



Port Kembla Gas Terminal

Environmental Management Strategy Stage 2A Marine Berth Construction and Onshore Receiving Facilities

Australian Industrial Energy

08 December 2021

→ The Power of Commitment



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Printed date	
Last saved date	08 December 2021
File name	\\ghdnet\ghd\AU\Sydney\Projects\21\27477\Tech\MP update\Stage 2A\Environmental Management Strategy\PKGT-AIE-EMS-Stage-2A_Rev0.docx
Author	Emily Kate Marsh
Project manager	Karl Rosen
Client name	Australian Industrial Energy
Project name	East Coast Gas Project
Document title	Port Kembla Gas Terminal Environmental Management Strategy
Revision version	Rev 0
Project number	2127477
AIE document number	PKGT-AIE-STR-006

Document status

Status Code	Author	Reviewer		Approved for issue		
		Name	Signature	Name	Signature	Date
A	Emily Kate Marsh	Sophy Townsend		Karl Rosen		07.10.2021
0	Emily Kate Marsh	Sophy Townsend		Karl Rosen		08.12.2021

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Acronyms

Acronym	Definition
AHIP	Aboriginal Heritage Impact Permit
AIE	Australian Industrial Energy
AQMP	Air Quality Management Plan
AS	Australian Standards
ASS	Acid Sulfate Soils
ASSMP	Acid Sulfate Soil Management Plan
BC Act	<i>Biodiversity Conservation Act 2016</i>
Berth 101	MBD Site Compound
CSSI	Critical State Significant Infrastructure
CSP	Contaminated Spoil Protocol
CTMP	Construction Traffic Management Plan
DEMP	Dredge and Excavation Management Plan
DPIE	Department of Planning, Industry and Environment
DPIE - Water	Department of Planning, Industry and Environment - Water
EIS	Environmental Impact Statement
EMS	Environmental Management Strategy
EPA	NSW Environment Protection Authority
EP&A Act	<i>Environmental Planning and Assessment Act 197</i>
EPBC Act	<i>Environment Protection Biodiversity Conservation Act 1999</i>
EPBC Regulations	<i>Environment Protection and Biodiversity Conservation Regulations 2000</i>
EPL	Environment Protection Licence
ESCP	Erosion and Sediment Control Plan
FFMP	Flora and Fauna Management Plan
FM Act	<i>Fisheries Management Act 1994</i>
FSRU	Floating Storage and Re-gasification Unit
GHD	GHD Pty Ltd
HSE	Health, Safety and Environment
HUFP	Heritage Unexpected Finds Protocol
LNG	liquefied natural gas
KPIs	Key Performance Indicators
MBD	Marine Berth Construction and Dredging
MLA	Marine Loading Arms
MNES	Matters of National Environmental Significance
NPW Act	<i>National Parks and Wildlife Act 1974</i>
NVMP	Noise and Vibration Management Plan
NZS	New Zealand Standards
ORF	Onshore Receiving Facilities
PANSW	Port Authority of NSW

Acronym	Definition
PIRMP	Pollution Incident Response Management Plan
PKCT	Port Kembla Coal Terminal
PKGT	Port Kembla Gas Terminal
PKGT EIS	Port Kembla Gas Terminal Environmental Impact Statement
POEO Act	<i>Protection of the Environment Operations Act 1997</i>
Roads Act	<i>Roads Act 1993</i>
SDS	Safety Data Sheet
SEPP	State Environmental Planning Policy
SMP	Spoil Management Plan
SRD SEPP	State Environmental Planning Policy State and Regional Development
TfNSW	Transport for NSW
The Project	Port Kembla Gas Terminal Project
VTIC	Vessel Traffic Information Centre
WARR Act	<i>Waste Avoidance and Resource Recovery Act 2001</i>
WM Act	<i>Water Management Act 2000</i>
WQMP	Water Quality Management Plan

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1. Introduction

1.1 Overview

This Environmental Management Strategy (EMS) has been developed to provide the overall strategic framework for environmental management for the Port Kembla Gas Terminal (PKGT) Project (the Project). This EMS has been prepared by GHD Pty Ltd (GHD) on behalf of Australian Industrial Energy (AIE) to apply to construction activities associated with the construction activities associated with Stage 2A construction of the Project.

This EMS overarches the other associated Sub-Plans, which together describe the proposed structure for environmental management and monitoring requirements for the Project. This EMS addresses the requirements of the Port Kembla Gas Terminal Environmental Impact Statement (PKGT EIS) and associated Infrastructure Approval (SSI 9471) and Environmental Protection Licence (EPL) No. 21529.

1.2 Background

AIE is developing the Project which involves the development of a liquefied natural gas (LNG) import terminal at Port Kembla, south of Wollongong, NSW. The Project will be the first of its kind in NSW and will provide a simple and flexible solution to the state's gas supply challenges.

NSW currently imports more than 95 percent of the natural gas it uses from other eastern states. In recent years, gas supplies to the Australian east coast market have tightened, resulting in increased natural gas prices for both industrial and domestic users.

The Project provides an immediate solution to address the predicted shortages and will result in significant economic benefits for both the Illawarra region and NSW. The Project will have a capacity to deliver more than 100 petajoules of natural gas, equivalent to more than 70 percent of NSW gas needs and will provide between 10 to 12 days of natural gas storage in case of interstate supply interruption. LNG will be sourced from worldwide suppliers and transported by LNG carriers to the gas terminal at Port Kembla where it will be re-gasified for input into the NSW gas transmission network.

The Project has been declared Critical State Significant Infrastructure (CSSI) in accordance with Section 5.13 of the *Environmental Planning and Assessment Act 1979* (EP&A Act) (NSW) and Schedule 5 of the State Environmental Planning Policy State and Regional Development (SRD SEPP). The Project received Infrastructure Approval from the Minister for Planning and Public Spaces on 29 April 2019.

The construction of the Project is primarily associated with the establishment of a new berth facility at Port Kembla to enable an LNG carrier to berth alongside the Floating Storage and Re-gasification Unit (FSRU) and new infrastructure to connect the terminal to the existing gas network. Excavation and dredging would be required to establish the new berth facility, with spoil deposited in a cell (referred to as the 'Emplacement Cell') in the Outer Harbour.

The development has progressed to Stage 2A works located at Berth 101 (referred to as 'the site' or 'MBD Site Compound'). The Stage 2A works include land-based construction works associated with the Marine Berth Construction and Dredging (MBD) and Onshore Receiving Facilities (ORF). The Stage 2A works include:

- Completion of excavation works undertaken during Stage 1 (including transport of spoil materials to Emplacement Cell Construction Site).
- Construction of the quay wall at the MBD Site Compound.
- Construction of ORF at the MBD Site Compound (including construction of Wharf Topside Area, Utility Area, and Common Area).
- Installation and commissioning of power, communications, and potable water line.
- Installation of gas pipeline within the MBD Site Compound as part of ORF.

1.3 Purpose and scope

This EMS has been prepared in accordance with the PKGT EIS and associated Infrastructure Approval (SSI 9471) and EPL No. 21529. It describes how the management measures and commitments in the PKGT EIS, Infrastructure Approval (SSI 9471) and EPL No. 21529 relating to environmental management and compliance are to be implemented by the Principal Contractor during Stage 2A construction of the Project. Specifically, this plan includes requirements to:

- Ensure environmental management procedures are incorporated into a comprehensive framework to facilitate appropriate management throughout the life of the Project.
- Ensure that controls are properly implemented, regularly monitored, and audited to assess their effectiveness.
- Ensure processes for resourcing and implementing this plan are developed to provide certainty of delivery.
- Demonstrate compliance with statutory, legislative and consent conditions.
- Minimise impacts on the community and the environment.
- Ensure timely and efficient response to environmental incidents and complaints.
- Monitor, review, and report on environmental impacts of construction activities.

This EMS provides the framework for environmental management during Stage 2A and should be read in conjunction with associated Sub-Plans, procedures, and protocols.

This EMS provides the strategic context for environmental management and is consistent with Australian Standards (AS)/New Zealand Standards (NZS) ISO 14001:2004.

2. Project overview

2.1 Site description

The site of the Project is situated at Port Kembla within the Illawarra region of NSW, about 80 kilometres south of Sydney. Port Kembla is mainly characterised by an existing import and export terminal and multiple other business, cargo, logistics, bulk goods, and heavy industrial facilities in the vicinity.

Port Kembla is situated about two kilometres south of the centre of Wollongong. Other localities surrounding Port Kembla and the Project site include Mangerton, Mount St. Thomas and Figtree to the north-west; Unanderra to the west; Berkeley to the south-west; and Cringila, Lake Heights, Warrawong and the residential region of Port Kembla to the south.

The zoned land use in the region includes special use and industrial use at Port Kembla and a mix of primarily residential and commercial uses at the surrounding localities. Major infrastructure in the region of Port Kembla includes the Princes Highway, which is a major state and regional highway connecting Sydney and Wollongong and regional areas further south. Princes Highway provides access to Port Kembla through turnoffs at Masters Road, Five Islands Road and Northcliffe Drive and is broadly utilised including by heavy vehicles from the port.

The South Coast railway line runs along the periphery of Port Kembla including the stations Port Kembla, Port Kembla North, Cringila and Lysaghts. The rail line services commuters and is also used to transport bulk solid goods like coal, grain, copper and steel from Port Kembla. The environmental features of Port Kembla and the surrounding region are limited given the extensive industrial, commercial and residential development. Waterways in the region include the Gurungaty Waterway, Allans Creek, American Creek and Byarong Creek. Green space includes JJ Kelly Park and Wollongong Golf Club to the north and a larger open area to the south-west.

The Project will be predominantly located within land zoned for dedicated port and industrial uses. Berth and wharf facilities, as well as the FSRU, would be situated at Berth 101 at the Inner Harbour, while the gas pipeline would extend around the periphery of port operations from Berth 101 to a tie-in point at Cringila. The Emplacement Cell will be located in the Outer Harbour. A site overview is provided as Figure 2.1.



Figure 2.1 Site overview

2.2 Project construction scope of works

2.2.1 Overview

The Project construction scope of work has been divided into the three main packages (with associated activities), as outlined in Table 2.1. Construction staging of the Project has been approved in accordance with Condition 3 of Schedule 4 of Infrastructure Approval SSI-9471 as per correspondence from DPIE dated 27 October 2021. A copy of the approval staging is included in Appendix B. This EMS applies only to the works associated with Stage 2A.

Table 2.1 Construction stages/work packages

Stage	Package	Proposed commencement	Activities
1	Early Enabling Works	May 2021	Demolition of Berth 101, removal of structures and land based excavation works, and Cone Penetration Testing (CPT) in the Outer Harbour to inform Emplacement Cell design and relocation of Bunker Oil Pipeline.
2A	Marine Berth Construction – Land Based	January 2022	Completion of excavation works undertaken during Stage 1. Transport of spoil materials for storage at the Emplacement Cell Construction Site. Quay wall construction.
		February 2022	Installation of communications conduit, potable water line, and 11kV power cable and Padmount Substation within MBD Site Compound.
		April 2022	Construction of the ORF, which comprises three areas: Wharf Topside Area; Utility Area; and Common Area.
		June 2022	Pipeline construction and associated ancillary infrastructure within MBD Site Compound delivered as part of ORF scope.
2B	Marine Berth Construction and Dredging – Land and Marine Based	March 2022	Continuation of Stage 2A with addition of the following activities:
			Excavation/dredging and construction of the Emplacement Cell in the Outer Harbour.
			Marine based construction activities including installation of navigational aids and revetment shore protection.
3	Pipeline Installation including tie-ins (NGP)	June 2022	Construction of an 18" onshore natural gas pipeline approximately 6.3km in length from the Berth 101 site boundary to Tie-in Facility at Cringila for connection to the Eastern Gas Pipeline. Pipeline construction to occur concurrently with Jemena, subject to separate set of management plans.

The construction of Stage 2A works is located within the former Port Kembla Coal Terminal (PKCT) Bulk Products Berth (Berth 101). As part of the Early Enabling works the removal of existing structures and services and excavation was undertaken to facilitate subsequent development stages of the Project.

The following will be undertaken as part of the Stage 2A land-based works:

- Construction of the quay wall at MBD Site Compound incorporating finalisation of excavation works undertaken during Stage 1 (including transport of spoil materials to Emplacement Cell Construction Site).
- Installation of and commissioning of power, communications, and potable water line.
- Construction of ORF at MBD Site Compound (including construction of Wharf Topside Area, Utility Area, and Common Area).
- Installation of gas pipeline within the MBD Compound site.

