officer	TBA	TBA

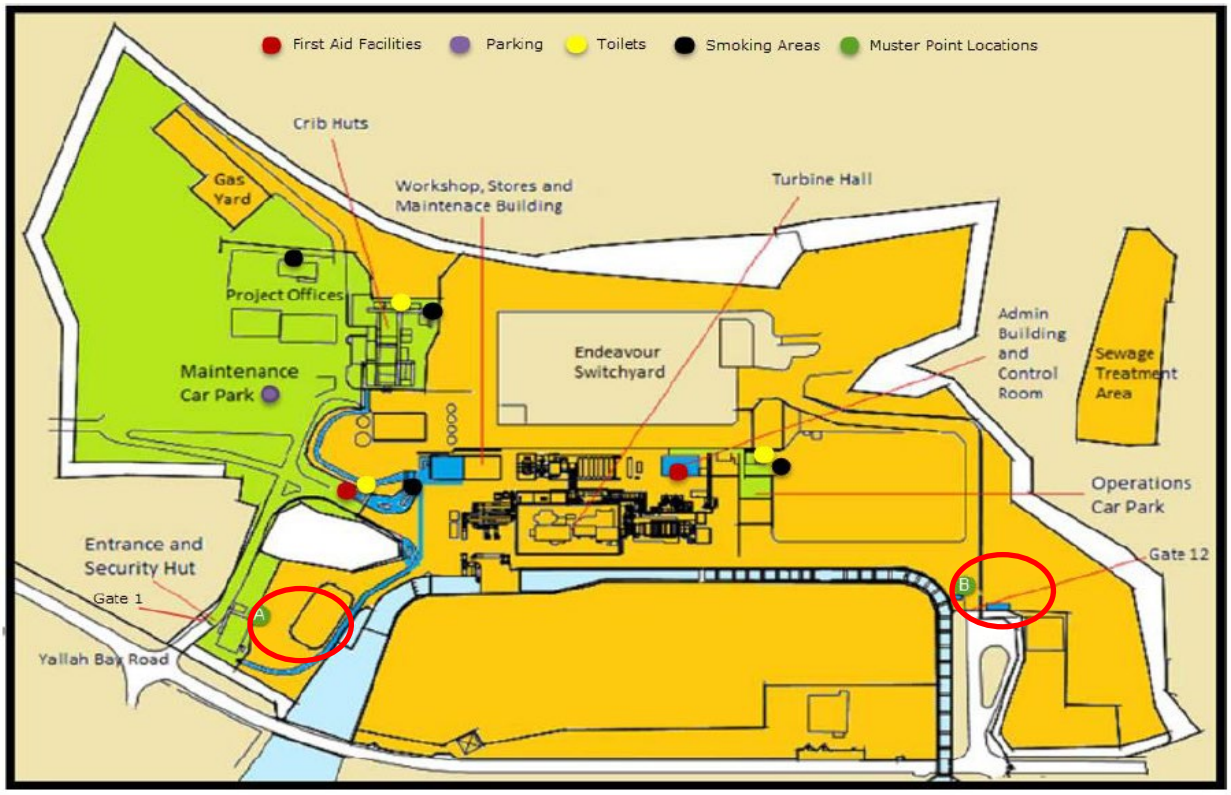
EMERGENCY SERVICES		
Services	**Address**	**Contact Number**
Fire		000
Ambulance		000
Police		000
Albion Park Police Station		02 4256 1044
Wollongong Hospital	Loftus Street, Wollongong	02 4222 5000
Shellharbour Hospital	Madigan Boulevard, Mt Warrigal	02 4295 2500
Endeavour Energy		131 003
Jemena (Fuel Gas Supply)		132 500
SES		132 500
Poisons Information Centre		131 126
Wollongong Council		02 4221 6111
SafeWork NSW – Notify Incident		131 050
SafeWork NSW – Wollongong Branch		4222 7333
EPA Pollution Hotline		131 555