An outline of the tasks associated with Stage 2A is provided in Section 2.3 through Section 2.5. The site of the works includes the MBD Site Compound with materials being transported to the Emplacement Cell Construction Site. The location of the Stage 2A works, MBD Site Compound, and the Emplacement Cell Construction Site is shown in Figure 2.2.



Figure 2.2 Stage 2A works and location of MBD Site Compound and Emplacement Cell Construction Site

2.2.2 Traffic

Traffic generated by Stage 2A will be controlled through the gate on Sea Wall Road. Heavy vehicle movements will be generated by the delivery of materials, equipment, and plant to the MBD Site Compound and transport of stockpiled material to the Emplacement Cell Construction Site.

There may be a requirement to transport and tip up to 8000m³ of crushed concrete and up to 2000m³ of crushed heavily bound base course to the Emplacement Cell Construction Site via road to increase the storage footprint area within the East Stockyard and to facilitate for later use during the construction of the Emplacement Cell.

The activities associated with this task will involve loading, road transportation via truck and trailer (approximately 30-tonne capacity), unloading, stockpiling, and management of the stockpiles.

Light vehicle movements will be generated from construction workers accessing the MBD Site Compound. Parking will be provided for up to 76 workers on the MBD Site Compound (refer to Figure 2.3).

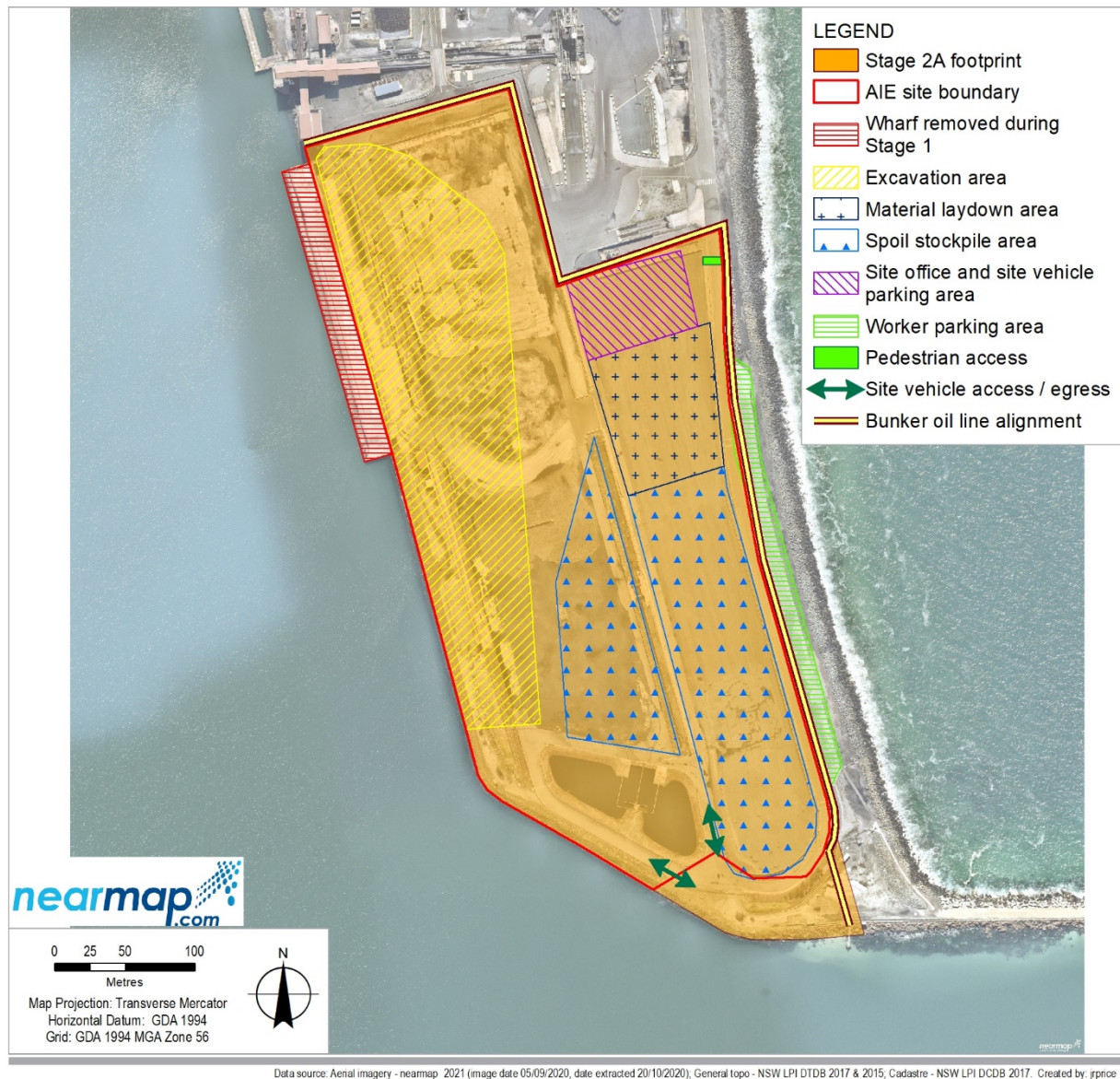


Figure 2.3 Layout of MBD Site Compound

2.2.3 Program

The Stage 2A works are anticipated to commence in January 2022. Stage 2B which includes the continuation of land-based construction and water-based works) are then anticipated to commence in March 2022 (refer to Table 2.1).

2.3 Construction of quay wall (MBD – Land Based)

A number of structures will be constructed within the MBD Site Compound to accommodate the FSRU and LNG carrier for the Project. Excavation and stockpiling activities from the Stage 1 Early Enabling Works will continue on-site during Stage 2A to lay the platform for ongoing construction activities at the MBD Site Compound.

The new structures that will commence construction during Stage 2A are summarised in Table 2.2. The location of the quay wall and layout of the marine berth and wharf facilities is shown in Figure 2.4.

Table 2.2 Marine berth and wharf structures to be constructed during Stage 2A

Component	Works required
Earthworks and stockpiles	<ul style="list-style-type: none"> – Completion of excavation and backfilling works from Stage 1 Early Enabling Works. – A nominal 15-metre-wide section on the northern end and a circa 60-metre 'wedge' at the south- west corner of the excavation zone was left to facilitate contractor access and will required completion at commencement of Stage 2A. – Excavated materials from the Early Enabling Works have been stockpiled within the Eastern and Western Stockyards of the MBD Site Compound and the Emplacement Cell Construction Site. – The excavated materials stockpiled include: <ul style="list-style-type: none"> • Approximately 15,000m³ of demolished concrete crushed to nominal 70mm minus. • Approximately 30,000m³ of heavily bound base course crushed to nominal -150mm minus. • Approximately 25,000³ of mixed slag, general fill, and coal nominally < 150mm in size. • Approximately 10,000m³ of predominantly sand with some slag and coal. – The excavated materials will be used/reused for quay wall construction and to backfill the landside area of the quay wall or transported to the Emplacement Cell Construction Site for storage and use in construction of the Emplacement Cell.
Quay wall	<ul style="list-style-type: none"> – Construction of a new piled quay wall keyed into bedrock complete with sheet pile anchor wall, capping beam and tie rods to the south of the existing coal terminal. – Excavated and processed materials from the Stage 1 Early Enabling Works are stockpiled within the MBD Site Compound and will be used during construction of the quay wall and to backfill on landside area of the wall. – Installation of a marine fender system attached to the capping beam along the quay wall to protect the quay wall from berthing and mooring loads. – Installation of a cathodic protection system to the quay wall and associated elements, including assessment of the potential impacts the FSRU and pipeline cathodic protection will have on quay wall. – Backfilling and compaction on landside area of wall utilising the site stockpiled materials.
Mooring dolphins	<ul style="list-style-type: none"> – Installation of landside mooring dolphin structures on reinforced concrete platforms supported by steel piles. – Mooring equipment will be installed and comprise the following: <ul style="list-style-type: none"> • 20 load sensing quick release hooks. • Up to four land-based mooring winches on mooring dolphins may be required. • Up to four swivel fairleads may be required to enable each mooring line to land-based winches to be fed in a horizontal alignment.
Marine Loading Arm foundations	Construction of a new reinforced concrete foundation supported on steel piles, located behind the new quay wall.
Gangway tower foundation	Construction of foundation for Gangway tower
Fire monitor foundation	Fire monitor foundations, subject to risk studies.

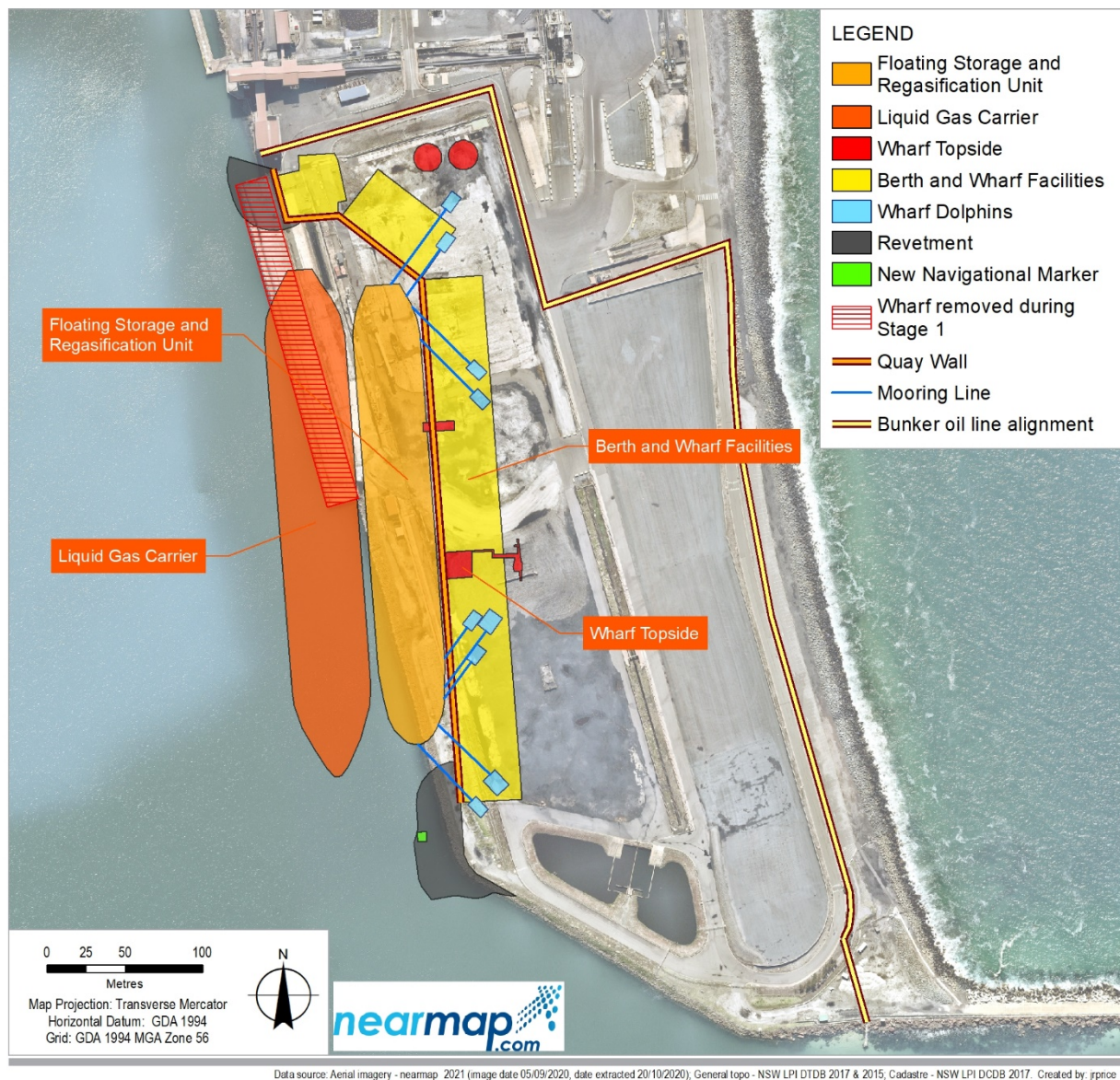


Figure 2.4 Location of quay wall and layout of MBD and ORF

2.4 Power, communications, and water connections

Works required for power, communications, and water connections are summarised in Table 2.3.

Table 2.3 Construction of power connections for Stage 2A

Component	Works required
Power and communications	<ul style="list-style-type: none"> Construction and installation of a new 11kV power cable in a buried conduit and Substation. Energisation of the Padmount Substation and 415kV Temporary Building Supply. Installation of communication conduit and pits.
Potable water	<ul style="list-style-type: none"> Extension of existing potable water line within MBD Site Compound.

2.5 Construction of ORF

The general layout of the ORF areas is shown in Figure 2.4. Works required for the three ORF areas are summarised in Table 2.4.

Table 2.4 Structures to be constructed for ORF during Stage 2A

Component	Works required
Wharf Topside Area	
Marine Loading Arms (MLAs)	Installation of MLAs, including: <ul style="list-style-type: none"> Civils and structures. Associated works such as piping, hydraulics, electrical, instrumentation, and auxiliary systems.
Piping and valving	<ul style="list-style-type: none"> All necessary piping and valving. Odorant injection facilities. Pig launcher, downstream of the MLAs to tie-in to the Natural Gas Pipeline.
Gangway	<ul style="list-style-type: none"> Gangway access tower to provide connection between the wharf and FSRU.
Utility connections	FSRU utilities connections for: <ul style="list-style-type: none"> Communications. Marine Diesel Oil. Freshwater. Sewage, bilge, and grey water.
Utility Area	
Site Utilities	Site utilities including: <ul style="list-style-type: none"> Potable water and sewerage. Instrument air and bottled nitrogen. Diesel storage. Electrical distribution (including UPS and emergency diesel generators). Control and instrumentation. Telecommunications.
Common Areas	
Firefighting systems and equipment	Firefighting equipment including: <ul style="list-style-type: none"> Firewater storage. Pumps. Firewater monitors.
Security systems and equipment	<ul style="list-style-type: none"> CCTV. Fencing and gates. Security access and monitoring systems.
Equipment housing	Equipment shelters and buildings to house:

Component	Works required
	<ul style="list-style-type: none"> – Electrical, control, and operating equipment, critical spares, emergency response and site monitoring facilities. – Buildings will include appropriate building services e.g., HVAC, potable water, amenities, sewerage etc.
Site roadways, lighting and drainage	<ul style="list-style-type: none"> – Roads and car parking areas. – General lighting, earthing, lightning system. – Drainage system to tie into the existing Port Kembla drainage system.
Gas Pipeline	<p>A section of gas pipeline will be installed within the MBD Compound site as part of the Stage 2A works. Final safety studies will be prepared prior to the construction of the gas pipeline and prior to commencement of operation as per Schedule 3, Condition 21 of Infrastructure Approval (SSI 9471).</p>

3. Roles and responsibilities

All personnel working for AIE and the Principal Contractor are responsible for:

- Reporting all environmental incidents to their supervisor.
- Carrying out work duties at all times in an environmentally sensitive and responsible manner.

In addition, specific responsibilities are assigned to key personnel, as presented Table 3.1.

Table 3.1 *Roles and responsibilities of Project Team*

Project Role	Responsibility
AIE Project Director	<ul style="list-style-type: none"> – Responsible for the overall funding and direction of civil and environmental works associated with Stage 2A. – Ensuring provision of adequate resources to achieve the environmental objectives for the project including ensuring sufficient resourcing for the Environmental Team, Engineering and Construction Teams.
AIE Construction Manager	<ul style="list-style-type: none"> – Proactively stewards the effective implementation of Stage 2A in accordance with requirements of the Infrastructure Approval (SSI 9471), Environmental Strategy and all related Sub-Plans. – Demonstrate proactive support for environmental requirements.
AIE HSE Manager	<ul style="list-style-type: none"> – Develop and update of all Health, Safety and Environmental (HSE) Management Strategies and Sub-Plans. – Ongoing liaison and engagement with government agencies and point of escalation for any environmental incidents. – Identifying environmental issues as they arise and proposing solutions. – Coordinate and facilitate weekly environmental inspections with the key contractors. – Environmental Reporting.
Principal Contractor Project Manager	<ul style="list-style-type: none"> – On-site Project management and control. – Decision-making authority relating to environmental performance of the construction program. – Authority over Project construction and site activities in accordance with the EMS. – Ensure relevant training is provided to all Project staff prior to commencing individual activities. – Reports to AIE Construction Manager on environmental matters. – Ensures appropriate Contractor resources are allocated to implement the environmental requirements. – Responsible for planning and scheduling of construction, and to ensure operations are conducted in accordance with statutory requirements and the EMS. – Monitors performance against environmental Key Performance Indicators (KPIs). – Ensures that all environmental objectives associated with the Project are achieved. – Day-to-day decision-making authority relating to environmental performance of construction activities and direct site activities and construction. – To provide resources to ensure environmental compliance and continuous improvement. – Ensure all personnel are aware of any changes to EMS and improved procedures. – Ensure this EMS is implemented for the duration of Stage 2A.
Principal Contractor Construction Foreman	<ul style="list-style-type: none"> – Implement requirements contained in the EMS and Sub-Plans, work procedures and standard drawings. – Maintaining open and transparent communication with other Project discipline managers and other areas of the Project. – Reporting of hazards and incidents and implementing any rectification measures. – Ensures appropriate contractor resources are allocated. – Orders STOP WORK for any environmental breaches and reports incidents to the Project Manager. – Ensure this EMS is implemented for the duration of Stage 2A.

Project Role	Responsibility
Principal Contractor Environmental Representative	<ul style="list-style-type: none"> – Delivers environmentally focussed toolbox talks and provides applicable site inductions. – Provides environmental advice, assistance, and direction to Project Manager to ensure construction activities are conducted in accordance with regulatory legislation and this EMS. – Participate and cooperate with AIE HSE Manager with regards to undertaking of joint weekly environmental site inspections. – Coordinate / undertake wet-weather inspections as per EPL No.21529 and report accordingly to the AIE HSE Manager. – Develop strong working relationships with the AIE team and Consultants. – Ensure environmental risks are appropriately identified, communicated, and effectively managed. – Ensure communication of relevant environmental information to Project personnel. – Provide specialist advice and input as required. – Ensure construction manager, superintendents and field supervisors fully understand the environmental constraints and how construction practices must ensure any such constraints are considered and mitigated against during construction. – Orders STOP WORK for any environmental breaches and immediately reports incidents to Principal Contractor Project Manager and AIE HSE Manager.
AIE Environmental Representative	<ul style="list-style-type: none"> – Develop strong working relationships with the Principal Contractor Team and Consultants. – Ensure environmental risks are appropriately identified, communicated, and effectively managed. – Instruct and advise management team on compliance issues. – Provide specialist advice and input as required. – Co-ordinate internal audits of the EMS. – Conduct audit review as required. – Reports on the performance of the EMS and recommends changes or improvements to Project Manager. – Orders STOP WORK for any environmental breaches and immediately reports incidents to the AIE Construction Manager and AIE HSE Manager. – Conducts investigation and response to environmental complaints and inquiries, where required.
Subcontractors and construction personnel	<ul style="list-style-type: none"> – Undertake an environmental induction prior to accessing to site. – Comply with legislative requirements. – Participate in weekly inspections and audits. – Follow environmental procedures. – Report all environmental incidents and hazards. – Introduce environmental topics to prestart meetings. – Ensure that all relevant permits and clearances are in place prior to commencing work.

4. Legislative requirements

4.1 Legislative requirements and standards

AIE and the Principal Contractor are committed to compliance with legislative requirements and industry standards throughout all their activities for Stage 2A. The construction of the Project will be in accordance with the statutory requirements listed in Table 4.1.

Table 4.1 Legislation and relevant policy applicable to this EMS

Legislation	Project Relevance	Applicability
Federal		
<i>Environment Protection Biodiversity Conservation Act 1999</i> (EPBC Act)	<p>The EPBC Act is the Australian Government's central piece of environmental legislation that provides a legal framework to protect and manage environmental values considered to be of national environmental significance.</p> <p>The EPBC Act requires approval from the Commonwealth Minister for the Environment for actions that are likely to have a significant impact on listed Matters of National Environmental Significance (MNES). It is the responsibility of the applicant proposing to undertake an action to initially consider whether the proposal is likely to have a significant impact on any MNES. If the applicant considers there is potential for significant impacts upon any matters protected under the EPBC Act, then a referral is required to be submitted to the Minister for the Environment. Developments considered likely to result in significant impacts are defined as "controlled actions" and require assessment and approval.</p>	Consideration of potential impacts upon listed threatened species and communities and any other MNES potentially impacted by the Project has been undertaken as part of the EIS. No impacts have been identified that are considered likely to be significant and consequently a referral to the Commonwealth Minister for the Environment was not undertaken.
State		
EP&A Act	<p>The Project has been classified as CSSI in accordance with Section 5.13 of the EP&A Act and Schedule 5 of the SRD SEPP.</p> <p>A detailed EIS was prepared as part of the approval process and the applicable mitigation measures to guide construction activities are included in this EMS.</p>	<p>Applicable subsidiary State Environmental Planning Policy (SEPP) planning instruments considered as part of the PKGT EIS included:</p> <ul style="list-style-type: none"> – SRD SEPP. – Three Ports SEPP 2013. – Infrastructure SEPP 2007. – Coastal Management SEPP 2018. – SEPP No. 33 – Hazardous and Offensive Development. – SEPP No. 55 – Remediation of Land – Wollongong Local Environmental Plan 2009.
<i>Protection of the Environment Operations Act 1997</i> (POEO Act)	<p>The objectives of the POEO Act are to protect, restore and enhance the quality of the environment, in recognition of the need to maintain ecologically sustainable development.</p> <p>The POEO Act provides an integrated system of licencing and contains a core list of activities requiring an EPL from the NSW Environment Protection Authority (EPA).</p>	AIE have been issued an EPL for the Project (EPL No. 21529) which will be updated as the construction phases of the Project progress.
<i>Biodiversity Conservation Act 2016</i> (BC Act)	The BC Act aims to conserve biodiversity at the bioregional and state scale and lists a number of threatened species, populations, and ecological communities to be considered when deciding if a project is likely to have a significant impact.	A detailed biodiversity assessment report was prepared as part of the PKGT EIS, and the Project would be unlikely to have a significant impact on any threatened species, populations or ecological communities listed under the BC Act.

Legislation	Project Relevance	Applicability
		Biodiversity offsets have been secured for unavoidable impacts (primarily during pipeline construction) through payment into the Biodiversity Conservation Trust. Stage 2A is not expected to impact upon any biodiversity values.
<i>Biosecurity Act 2015</i>	Part 3 of the <i>Biosecurity Act 2015</i> provides that any person who deals with a biosecurity matter ensures the risks are prevented, eliminated or minimised.	A Flora and Fauna Management Plan (FFMP) has been produced and includes general biosecurity duties. The plan specifies protocols and management actions that are appropriate to the credible risks that can arise from the intended construction activities. Implementation of the plan will effectively manage identified biosecurity risk including traffic movement (on water and land), importation of machinery and materials to site, and proposed ground disturbance activities.
<i>Pipelines Act 1967</i>	Under Section 11 of the <i>Pipelines Act 1967</i> , a licence is required to: <i>commence, or continue, the construction of a pipeline; alter or reconstruct a pipeline; or operate a pipeline.</i> Pipelines with a length of 10 kilometres or less are exempt from the above requirements and are instead subject to SafeWork NSW oversight.	Not applicable - This Project has been exempted from the requirement to obtain a pipeline licence as the proposed pipeline is approximately 6 kilometres in length.
NSW Work Health and Safety Regulations 2017	Under NSW Work Health and Safety Regulations 2017, pipeline owners must ensure that an activity, structure, equipment, or substance that is not part of the pipeline does not affect the hazardous chemicals or the pipeline in a way that increases risk	Applicable - pipeline construction will occur within the MBD Site Compound during Stage 2A.
AS2885	Pipeline national best practice standard for design and construction, welding, operation and maintenance, offshore submarine pipeline systems and field pressure testing.	Applicable - pipeline construction will occur within the MBD Site Compound during Stage 2A
<i>Roads Act 1993</i> (Roads Act)	Section 138 of the Roads Act requires applicants to obtain consent from the relevant road's authority for the erection of a structure, carrying out of work in or under a public road, digging up or disturbance to the surface of a public road.	The Stage 2A phase will not involve carrying out of work in or under a public road and Section 138 permits will not be required for this phase of work.
<i>Waste Avoidance and Resource Recovery Act 2001</i> (WARR Act)	The WARR Act promotes waste reduction and better use of resources. It includes provisions for waste strategies and programs, and for industry actions to reduce waste, including extended producer responsibility schemes and container deposit schemes.	A Spoil Management Plan (SMP) has been produced to encompass the requirements of the WARR Act.
<i>Fisheries Management Act 1994</i> (FM Act)	The objectives of the FM Act are to conserve, develop and share the fishery resources of NSW for the benefit of present and future generations. Part 7 of the FM Act requires a permit for a number of activities, including those involving dredging and reclamation work and those involving harm to marine vegetation.	In accordance with Section 5.23 of the EP&A Act, a permit under Section 201, 205 or 219 of the FM Act is not required for approved SSI. However, a number of marine ecology and water quality mitigation measures have been committed to in the EIS and form part of Sub-Plans for the management of dredging and reclamation works.
<i>Water Management Act 2000</i> (WM Act)	The objects of the WM Act are to provide for the sustainable and integrated management of the water sources of the state for the benefit of both present and future generations. The regulator and policy maker for water resource management is the NSW Department of Planning, Industry and Environment – Water (DPIE - Water).	The Project will involve excavation within 40 metres of the shoreline and has the potential to intercept water within an aquifer during excavation or directional drilling. However, the Project is not anticipated to require major dewatering of water from a water source and is not expected to trigger the need for a water use approval, water management works approval, or controlled activity approval under Sections 89, 90