Appendix 5 – Evacuation Procedure

General Evacuation Procedure:

1. Project Manager, Supervisor or Safety Representative or Relevant ECO directs an evacuation.
2. Proceed in an orderly manner to a muster point (Gate 12 primary or Gate 1 secondary).
    - If you come across another person whilst proceeding to the muster point, ensure they are aware of the evacuation and muster point area.
    - Visitors – the fully inducted person responsible is responsible for assisting the visitor/s to evacuate
3. Wait at the muster point for further instructions.
4. Project Manager, Supervisor or Safety Representative to sweep the site to ensure all persons have evacuated successfully.

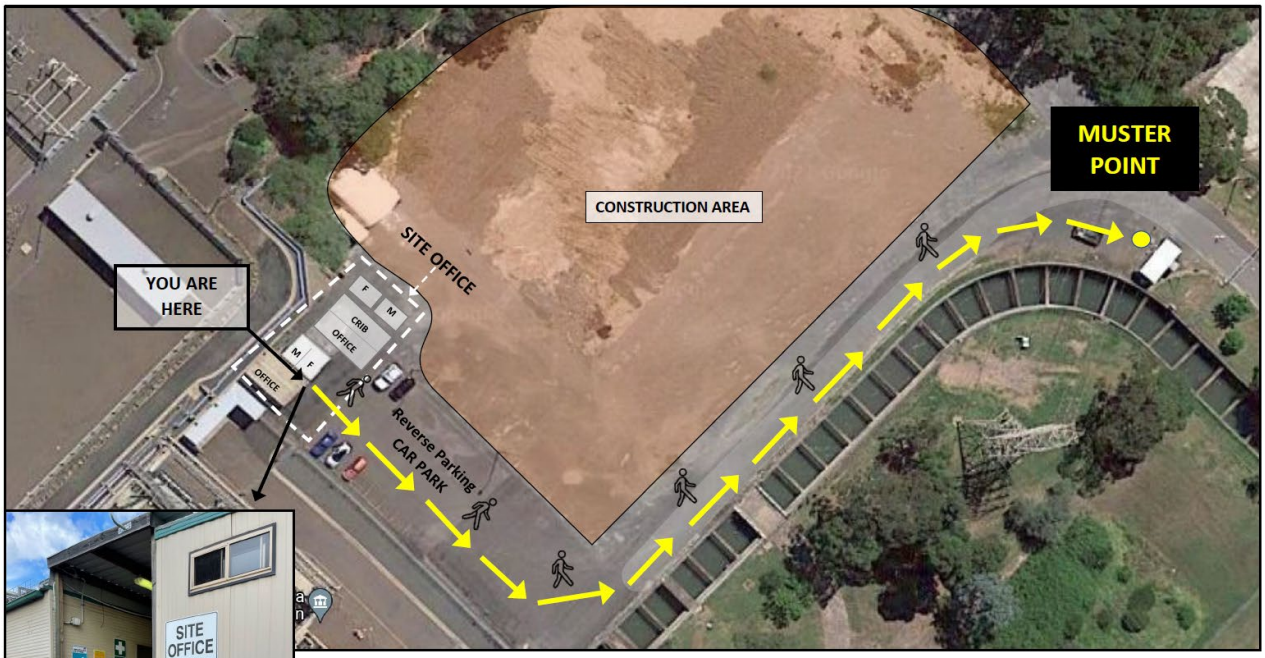
Note: Emergency evacuations will be in conjunction with Energy Australia.