Legislation	Project Relevance	Applicability
		<p>or 91 of the WM Act as these approvals are not required for SSI in accordance with Section 5.23 of the EP&A Act.</p> <p>A Water Quality Management Plan (WQMP) has been produced to cover specific requirements of the WM Act.</p>
<i>Heritage Act 1997</i>	<p>The <i>Heritage Act 1997</i> is concerned with all aspects of heritage conservation ranging from basic protection against indiscriminate demolition of buildings and sites, to their restoration and enhancement.</p> <p>CSSI status of the Project means that approval under Part 4, or an excavation permit under Section 139 are not required.</p>	<p>No impacts to heritage are anticipated during Stage 2A for the Project.</p> <p>Discovery protocols have been developed and will be incorporated into the site induction and implemented on site should any potential items of historic heritage be excavated or otherwise located during the intended work.</p> <p>A Heritage Unexpected Finds Protocol (HUFPP) has been produced to outline the processes to be implemented in the event any artefacts are encountered.</p>
<i>National Parks and Wildlife Act 1974</i> (NPW Act)	<p>The NPW Act provides for the protection of Aboriginal objects (sites, objects, and cultural material) and Aboriginal places. Under the NPW Act, an Aboriginal object is defined as any deposit, object or material evidence relating to indigenous and non-European habitation, being habitation both prior to and concurrent with the occupation of that area by persons of European extraction and includes Aboriginal remains.</p> <p>An Aboriginal place is defined under the NPW Act as an area which has been declared by the Minister administering the Act as a place of special significance for Aboriginal culture. An Aboriginal place may or may not contain physical Aboriginal objects.</p>	<p>An Aboriginal Heritage Impact Permit (AHIP) under Section 90 of the NPW Act is not required for approved CSSI in accordance with Section 5.23 of the EP&A Act.</p> <p>The design of the Project has been amended to avoid areas of archaeological potential. Discovery protocols have been developed and will be incorporated into the site induction and implemented on site should any potential items of Aboriginal heritage be excavated or otherwise located during the intended work.</p> <p>A HUFPP has been produced and approved to outline the processes to be implemented in the event any artefacts are encountered.</p>

4.2 Permits and licences

This section identifies planning and environmental regulatory permits and licences applicable to the Project during Stage 2A. AIE will secure the required permits and licences throughout the construction process prior to, during, and after completion of works.

The Project has been declared and approved CSSI, and in accordance with Section 5.23 of the EP&A Act the following permits are not required for an approved CSSI:

- Permit to Dredge and Reclaim under Section 201 and 205 of the FM Act.
- AHIP under Section 90 of the NPW Act.
- Excavation permit under Section 139 of the Heritage Act.
- Controlled Activity Permit under the WM Act.
- Water Licence under the WM Act.
- Permit to block fish passage under Section 219 of the FM Act.

Other than those identified below, no additional permits or licences are required to undertake the Stage 2A works.

4.2.1 Transport for NSW Road Permit

Section 138 of the Roads Act requires applicants to obtain consent from the relevant road authority, Transport for NSW (TfNSW) or Council, for the erection of a structure, or the carrying out of work in, on or over a public road, or the digging up or disturbance of the surface of a road.

The Stage 2A phase will not involve carrying out of work in or under a public road. Dilapidation surveys may be undertaken for which the scope of works has yet to be confirmed. Roads identified as transport routes for the Stage 2A works are primarily located within the NSW Ports lease boundary and are managed and owned by NSW

Ports, and as such are the road authority. No Section 138 permit will be required for the Project. Notification and approval has been sought from NSW Ports confirming the use of the identified internal ports roads and laydown area.

4.2.2 Maritime Safety Licence

Vessels operated as part of the Project would be subject to the provisions of the *Marine Safety Act 1998* including requirements to obtain marine safety licences. Pilotage would also be compulsory under Part 7 of the *Marine Safety Act* as Port Kembla is defined as a pilotage port.

4.2.3 Certificate of Local Knowledge

Barge operations will be controlled through a permit system under the control of the Harbour Master and Principal Contractor will obtain Certificates of Local Knowledge for all Masters, as required by the Harbour Master and NSW Maritime Safety Regulation 2016.

4.2.4 Major Hazard Facility Licence

Prior to operations, a licence for a Major Hazard Facility would be secured under Part 9.7 of the Work Health and Safety Regulation 2017, subject to consultation with SafeWork NSW. The application for a licence for a Major Hazard Facility will include a safety case as stipulated in the EIS. Final safety case investigations will be undertaken concurrently during Stage 2A and the construction phase of the Project.

4.2.5 Asbestos removal

Asbestos remediation may be required for the Stage 2A works. In the event asbestos removal is required, a Notification of Asbestos Removal is required to be lodged with SafeWork NSW. The Notification will be lodged by the licensed asbestos removalist and in accordance with the Contaminated Spoil Protocol (CSP) for the Project.

As per a variation to the EPL No. 21529 an asbestos clearance certificate from a third-party asbestos assessor is required prior to the crushing of any excavated fill material from the site (excluding raw slag, concrete or basecourse).

5. Planning requirements

5.1 Conditions of approval

The Project has been declared CSSI in accordance with Section 5.13 of the EP&A Act and Schedule 5 of the SRD SEPP. The Project received Infrastructure Approval (SSI 9471) from the Minister for Planning and Public Spaces on the 24th of April 2019.

Schedule 4, Condition 1 of the approval requires an EMS to be developed to the satisfaction of the NSW DPIE Planning Secretary. It must encompass the key requirements as per Table 5.1.

Table 5.1 *Approval conditions*

EMS requirements	Reference	Evidence
Environmental Management Strategy Prior to the commencement of construction, the Proponent must prepare an Environmental Management Strategy for the development to the satisfaction of the Planning Secretary. This strategy must:	Infrastructure Approval Schedule 4, Condition 1	This Plan
a. provide the strategic framework for environmental management of the development		
b. identify the statutory approvals that apply to the development		Section 4
c. describe the role, responsibility, authority, and accountability of all key personnel involved in the environmental management of the development		Section 3
d. describe the procedures that would be implemented to: <ul style="list-style-type: none"> – keep the local community and relevant agencies informed about the development being carried out 		Section 7.2
<ul style="list-style-type: none"> – receive, handle, respond to, and record complaints – resolve any disputes that may arise during the course of the development 		Section 7.3
<ul style="list-style-type: none"> – respond to any non-compliance 		Section 8.6
<ul style="list-style-type: none"> – respond to emergencies; and 		Section 9
e. include: <ul style="list-style-type: none"> – copies of any strategies, plans and programs approved under the conditions of this approval; and 		Section 5.3
<ul style="list-style-type: none"> – a clear plan depicting all the monitoring to be carried out in relation to the development. 		Section 8.2
The Proponent must implement the approved Environmental Management Strategy for the development.	Infrastructure Approval Schedule 4, Condition 2	This Plan

5.2 Environmental Protection Licence

AIE have been issued an EPL (EPL No. 21529) under the POEO Act as of 2 June 2021. The administrative conditions of the EPL No. 21529 are provided in Table 5.2. Specific EPL conditions related to environmental monitoring, such as air and water quality monitoring, are provided in their applicable Sub-Plan.

EPL No. 21529 will require updating to reflect the current site operations as construction stages progress. An EPL notice of variation was issued 27 July 2021, 20 August 2021 and 5 October 2021 to amend conditions related to allowing stockpiling in the Emplacement Cell Construction Site, crushing of excavated fill materials at Berth 101 (MBD Site Compound) and additional water monitoring requirements.

Table 5.2 EPL No. 21529 conditions

Condition	Requirement												
1	Administrative Conditions												
A1	What the licence authorises and regulates												
A1.1	<p>This licence authorises the carrying out of the scheduled development work listed below at the premises listed in A2.</p> <p>There are two stages to the scheduled development works of which the following stages are authorised by this licence:</p> <ul style="list-style-type: none">– Stage 1: Demolition of existing infrastructure and wharf at Berth 101, dredging of inner harbour sediments, and transport to stockpile area in Outer Harbour.– Stage 2: reclamation of material into the emplacement cell in Outer Harbour, must not be undertaken.												
A1.2	<p>Note that Stage 1 works also includes stockpiling of excavated material from Berth 101 at the following locations:</p> <ul style="list-style-type: none">– Berth 101; and– Outer Harbour <p>at locations shown in the latest version of the Erosion and Sediment Control Plan (as viewed by the EPA).</p>												
A1.3	<p>The licensee can only progress to Stage 2: emplacement of material from the stockpile area into the emplacement cell in Outer Harbour, if this licence is varied accordingly.</p>												
A1.4	<p>This licence authorises the carrying out of the scheduled activities listed below at the premises specified in A2. The activities are listed according to their scheduled activity classification, fee-based activity classification and the scale of the operation.</p> <p>Unless otherwise further restricted by a condition of this licence, the scale at which the activity is carried out must not exceed the maximum scale specified in this condition.</p> <table><tr><th>Scheduled Activity</th><th>Fee Based Activity</th><th>Scale</th></tr><tr><td>Contaminated soil treatment</td><td>Contaminated soil treatment</td><td>Any annual handling capacity</td></tr><tr><td>Crushing, grinding or separating</td><td>Crushing, grinding or separating</td><td>> 30000 - 100000 T annual processing capacity</td></tr><tr><td>Chemical storage</td><td>Petroleum products storage</td><td>> 100000 kL storage capacity</td></tr></table>	Scheduled Activity	Fee Based Activity	Scale	Contaminated soil treatment	Contaminated soil treatment	Any annual handling capacity	Crushing, grinding or separating	Crushing, grinding or separating	> 30000 - 100000 T annual processing capacity	Chemical storage	Petroleum products storage	> 100000 kL storage capacity
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Contaminated soil treatment	Contaminated soil treatment	Any annual handling capacity											
Crushing, grinding or separating	Crushing, grinding or separating	> 30000 - 100000 T annual processing capacity											
Chemical storage	Petroleum products storage	> 100000 kL storage capacity											
A1.5	<p>Until such time as the scheduled development works are completed, Condition A1.1 supersedes Condition A1.4</p>												
A2	Premises or plant to which this licence applies												
A2.1	<p>The licence applies to the following premises:</p> <table><tr><th>Premises Details</th></tr><tr><td>PORT KEMBLA GAS TERMINAL</td></tr><tr><td>INNER AND OUTER HARBOUR</td></tr><tr><td>PORT KEMBLA</td></tr><tr><td>NSW 2505</td></tr><tr><td>LOT 22 DP 1128396, LOT 8 DP 1154760, LOT 70 DP 1182824</td></tr><tr><td>BERTH 101: LOT 22 DP 1128396, LOT 8 DP 1154760, LOT 70 DP 1182824. ALSO INCLUDES OUTER HARBOUR AREAS AS APPROVED UNDER INFRASTRUCTURE APPROVAL NO SSI 9471 (AND SUBSEQUENT MODIFICATIONS).</td></tr></table>	Premises Details	PORT KEMBLA GAS TERMINAL	INNER AND OUTER HARBOUR	PORT KEMBLA	NSW 2505	LOT 22 DP 1128396, LOT 8 DP 1154760, LOT 70 DP 1182824	BERTH 101: LOT 22 DP 1128396, LOT 8 DP 1154760, LOT 70 DP 1182824. ALSO INCLUDES OUTER HARBOUR AREAS AS APPROVED UNDER INFRASTRUCTURE APPROVAL NO SSI 9471 (AND SUBSEQUENT MODIFICATIONS).					
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A2.2	<p>For the purposes of this licence, the premises is defined by the most recent premises map(s) held on EPA Electronic File EF21/2792 and approved in writing by the EPA.</p>												
A2.3	<p>Premises map(s) changes as a result of scheduled land portion handover, land portion surrenders, land portion additions and any other changes are permitted to be altered through this condition.</p> <p>Any proposed variations to the premises must:</p> <ul style="list-style-type: none">– be submitted to the EPA in electronic format– be clearly described in writing												

Condition	Requirement		
	<ul style="list-style-type: none">– include a complete map set containing unique identifiers for revision number, map sheet numbers and issue date– be submitted to the EPA no less than 5 business days prior to the date of the scheduled land portion handover, land portion surrenders, land portion additions or any other changes; and– demonstrate environmental impacts in relation to any changes have been considered and can be managed in an appropriate manner.		
A2.4	The approved premises map(s) must be available for public viewing on the licensee's project website, or a related website approved in writing by the EPA, no more than 3 business days after the approval of the maps by the EPA.		
A3	Other activities		
A3.1	<div>This licence applies to all other activities carried on at the premises, including:<table><tr><td>Ancillary Activity</td></tr><tr><td>General chemicals storage</td></tr></table></div>	Ancillary Activity	General chemicals storage
Ancillary Activity			
General chemicals storage			
A4	Information supplied to the EPA		
A4.1	<div>Works and activities must be carried out in accordance with the proposal contained in the licence application, except as expressly provided by a condition of this licence. In this condition the reference to "the licence application" includes a reference to:<ul style="list-style-type: none">f. applications for any licences (including former pollution control approvals) which this licence replaces under the Protection of the Environment Operations (Savings and Transitional) Regulation 1998; andg. the licence information form provided by the licensee to the EPA to assist the EPA in connection with the issuing of this licence.</div>		
A4.2	Unless specifically stated by another condition of this licence, Environmental Management Plans or systems supplied to the EPA by the licensee do not form part of this licence.		
5	Monitoring and Recording Conditions		
M1	Monitoring records		
M1.1	The results of any monitoring required to be conducted by this licence or a load calculation protocol must be recorded and retained as set out in this condition.		
M1.2	<div>All records required to be kept by this licence must be:<ul style="list-style-type: none">a. in a legible form, or in a form that can readily be reduced to a legible formb. kept for at least 4 years after the monitoring or event to which they relate took place; andc. produced in a legible form to any authorised officer of the EPA who asks to see them.</div>		
M1.3	<div>The following records must be kept in respect of any samples required to be collected for the purposes of this licence:<ul style="list-style-type: none">a. the date(s) on which the sample was takenb. the time(s) at which the sample was collectedc. the point at which the sample was taken; andd. the name of the person who collected the sample.</div>		
M6	Recording of pollution complaints		
M6.1	The licensee must keep a legible record of all complaints made to the licensee or any employee or agent of the licensee in relation to pollution arising from any activity to which this licence applies.		
M6.2	<div>The record must include details of the following:<ul style="list-style-type: none">a. the date and time of the complaintb. the method by which the complaint was madec. any personal details of the complainant which were provided by the complainant or, if no such details were provided, a note to that effectd. the nature of the complainte. the action taken by the licensee in relation to the complaint, including any follow-up contact with the complainant; andf. if no action was taken by the licensee, the reasons why no action was taken.</div>		
M6.3	The record of a complaint must be kept for at least 4 years after the complaint was made.		

Condition	Requirement
M6.4	The record must be produced to any authorised officer of the EPA who asks to see them.
M7	Telephone complaints line
M7.1	The licensee must operate during its operating hours a telephone complaints line for the purpose of receiving any complaints from members of the public in relation to activities conducted at the premises or by the vehicle or mobile plant, unless otherwise specified in the licence.
M7.2	The licensee must notify the public of the complaints line telephone number and the fact that it is a complaints line so that the impacted community knows how to make a complaint.
M7.3	The preceding two conditions do not apply until 1 month after the date of the issue of this licence.
M8	Requirement to monitor volume or mass
M8.1	The licensee must record the volume of material that is crushed or grinded at the premises.
R1	Annual return documents
R1.1	<p>The licensee must complete and supply to the EPA an Annual Return in the approved form comprising:</p> <ol style="list-style-type: none"> 1. a Statement of Compliance, 2. a Monitoring and Complaints Summary, 3. a Statement of Compliance - Licence Conditions, 4. a Statement of Compliance - Load based Fee, 5. a Statement of Compliance - Requirement to Prepare Pollution Incident Response Management Plan, 6. a Statement of Compliance - Requirement to Publish Pollution Monitoring Data; and 7. a Statement of Compliance - Environmental Management Systems and Practices. <p>At the end of each reporting period, the EPA will provide to the licensee notification that the Annual Return is due.</p>
R1.2	<p>An Annual Return must be prepared in respect of each reporting period, except as provided below.</p> <p>Note: The term "reporting period" is defined in the dictionary at the end of this licence. Do not complete the Annual Return until after the end of the reporting period.</p>
R1.3	<p>Where this licence is transferred from the licensee to a new licensee:</p> <ol style="list-style-type: none"> a. the transferring licensee must prepare an Annual Return for the period commencing on the first day of the reporting period and ending on the date the application for the transfer of the licence to the new licensee is granted; and b. the new licensee must prepare an Annual Return for the period commencing on the date the application for the transfer of the licence is granted and ending on the last day of the reporting period. <p>Note: An application to transfer a licence must be made in the approved form for this purpose.</p>
R1.4	<p>Where this licence is surrendered by the licensee or revoked by the EPA or Minister, the licensee must prepare an Annual Return in respect of the period commencing on the first day of the reporting period and ending on:</p> <ol style="list-style-type: none"> a. in relation to the surrender of a licence - the date when notice in writing of approval of the surrender is given; or b. in relation to the revocation of the licence - the date from which notice revoking the licence operates.
R1.5	The Annual Return for the reporting period must be supplied to the EPA via eConnect <i>EPA</i> or by registered post not later than 60 days after the end of each reporting period or in the case of a transferring licence not later than 60 days after the date the transfer was granted (the 'due date').
R1.6	<p>Where the licensee is unable to complete a part of the Annual Return by the due date because the licensee was unable to calculate the actual load of a pollutant due to circumstances beyond the licensee's control, the licensee must notify the EPA in writing as soon as practicable, and in any event not later than the due date. The notification must specify:</p> <ol style="list-style-type: none"> a. the assessable pollutants for which the actual load could not be calculated; and b. the relevant circumstances that were beyond the control of the licensee.
R1.7	The licensee must retain a copy of the Annual Return supplied to the EPA for a period of at least 4 years after the Annual Return was due to be supplied to the EPA.
R1.8	<p>Within the Annual Return, the Statements of Compliance must be certified and the Monitoring and Complaints Summary must be signed by:</p> <ol style="list-style-type: none"> a. the licence holder; or b. by a person approved in writing by the EPA to sign on behalf of the licence holder.

Condition	Requirement
R2	Notification of environmental harm
R2.1	<p>Notifications must be made by telephoning the Environment Line service on 131 555.</p> <p>Note: The licensee or its employees must notify all relevant authorities of incidents causing or threatening material harm to the environment immediately after the person becomes aware of the incident in accordance with the requirements of Part 5.7 of the Act.</p>
R2.2	The licensee must provide written details of the notification to the EPA within 7 days of the date on which the incident occurred.
R3	Written report
R3.1	<p>Where an authorised officer of the EPA suspects on reasonable grounds that:</p> <ol style="list-style-type: none"> where this licence applies to premises, an event has occurred at the premises; or where this licence applies to vehicles or mobile plant, an event has occurred in connection with the carrying out of the activities authorised by this licence, and the event has caused, is causing or is likely to cause material harm to the environment (whether the harm occurs on or off premises to which the licence applies), the authorised officer may request a written report of the event.
R3.2	The licensee must make all reasonable inquiries in relation to the event and supply the report to the EPA within such time as may be specified in the request.
R3.3	<p>The request may require a report which includes any or all of the following information:</p> <ol style="list-style-type: none"> the cause, time and duration of the event the type, volume and concentration of every pollutant discharged as a result of the event the name, address and business hours telephone number of employees or agents of the licensee, or a specified class of them, who witnessed the event the name, address and business hours telephone number of every other person (of whom the licensee is aware) who witnessed the event, unless the licensee has been unable to obtain that information after making reasonable effort action taken by the licensee in relation to the event, including any follow-up contact with any complainants details of any measure taken or proposed to be taken to prevent or mitigate against a recurrence of such an event; and any other relevant matters.
R3.4	The EPA may make a written request for further details in relation to any of the above matters if it is not satisfied with the report provided by the licensee. The licensee must provide such further details to the EPA within the time specified in the request.
7	General Conditions
G1	Copy of licence kept at the premises or plant
G1.1	A copy of this licence must be kept at the premises to which the licence applies.
G1.2	The licence must be produced to any authorised officer of the EPA who asks to see it.
G1.3	The licence must be available for inspection by any employee or agent of the licensee working at the premises.
8	Special Conditions
E1	Emplacement Cell Report
E1.1	<p>Condition of consent No. 8 for the project (SSI 9471) requires that an emplacement cell report (report) is prepared to the satisfaction of the Planning Secretary prior to the commencement of dredging, disposal and emplacement activities.</p> <p>The licensee must provide a Emplacement Cell report (Report) to the EPA for comment. The report must be provided to the EPA at least four weeks prior to commencement of dredging disposal and emplacement activities.</p>
E2	Pollution Incident Response Management Plan (PIRMP)
E2.1	<p>The Licensee must prepare a 'Pollution Incident Response Management Plan' (PIRMP) that complies with Part 5.7A of the POEO Act (1997) in relation to the activity to which the licence relates. The PIRMP must be in the form required by the 'Regulations' and include the following:</p> <ul style="list-style-type: none"> - the procedures to be followed by the holder of the relevant environment protection licence, or the occupier of the relevant premises, in notifying a pollution incident to: <ol style="list-style-type: none"> (i) the owners or occupiers of premises in the vicinity of the premises to which the environment protection licence or the direction under section 153B relates, and

Condition	Requirement
	<p>(ii) the local authority for the area in which the premises to which the environment protection licence or the direction under section 153B relates are located and any area affected, or potentially affected, by the pollution, and</p> <p>(iii) any persons or authorities required to be notified by Part 5.7,</p> <ul style="list-style-type: none"> - a detailed description of the action to be taken, immediately after a pollution incident, by the holder of the relevant environment protection licence, or the occupier of the relevant premises, to reduce or control any pollution, - the procedures to be followed for co-ordinating, with the authorities or persons that have been notified, any action taken in combating the pollution caused by the incident and, in particular, the persons through whom all communications are to be made, - any other matter required by the regulations, including 'Keeping of Plan', 'Testing of Plan', 'Making Plan Readily Available' and 'Implementation of Plan'.

5.3 Project-specific approval

5.3.1 Infrastructure Approval

The PKGT was approved on 24th April 2019 by the NSW Minister for Planning and Public Spaces, under Section 5.19 of the EP&A Act. The Project has subsequently been modified twice in April 2020 and September 2020.

The Infrastructure Approval Conditions include the development of this EMS and associated sub-plans to guide environmental management throughout construction and operation of the Project.

The PKGT has progressed to Stage 2A of the development, which has an expected duration of approximately nine months, as described in Chapter 2.