Tallawarra B Emergency Muster Points

SITE EMERGENCY DETAILS

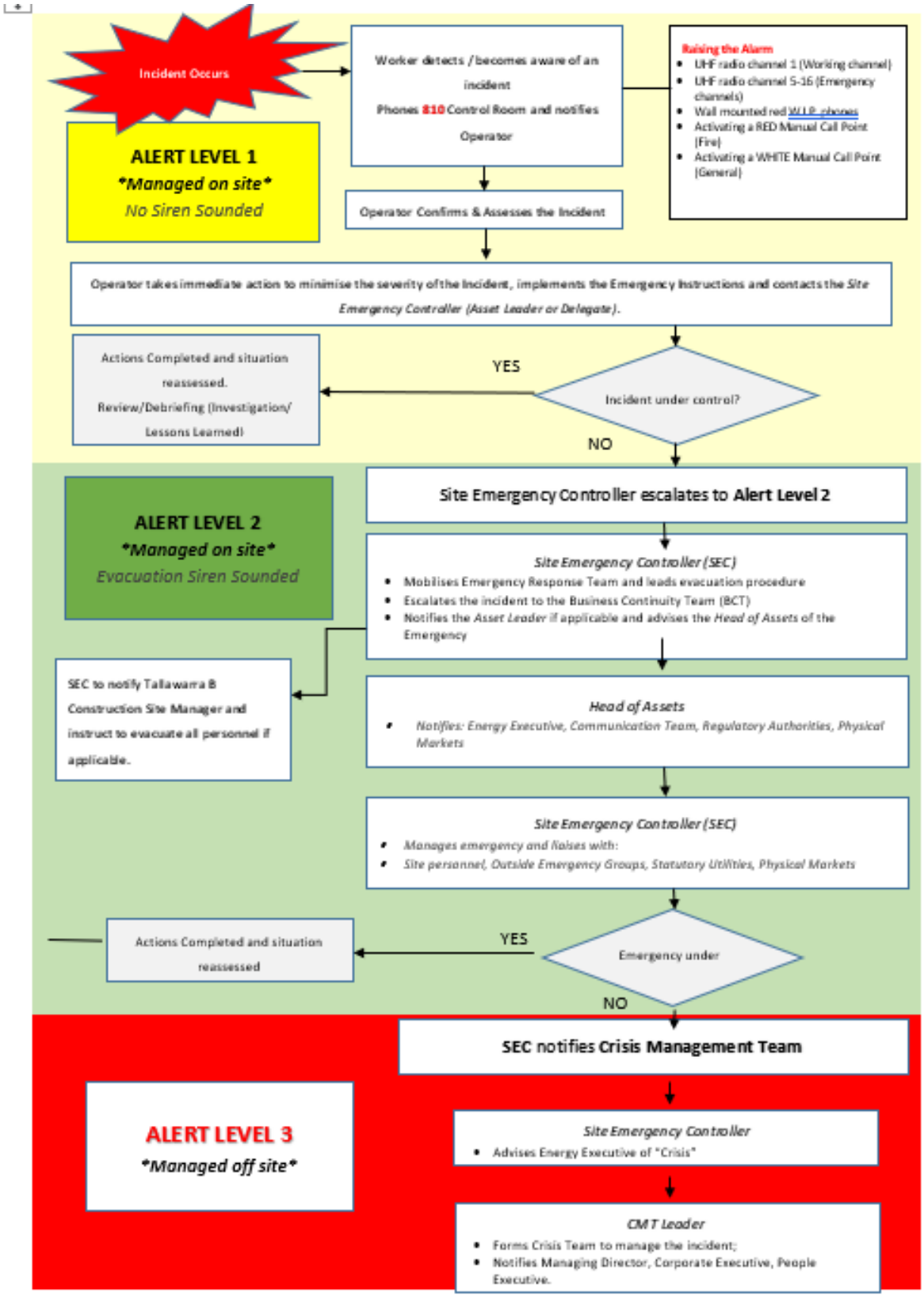
CLOUGH



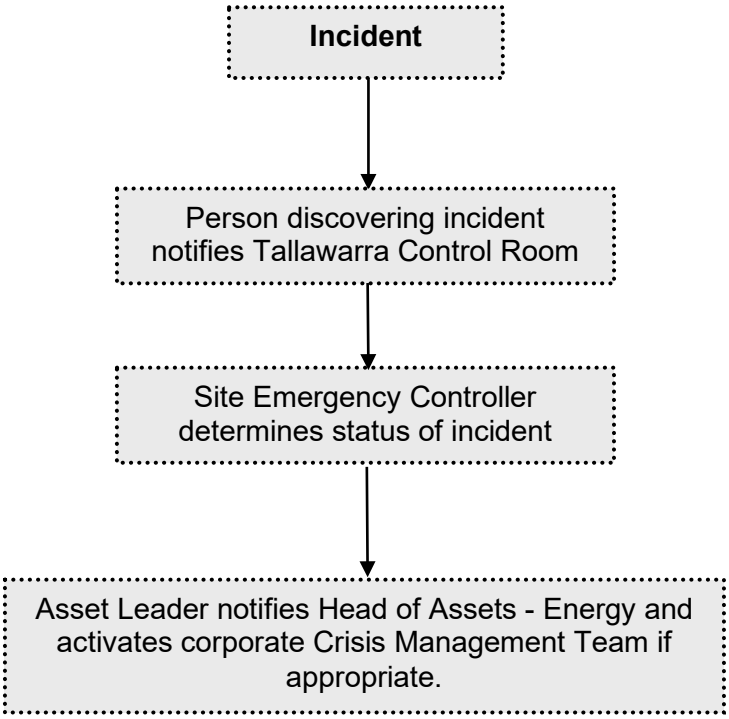
EMERGENCY CONTACTS

NAME	#
Ambulance, Fire, Police	000
Steve Lee – Construction Manager	0420 774 786
Stewart Wallace – HSE Manager	0410 212 089
Lawrence McIntosh – SMP Superintendent	0439 955 035

Appendix 6 – Energy Australia Emergency Alert System for Tallawarra A



Appendix 7– Emergency Classification & EMT Activation



Raising the Alarm

The alarm can be raised by contacting the Tallawarra Control Room via the following means:

- Portable UHF radio on Channel 1 (Working Channel) or Channels 5 to 16 (Emergency Channels);
- Dialling (02) 4231 0810 on a site land line;
- Activating a RED Manual Call Point - `Break Glass' unit in case of Fire;
- Activating a WHITE Manual Call Point - `Break Glass' unit in case of General Emergency;
- Dialling (02) 4231 0810 on a mobile telephone (ONLY from a secure location i.e. workshop).

The person raising the alarm must inform the control room of the location, size and nature of the emergency without delay so that the emergency can be classified as a Status 1 or 2 and carry out the relevant procedures.

When the Site Evacuation Alarm is actuated, an audible intermittent siren is heard around the plant. Red flashing beacons are located in high noise areas and on the roof of the Turbine Hall Building.

1.1. Immediate Actions – Contractors, Visitors and Energy Australia Employees

When the Evacuation Alarm system is activated, the following actions will be carried out by all Energy Australia employees and contractors on site:

- STOP WORK;
- MAKE the workplace safe if possible;
- ASSIST any injured persons where possible;
- SHUTDOWN all possible sources of ignition, electrical tools;
- PROCEED on foot to the Muster Point (with your visitors if applicable);
- REPORT to the Muster Point Controller.

Note: The primary Muster Point for **On-shift Energy Australia** personnel is the Operations Control Room.

These procedures are designed to:

- Ensure all Energy Australia employees, contractors and visitors are accounted for.

On sounding the Evacuation Alarm, either the Tallawarra Asset Leader or his delegate or the Power Plant Technician will assume the role of 'Site Emergency Controller' and take charge of the emergency.

Once the Muster is completed and all persons accounted for:

- Energy Australia employees are to report to the Site Emergency Controller as directed;
- The Site Emergency Controller will then delegate tasks to those members of the Emergency Response Team;
- The Emergency Response Team will maintain radio contact using the Emergency Radio Channel 1.

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