In accordance with Schedule 4, Condition 3 of Infrastructure Approval (SSI 9471), AIE seeks approval for commencement of Stage 2A component of the development and have updated Sub-Plans to be specifically reflective of this phase of the Project. These include:

- EMS.
- SMP including a
 - CSP.
 - WQMP.
 - Erosion and Sediment Control Plan (ESCP).
 - Acid Sulfate Soil Management Plan (ASSMP).
 - Incident Notification and Response Flow Chart.
- Emergency Spill Plan.
- HUFP.
- Construction Traffic Management Plan (CTMP).
- Air Quality Management Plan (AQMP).
- Noise and Vibration Management Plan (NVMP).
- FFMP.

In parallel with this stage of the Project, detailed design is progressing for the subsequent stages, including the Stage 2B works and natural gas pipeline (Stage 3). A revised contracting strategy for subsequent construction stages is also progressing concurrently with the detailed design.

All Sub-Plans required by Infrastructure Approval (SSI 9471) for construction will be updated to be reflective of the revised design and contracting strategy. The plans will be prepared and undergo consultation in accordance with the relevant conditions of the Infrastructure Approval and will be submitted to DPIE for review and approval eight weeks prior to those stages of works commencing.

5.3.2 EIS mitigation measures

In addition to the Infrastructure Approval conditions, the Principal Contractor is committed to delivering the mitigation/management measures as identified in the EIS and Response to Submissions applicable to Stage 2A, as summarised in Table 5.3.

Table 5.3 Construction phase mitigation/management measures and applicability to Stage 2A

EIS ID	Issue	Mitigation/management measure	Applicability to Stage 2A
Port navigation			
PN2	Port Navigation	The movement of barges will be coordinated by the Port Authority Vessel Traffic Information Centre (VTIC). Adherence with existing Port Kembla navigational protocols through close liaison and compliance to directions of the Harbour Master.	Not applicable – to be included for Stage 2B.
PN3	Port Navigation	Development of a Construction Marine Traffic Management Plan for submission to the Harbour Master.	Not applicable – to be included for Stage 2B..
PN4	Port Navigation	Barge operation will be controlled through a permit system under the control of the Harbour Master (through the VTIC) and Masters will be required to obtain Certificates of Local Knowledge as required by the Harbour Master and NSW Marine Safety Regulation 2016.	Not applicable – to be included for Stage 2B.
PN5	Port Navigation	Permission of the Harbour Master will be sought for split hopper barges to be used at night. Construction will be coordinated so as to not impact other vessels and port navigation, with due regard to the port instructions and port protocols (Port Authority of NSW (PANSW, 2015)).	Not applicable – to be included for Stage 2B.
PN6	Port Navigation	Monitoring of the depth of deposited dredged material from the seabed in the disposal area to ensure that the barges transferring dredged material are not at risk of grounding.	Not applicable – to be included for Stage 2B.
Contamination			
CO1	Contamination at Berth 101	<p>One or more of the following is proposed for assessing the potential risk to human health the two Benzo(a)Pyrene (BaP) Toxic Equivalence Quotient (TEQ) hotspots identified at GHB09 and GBH26:</p> <p>Development of a human health risk assessment for BaP (TEQ), to further refine the potential risk posed by these contaminants to future construction workers. Given the short duration of the works relative to the standard exposure assumptions in a commercial/industrial scenario, it is likely that derived site-specific target levels for BaP (TEQ) would be higher than adopted for this assessment.</p> <p>Additional investigation to delineate the vertical and lateral extent of BaP (TEQ). The investigation would involve step out borehole locations which will target materials at depths between 4 m and 5 m, to assess if the contamination is isolated or widespread.</p> <p>The source of BaP (TEQ) at GHB09 and GBH26 was not identified nor was their apparent evidence of this contamination present at the time of sampling. The contamination may be a characteristic of the fill material, meaning it could be randomly distributed throughout the fill matrix. Therefore, in addition to further investigation, bioavailability testing is also recommended so that the risk to human health is better understood, and appropriate safety control measures can be adopted during construction. The laboratory is presently maintaining these samples pending further analysis.</p>	Not applicable – addressed as part of Stage 1.
CO2	Contamination at Berth 101	<p>Removal of any remnant ACM fragments from the ground surface. The removal should be undertaken by a licenced removalist in accordance with relevant SafeWork NSW codes of practice.</p> <p>Following removal, a licenced asbestos assessor should inspect the site and provide a clearance certificate confirming removal of asbestos.</p>	Applicable – refer to CSP included as part of the SMP.
CO3	Contamination at Berth 101	Inclusion of a CSP for contamination in the EMS for the work associated with construction activities.	Applicable – refer to CSP

EIS ID	Issue	Mitigation/management measure	Applicability to Stage 2A
			included as part of the SMP.
CO4	Berth 101; Proposed pipeline alignment, dredging area and disposal area.	Preparation of an ASSMP by a consultant experienced in the identification and management of ASS. This will also include appropriate treatment and/or management of Acid Sulfate Soils (ASS). The ASSMP will be developed in line with the requirements of the Acid Sulfate Soils Management Advisory Committee Guidelines (ASSMAC, August 1998 and as updated). The ASSMP will be prepared to identify, manage, and treat the ASS encountered during excavation and dredging to minimise the production of acid leachate.	Applicable – refer to ASSMP included as part of the SMP.
CO5	Proposed pipeline alignment	Preparation and implementation of an EMS to include an CSP to effectively manage the potential contamination issues identified from both a human health and environmental perspective. This would include the assessment of materials to be disturbed across the site to inform appropriate management strategies.	Applicable – refer to CSP included as part of the SMP.
CO6	Proposed pipeline alignment	Assessment and classification of all material to be disposed of offsite as per NSW EPA (2014) Waste Classification Guidelines, Part 1: Classifying Waste and Part 4: Acid Sulphate Soils prior to off-site disposal.	Applicable – refer to SMP.
CO7	Proposed pipeline alignment	If the proposed pipeline alignment is likely to intersect groundwater, assessment of groundwater quality in those sections should also be carried out to inform construction management of potential contamination issues	Not applicable - to be included for Stage 3.
CO8	Dredging area and disposal area in the Outer Harbour	A Dredge and Excavation Management Plan (DEMP) will be prepared prior to the dredging of Berth 101, outlining the contamination management measures, including: surface water monitoring, which will be implemented during the course of the works to minimise potential impacts to the receiving waters use of a turbidity curtain to restrict the generation of turbidity plumes and localise any water quality issues	Not applicable – to be included for Stage 2B.
Water resources			
W5	Water Quality	Preparation of an EMS including specific DEMP to provide a framework for the environmental management of construction activities to minimise the environmental risks to a level that is as low as practically possible for this Project.	Not applicable – to be included for Stage 2B.
W6	Water Quality	Design and implementation of a WQMP to ensure construction works do not cause exceedance of the marine water quality criterion of background plus 50 mg/L of suspended sediment, in accordance with EPL for similar activities within Port Kembla such as the Berth 103 Stage 2 Dredging & Spoil Disposal EPL20563). Continuous turbidity monitoring would be undertaken using a series of monitoring buoys to provide impact and background data (turbidity (NTU), pH, temperature). Prior to commencement of the dredging works, buoys would be deployed for an agreed period of time to confirm background conditions in the vicinity of the monitoring points. Data would be logged and transmitted to an onshore recording station where it would be processed to allow automated comparison of median turbidity levels to a series of green, amber and red trigger levels. When exceeded, an alarm would be triggered, automated email and SMS alerts sent to the Environmental Representative and agreed procedures implemented. Such procedures include hand-held monitoring to verify readings, reduction in the rate of dredging, relocation of dredging activities or cessation of turbidity generating works until turbidity readings reach acceptable levels.	Applicable – Water Monitoring Program included in WQMP and included as part of the SMP.

EIS ID	Issue	Mitigation/management measure	Applicability to Stage 2A
		<p>The WQMP would include regular reporting, evaluation and revision where required to ensure the Project objectives and approval conditions are achieved.</p> <p>Daily visual observations would be undertaken during dredging operations to monitor the potential release of oil or grease.</p> <p>Collection of water samples and laboratory analysis for an agreed set of contaminants would be undertaken on a weekly basis during dredging operations.</p>	
W7	Water Quality	<p>Silt curtains would be installed prior to commencement of the works in order to minimise the spread of any sediments entrained within the water column during dredging and disposal operations.</p> <p>Silt curtains are available in a range of designs and would be provided by the successful Contractor. It is envisaged that the silt curtain would comprise a geocomposite material consisting of a non-woven geotextile sewn to a woven geotextile, which would provide the required filtering capacity and rigidity respectively.</p> <p>Vessel access would be via gated or overlapped curtains or through installation of a bubble curtain. The top of the curtain would be supported by a floating boom, whilst the lower portion of the curtain would be weighted with appropriate ballasting (e.g., bars or chains) to ensure that the full length of the curtain is maintained at all times. The curtain would be anchored or fixed to existing structures as necessary.¹</p>	Not applicable – to be included for Stage 2B.
W8	Water Quality	<p>Subaqueous sediment removal would be undertaken using a backhoe dredge. The use of mechanical dredging (rather than hydraulic dredging) ensures that sediments are removed, transported and placed as close to their in-situ density as possible. Thereby minimising the suspension and mobilisation of sediments at the dredge and disposal sites.</p> <p>Method statements would be prepared by the contractor to ensure that loading of dredged materials into the hopper barges is undertaken in a manner that reduces spillage and avoids overfilling barges.</p>	Not applicable – to be included for Stage 2B.
W9	Water Quality	A perimeter bund would be progressively constructed within the Outer Harbour placement area to ensure long term stability of dredged materials and to minimise sediment migration during placement.	Not applicable – to be included for Stage 2B.
W10	Water Quality	A site-specific ESCP will be prepared as part of the EMS to provide control of all land-based excavation and stockpiling requirements. All erosion and sediment control measures shall be designed, implemented and maintained in accordance with 'Managing Urban Stormwater: Soil and Construction Volume 1' (Landcom 2004) ('the Blue Book').	Applicable – refer to ESCP included as part of the SMP.
W11	Water quality, chemical and fuel impacts on flora and fauna	A site-specific emergency spill plan will be developed and will include spill management measures in accordance with relevant EPA guidelines. The plan will address measures to be implemented in the event of a spill, including initial response and containment, notification of emergency services and relevant authorities (including TfNSW and EPA officers).	Applicable – refer to Emergency Spill Plan.
	Water quality, chemical and fuel impacts on flora and fauna	An emergency spill kit will be kept on site at all times. All staff will be made aware of the location of the spill kit and trained in its use.	Applicable – refer to Emergency Spill Plan.
W12	Water quality, chemical and fuel impacts on flora and fauna	An emergency spill kit will be kept on site at all times. All staff will be made aware of the location of the spill kit and trained in its use.	Applicable – refer to Emergency Spill Plan.

EIS ID	Issue	Mitigation/management measure	Applicability to Stage 2A
W13	Water quality, chemical and fuel impacts on flora and fauna	Machinery will be checked daily to ensure there is no oil, fuel or other liquids leaking from the machinery. All staff will be appropriately trained through toolbox talks for the minimisation and management of accidental spills.	Applicable – refer to Emergency Spill Plan
Marine ecology			
ME1	Biofouling and benthic community disturbance	Works to remove the current quay wall and piles will commence after a visual inspection for protected mobile fauna (e.g., Syngnathids). If present, these will be relocated to adjacent habitats, outside the zone of influence by the proposed works, where feasible. Dredging will be carried out using mechanical backhoe dredge, split barges and supporting tug vessels, as opposed to suction-style dredging, to minimise the potential mobilisation of sediments within the Inner Harbour. Disposal of the dredged material will be limited to the Outer Harbour disposal area within the perimeter bund.	Not applicable – undertaken during Stage 1.
ME2	Water quality and marine ecology impacts from resuspension of sediments	<p>The following controls should be implemented prior to dredge activities:</p> <p>Physical controls such as installation of silt curtains prior to commencement of construction works would be adequate in minimising the spread of any sediments within the water column at the dredging and disposal locations.</p> <p>Dredging techniques that minimise sediment resuspension during excavation and disposal (such as using mechanical methods over hydraulic methods) should be implemented throughout the Project. Barge loads will also be controlled such that overflow of barge loads is avoided.</p> <p>Screening technologies will be implemented to ensure that any contaminated sediments are disposed of responsibly. Contaminated dredge material will be placed such that it will be capped by uncontaminated material in accordance with a dredge management plan.</p> <p>Implementation of a water quality monitoring program to ensure construction works do not exceed the Project's agreed marine water quality criteria.</p> <p>Daily visual observations of any potential toxic dinoflagellate blooms within the Inner Harbour.¹</p>	Not applicable – to be included for Stage 2B.
ME4	Impact of artificial noise emissions on marine fauna	<p>During piling activities, the following standard operational procedures are to be implemented (DPTI, 2012):</p> <p>Pre-start procedure – The presence of marine mammals should be visually monitored by a suitably trained crew member for at least 30 minutes before the commencement of the soft start procedure. Particular focus should be put on the shut-down zone, but the observation zone should be inspected as well, for the full extent where visibility allows. Observations should be made from the piling rig or a better vantage point if possible.</p> <p>Soft start procedure – If marine mammals have not been sighted within or are not likely to enter the shut down zone during the pre-start procedure, the soft start procedure will commence in which the piling impact energy is gradually increased over a 10-minute period.</p> <p>The soft start procedure should also be used after long breaks of more than 30 minutes in piling activity. Visual observations of marine mammals within the safety zones should be maintained by trained crew throughout soft starts. The soft start procedure will alert marine mammals to the presence of the piling rig and enable animals to move away to distances where injury is unlikely.</p> <p>Normal operation procedure – If marine mammals have not been sighted within or are not likely to enter the shut down or observation zone during the soft start procedure, piling will start at full impact energy. Trained crew will continuously undertake visual observations during piling activities and shut-down periods.</p>	Not applicable – to be included for Stage 2B.

EIS ID	Issue	Mitigation/management measure	Applicability to Stage 2A
		<p>After long breaks in piling activity or when visual observations ceased or were hampered by poor visibility, the pre-start procedure should be used. Night-time or low visibility operations may proceed provided that no more than three shut-downs occurred during the preceding 24 hour period.</p> <p>Stand-by operations procedure – If a marine mammal is sighted within the observation zone during the soft start or normal operation procedures, the operator of the piling rig should be placed on stand-by to shut-down the piling rig. An additional trained crew member should continuously monitor the marine mammal in sight.</p> <p>Shut-down procedure – If a marine mammal is sighted within or about to enter the shutdown zone, the piling activity should be stopped immediately. If a shut-down procedure occurred and marine mammals have been observed to move outside the shut-down zone, or 30 minutes have lapsed since the last marine mammal sighting, then piling activities should recommence using the soft start procedure. If marine mammals are detected within the shut- down zone during poor visibility, operations should stop until visibility improves.</p>	
ME5	Impact of artificial noise emissions on marine fauna	Vessel and heavy machinery should be maintained in accordance with the manufacturer specifications to reduce noise emissions.	Not applicable – to be included for Stage 2B.
ME6	Impact of artificial noise emissions on marine fauna	<p>The interaction of all vessels with cetaceans and pinnipeds will be compliant with Part 8 of the EPBC Regulations (2000). The Australian Guidelines for Whale and Dolphin Watching (DoEE, 2017) for sea-faring activities will be implemented across the entire Project.</p> <p>This includes the implementation of the following guidelines:</p> <p>Caution zone (300 m either side of whales and 150 m either side of dolphins) –vessels must operate at no wake speed in this zone.</p> <p>Caution zone - must not be entered when calf (whale or dolphin) is present.</p> <p>No approach zone (100 m either side of whales and 50 m either side of dolphins) – vessels should not enter this zone and should not wait in front of the direction of travel or an animal or pod, or follow directly behind.</p> <p>If there is a need to stop, reduce speed gradually. Do not encourage bow riding. If animals are bow riding, do not change course or speed suddenly</p>	Not applicable – to be included for Stage 2B.
ME7	The impact of artificial light emissions	Light spill from the nearshore vessel operations will be minimised where possible using directional lighting.	Not applicable – to be included for Stage 2B.
ME8	The impact of artificial light emissions	Lighting on vessel decks or the berth construction area will be managed to reduce direct light spill onto marine waters or surrounding landscape, unless such actions do not comply with site safety or navigation and vessel safety standards (Australian Maritime Safety Authority (AMSA) Marine Orders Part 30: Prevention of Collisions; AMSA Marine Orders Part 21: Safety of Navigation and Emergency Procedures).	Applicable –to be addressed during construction planning and mobilisation
ME9	Pest introduction and proliferation	<p>Locally sourced vessels (within NSW waters) to complete the construction works where possible. International vessels to empty ballast water in accordance with the latest version of the Australian Ballast Water Management Requirements (DAWR, 2017).</p> <p>If an Incursion of Marine Pests (IMP) is identified or suspected, then the contractor is obliged to immediately (within 24 hours) notify the NSW Department of Primary Industries Aquatic Biosecurity Unit hotline on (02) 4916 3877. Project activities are to adhere to the National System for the Prevention and Management of Marine Pest Incursions (National System) and NSW requirements for IMP identification and management.</p>	Not applicable – to be included for Stage 2B.
ME10	Accidental release of solid	Appropriate waste containment facilities will be included on site and managed to avoid overflow or accidental	Not applicable – to be

EIS ID	Issue	Mitigation/management measure	Applicability to Stage 2A
	waste	<p>release to the environment.</p> <p>No waste materials will be disposed of overboard of vessels, all non-biodegradable and hazardous wastes will be collected, stored, processed and disposed of in accordance with the vessel's Garbage Management Plan as required under Regulation 9 of The International Convention for the Prevention of Pollution from Ships (MARPOL) Annex V.</p> <p>All marine vessels will be operated and maintained in accordance with NSW regulations and best practice. Hazardous wastes will be separated, labelled and retained in storage onboard within secondary containment (e.g., bin located in a bund).</p> <p>All recyclable and general wastes to be collected in labelled, covered bins (and compacted where possible) for appropriate disposal at a regulated waste facility.</p> <p>Solid non-biodegradable and hazardous wastes will be collected and disposed of onshore at a suitable waste facility.</p>	included for Stage 2B.
ME11	Accidental release of hydrocarbons, chemicals and other liquid waste	<p>All liquid waste to be stored for discharge to an appropriate onshore facility.</p> <p>Chemicals and hydrocarbons will be packaged, marked, labelled, and stowed in accordance with MARPOL Annex I, II and III regulations. These include provisions for all chemicals environmentally hazardous) and hydrocarbons to be stored in closed, secure and appropriately bunded areas.</p> <p>A Materials Safety Data Sheet (SDS) will be available for chemicals and hydrocarbons in locations nearby to where the chemicals / wastes are stored.</p> <p>Vessel operators will have an up-to-date Shipboard Oil Pollution Emergency Plan (SOPEP) and Shipboard Marine Pollution Emergency Plan (SMPEP). All shipboard chemical and hydrocarbon spills will be managed in accordance with these plans by trained and competent crew.</p> <p>Any contaminated material collected will be contained for appropriate onshore disposal.</p> <p>Any equipment or machinery with the potential to leak oil will be enclosed in continuous bunding or will have drip trays in place where appropriate.</p> <p>Following rainfall events, bunded areas on open decks of the vessels or within any construction laydown areas will be cleared of rainwater.</p> <p>All hoses for pumping and transfers will be maintained and checked as per the Planned Maintenance System (PMS).</p>	Not applicable – to be included for Stage 2B.
ME12	Damaged fuel tank associated with vessel or plant collision	<p>Visual observations will be maintained by watch keepers on all vessels and plant/moving machinery.</p> <p>All vessels must comply with relevant marine navigation and safety standards. Marine diesel oil compliant with MARPOL Annex VI Regulation 14.2 (i.e., sulphur content of less than 3.50% m/m) is the only diesel engine fuel to be used by the vessels.</p> <p>Oil spill responses will be executed in accordance with the vessel's SOPEP, as required under MARPOL. Emergency spill response procedures would be developed and implemented when required.</p>	Not applicable – to be included for Stage 2B.
Heritage			
H1	Unexpected finds	The construction workforce would be given a heritage induction and supporting material enabling them to identify materials of potential heritage value and explaining how to respond.	Applicable – refer to HUFPP.

EIS ID	Issue	Mitigation/management measure	Applicability to Stage 2A
H2	Unexpected finds	A protocol to be followed in the event of an unexpected find would be developed and would include clear lines of communication and stop work procedures to be followed.	Applicable – refer to HUPF.
Terrestrial biodiversity			
TB1	Offset obligations	<p>In accordance with the offset rules established by the Biodiversity Conservation Regulation 2017 there are various means by which the offset obligations can be met. The following is recommended:</p> <p>Secure and retire appropriate credits from stewardship site/s that fit within the trading rules of the BOS (Biodiversity Offsets Scheme) in accordance with the 'like-for-like' report generated by the BAM (Biodiversity Assessment Method) calculator. If the required credits are unavailable, source credits in accordance with the 'variation report' generated by the BAM calculator.</p> <p>Only consider a payment to the Biodiversity Conservation Fund if a suitable number and type of biodiversity credits cannot be secured from third parties.</p>	Not applicable – completed pre-construction
TB2	Loss of native vegetation and fauna habitat	Staff will be inducted and informed of the limits of clearing and the areas of vegetation to be retained.	Not applicable – to be included for Stage 3.
TB3	Fauna protection	<p>A trained ecologist is to be present for construction activities that may impact frog habitat which includes dewatering / removal of detention basins and trenching immediately adjacent to Typha drainage line (west of Springhill Road).</p> <p>Temporary frog-proof fencing should be installed around drill sites, roadside drains and detention ponds near the project site to prevent frogs from being injured or killed by equipment.</p> <p>Any Green and Golden Bell Frogs or other resident frogs are to be handled in accordance with the Chytrid fungus hygiene protocols (DECC 2008c) and released into the most appropriate nearby habitat area.</p>	Applicable for detention basins/ movement corridor within MBD Site Compound - refer to FFMP.
		<p>The trench is to be covered at night to prevent fauna from falling in.</p> <p>An inspection is to be conducted each morning to check the trench for frogs. Any frogs identified will only be handled by an ecologist or wildlife rescue representative.</p>	Not applicable – to be included for Stage 3.
TB4	Spread of weeds	Priority weed control measures will be implemented as part of the EMS to prevent their spread in the study area.	Applicable – refer to FFMP.
TB5	Spread of weeds	<p>Declared priority weeds will be managed according to requirements of the NSW <i>Biosecurity Act 2015</i>.</p> <p>Soil material and stripped groundcover vegetation with the potential to contain priority weeds will not be removed from the project site.</p> <p>Soil disturbance will be avoided as much as possible to minimise the potential for spreading weeds.</p>	Applicable – refer to FFMP.
TB6	Sedimentation	A site-specific ESCP will be prepared as part of the EMS. All erosion and sediment control measures shall be designed, implemented and maintained in accordance with relevant sections of 'Managing Urban Stormwater: Soil and Construction Volume 1' (Landcom 2004) ('the Blue Book') (particularly Section 2.2) and 'Managing Urban Stormwater: Soil and Construction Volume 2A – Installation of Services' (DECC 2008b). The erosion and sediment control plan will include stockpiles, stormwater runoff, trees, site boundaries, site access and storage areas.	Applicable – refer to the ESCP included within SMP.
TB7	Sedimentation	Areas disturbed during the works will be rehabilitated, including stabilising disturbed soils to resist erosion and	Applicable – refer to the

EIS ID	Issue	Mitigation/management measure	Applicability to Stage 2A
		<p>weed invasion via establishment of a suitable turf species such as a native Couch or repaving roads and sealed surfaces.</p> <p>Stabilisation activities will be carried out progressively to limit the time disturbed areas are exposed to erosion processes.</p> <p>Activities with a risk of soil erosion such as earthworks will not be undertaken immediately before or during high rainfall or wind events.</p>	ESCP included within SMP.
TB8	Water quality, chemical and fuel impacts on flora and fauna	A site-specific Emergency Spill Plan will be developed and will include spill management measures in accordance relevant EPA guidelines. The plan will address measures to be implemented in the event of a spill, including initial response and containment, notification of emergency services and relevant authorities (including TfNSW and EPA officers).	Applicable – refer to Emergency Spill Plan.
TB9	Water quality, chemical and fuel impacts on flora and fauna	An emergency spill kit will be kept on site at all times. All staff will be made aware of the location of the spill kit and trained in its use.	Applicable – refer to Emergency Spill Plan.
TB10	Water quality, chemical and fuel impacts on flora and fauna	Any herbicides used for weed control will be applied to the manufacturer's specifications and as outlined in the manufacturer's Materials SDS.	Applicable – refer to FFMP.
TB11	Water quality, chemical and fuel impacts on flora and fauna	Machinery will be checked daily to ensure there is no oil, fuel or other liquids leaking from the machinery. All staff will be appropriately trained through toolbox talks for the minimisation and management of accidental spills.	Applicable – refer to Emergency Spill Plan.
TB12	Pathogen spread and establishment	Vehicle wash down facilities will be provided should evidence of pathogens or fungus such as Phytophthora or Chytrid be found.	Applicable – refer to FFMP.
Traffic and access			
T1	General	<p>A CTMP has been prepared prior to the commencement of works with site induction for construction personnel being undertaken to outline the requirements of the CTMP. The aim of the CTMP is to maintain the safety of all workers and road users within the vicinity site including but not limited to:</p> <p>Site access routes.</p> <p>Construction parking arrangement.</p> <p>Traffic management.</p> <p>Pedestrian and bicycle rider management.</p> <p>Roadside hazards.</p>	Applicable – refer to CTMP.
T2	Traffic management	A traffic control plan would be developed in accordance with the NSW RMS Services Traffic control at work sites and AS1742.3 – Traffic control devices for works on roads.	Applicable – refer to CTMP.
T2	Traffic volumes	Traffic management planning would seek to minimise traffic movements where possible during the morning and afternoon peak hours.	Applicable – refer to CTMP.
T3	Traffic volumes	Construction workers would be encouraged to carpool or utilise public transport where practicable ²	Applicable – refer to

EIS ID	Issue	Mitigation/management measure	Applicability to Stage 2A
			CTMP.
Noise and vibration			
NV1	Management of airborne noise through site inductions	<p>Provide site inductions to all employees, contractors, and subcontractors. The induction must at least include:</p> <p>All relevant project specific and standard noise and vibration mitigation measures</p> <p>Relevant licence and approval conditions</p> <p>Permissible hours of work</p> <p>Any limitations on noise generating activities with special audible characteristics</p> <p>Location of nearest sensitive receivers</p> <p>Construction employee parking areas</p> <p>Designated loading/unloading areas and procedures</p> <p>Site opening/closing times (including deliveries)</p> <p>Environmental incident procedures</p>	Applicable – refer to NVMP.
NV2	Airborne noise from transport	Plan traffic flow, parking, and loading/unloading areas to minimise reversing movements within the site.	Applicable – refer to CTMP.
NV3	Management of sensitive receivers from airborne noise	<p>Notify the affected receivers detailing the construction activities, time periods over which they would occur and the duration of works.</p> <p>Provide contact details to the affected receivers. If noise complaints are received, they should be recorded and attended. Noise monitoring should be conducted to assess compliance with the predicted construction noise levels.</p>	Applicable – refer to NVMP.
NV4	Airborne noise and general construction methods	Quieter construction methods should be used where feasible.	Applicable - refer to NVMP.
NV5	Airborne noise from pipeline construction	Minimise pipeline construction activities near sensitive receivers during more sensitive time periods (evening, night).	Not applicable – to be included for Stage 3.
NV6	Airborne noise from equipment	Turn off equipment after use.	Applicable - refer to NVMP.
NV7	Airborne noise from behavioural practices	<p>No swearing or unnecessary shouting or loud stereos/radios on site.</p> <p>No dropping of materials from height, throwing of metal items and slamming of doors.</p> <p>No excessive revving of plant and vehicle engines.</p> <p>Controlled release of compressed air.</p>	Applicable - refer to NVMP.
NV8	Updating the EMS	The EMS must be regularly updated to account for changes in noise and vibration management issues and strategies.	Applicable to EMS.
NV9	Airborne noise from use and siting of plant	<p>Simultaneous operation of noisy plant within discernible range of a sensitive receiver is to be avoided.</p> <p>The offset distance between noisy plant and adjacent sensitive receivers is to be maximised.</p>	Applicable- refer to NVMP

EIS ID	Issue	Mitigation/management measure	Applicability to Stage 2A
		Plant used intermittently to be throttled down or shut down. Noise-emitting plant to be directed away from sensitive receivers.	
NV10	Airborne noise from vehicles	Non-tonal reversing beepers (or an equivalent mechanism) must be fitted and used on all construction vehicles and mobile plant regularly used on site and for any out of hours work, including delivery vehicles.	Applicable- refer to NVMP
NV11	Airborne noise from delivery of goods to construction sites	Loading and unloading of materials/deliveries is to occur as far as possible from sensitive receivers.	Applicable- refer to NVMP.
	Airborne noise from delivery of goods to construction sites	Select site access points and roads as far as possible away from sensitive receivers. Dedicated loading/unloading areas to be shielded if close to sensitive receivers. Delivery vehicles to be fitted with straps rather than chains for unloading, wherever possible.	Applicable- refer to NVMP.
NV12	Airborne noise from mobile plant	Where possible reduce noise from mobile plant through additional fittings including residential grade mufflers.	Applicable- refer to NVMP.
NV13	Airborne noise from prefabrication of materials	Where practicable, pre-fabricate and/or prepare materials off-site to reduce noise with special audible characteristics occurring on-site. Materials can then be delivered to site for installation.	Applicable- refer to NVMP.
NV14	Airborne noise from stationary noise sources	Stationary noise sources, such as pumps, should be enclosed or shielded whilst ensuring that the occupational health and safety of workers is maintained. Appendix F of AS 2436:1981 lists materials suitable for shielding	Applicable- refer to NVMP.
NV15	Noisy activity impacts on sensitive receivers	Use structures to shield residential receivers from noise such as site shed placement; earth bunds; fencing; erection of operational stage noise barriers (where practicable) and consideration of site topography when siting plant.	Applicable- refer to NVMP.
NV16	Impacts from underwater noise	It is recommended that a 109-metre observation zone be established around the underwater piling zone. The 109-metre observation zone would permit up to 30 minutes of continuous piling. Larger observation zones can permit longer durations of piling.	Not applicable – to be included for Stage 2B.
NV17	Impacts from underwater noise	The Underwater Piling Noise Guidelines (2012) recommends the following standard management and mitigation procedures with respect to underwater piling operations: Avoid conducting piling activities during times when marine mammals are likely to be breeding, calving, feeding, migrating or resting in biologically important habitats located within the potential noise impact footprint. Use low noise piling methods, instead of impact piling, where possible. Presence of marine mammals should be visually monitored by a suitably trained crew member for at least 30 minutes before the commencement of the piling procedure. If no marine mammals are nearby, a soft-start piling procedure should be used. This involves gradually increasing the piling impact energy over a 10-minute time period. Visual observations of marine mammals within the safety zone should be maintained by trained crew throughout the start period. If a marine mammal is sighted within the observation zone during the soft start of normal operation procedures, the operator of the piling rig should be placed on stand-by to shut down the piling rig.	Not applicable – to be included for Stage 2B.

EIS ID	Issue	Mitigation/management measure	Applicability to Stage 2A
		A record of procedures employed during the operations should be maintained by the piling contractor	
Air quality			
AQ1	Fugitive dust emissions	Water material prior to it being loaded for on-site haulage, where appropriate.	Applicable – refer to AQMP.
AQ2	Fugitive dust emissions	Aim to minimise the size of storage piles where possible.	Applicable – refer to AQMP.
AQ3	Fugitive dust emissions	Limit cleared areas of land and clear only when necessary to reduce fugitive dust emissions.	Applicable – refer to AQMP.
AQ4	Vehicle emissions	Control on-site traffic by designating specific routes for haulage and access and limiting vehicle speeds to below 25 km/hr.	Applicable – refer to AQMP.
AQ5	Fugitive dust emissions	All trucks hauling material will be covered on the way to the site and maintain a reasonable amount of vertical space between the top of the load and top of the trailer.	Applicable – refer to AQMP.
AQ6	Fugitive dust emissions	Operations conducted in areas of low moisture content material should be suspended during high wind speed events or water sprays should be used.	Applicable – refer to AQMP.
Landscape and visual			
LV4	Visual – construction works	Temporary boardings, barriers, traffic management and signage would be removed when no longer required.	Applicable – refer to CTMP.
LV5	Visual - construction works	Materials and machinery would be stored neatly during construction works.	Applicable – refer to AQMP.
LV6	Visual - construction works	Roads providing access to the site and work areas would be maintained free of dust and mud as far as reasonably practicable.	Applicable – refer to AQMP.
LV7	Visual - construction works	Ensure temporary lighting required during the construction period is sited and designed to avoid light spill into the surrounding area.	Applicable – to be captured in the Principal Contractors Site Environmental Plan (or similar)
Social and economic matters			
S1	Investment and employment	A contracting and procurement strategy focusing on maximising local content will be prepared to support local employment and business opportunities during construction. During operation, the Project should seek to work with interested local parties to support new qualification/certification pathways for some of the specialised roles on the FSRU.	Applicable – to be captured in the Principal Contractor procurement strategy.
S2	Other impacts	Stakeholder engagement would be carried out prior to and during construction with key stakeholders and the community to provide information about the project activities and provide a feedback mechanism for residents.	Applicable – refer to Section 7.2.
Waste management			

EIS ID	Issue	Mitigation/management measure	Applicability to Stage 2A
W1	Construction waste	Develop and implement a waste management plan for construction that integrates all statutory requirements for waste in NSW and includes: Systems to sort and track the actual types and quantities of waste generated. Measures for separating waste based on classification of management options including colour coded bins. Options for offsite reuse, reprocessing, recycling, and energy recovery of waste.	Applicable – refer to SMP.
G1	Greenhouse gas emissions	All plant and equipment used during the construction works shall be regularly maintained to comply with the relevant exhaust emission guidelines.	Applicable – refer to AQMP.
G2	Greenhouse gas emissions	Sustainable procurement practices will be adopted where feasible.	Applicable – to be captured in the Principal Contractor procurement strategy.
G3	Greenhouse gas emissions	The following measures will be considered by contractor(s): Construction materials sourced locally where possible. Construction materials that have minimal embodied energy be selected. Use of Polyvinyl Chloride (PVC) plastic minimised. Construction materials that are low maintenance and durable. Plant and equipment will be switched off when not in constant use and not left idling. Plant and equipment brought onsite will be regularly serviced and energy efficient vehicles or equipment will be selected where available. Any plant and equipment that is not working efficiently (i.e., emitting excessive smoke) will be removed from site and replaced as soon as possible. Construction works will be planned to ensure minimal movement of plant and equipment, including barges.	Applicable – to be captured in the Principal Contractor procurement strategy and AQMP.

1 Harbour Master indicates silt curtain around MBD Site Compound are unsuitable for dredging works within the Inner Harbour. Silt curtain requirements for Stage 2B dredging works to be discussed further with NSW EPA and DPIE.

2 Subject to NSW Public Health Orders (COVID-19) applicable at the time.

5.3.3 Contaminated site auditor

The Site Auditor nominated for the Project is Melissa Porter of Senversa Environmental. A NSW EPA accredited Site Auditor is required to consult on the preparation of Sub-Plans including the:

- Emplacement Cell Report.
- SMP – specific to the dredging and excavation of MBD spoil that will be placed in the emplacement cell, segregation, and testing of materials.
- DEMP.
- WQMP – specific to dredging and placement works. At the completion of dredging, excavation and disposal works, the Auditor will be required to issue a Section A 'Site Audit Statement' confirming the suitability of the site for its intended use.

The following Sub-Plans have been reviewed by an accredited site auditor for Stage 2A.

- SMP.
- WQMP.

5.3.4 Emplacement cell auditor

A suitably qualified and experienced person will audit the construction of the emplacement cell at the completion of each stage, including:

- Dredging and relocation of existing spoil within the disposal area.
- Construction of the bunds within and around the disposal area.
- Emplacement of dredged and excavated spoil in the disposal area.
- Emplacement cell capping.

The audit of the emplacement cell is not applicable to Stage 2A.

5.3.5 Port Authority of NSW and NSW Ports

The PANSW and NSW Ports have reviewed the following documents:

- SMP.
- WQMP.

NSW Ports has reviewed the CTMP.

5.3.6 TfNSW and Wollongong City Council

TfNSW and Wollongong City Council have reviewed the CTMP for Stage 2A.

6. Environmental management framework

AIE strives for excellence through its commitment to leading practice in environmental management and performance. Implementation of this EMS assists in minimising the environmental impacts of construction-related activities by facilitating continual improvement in environmental performance.

This strategy outlines the minimum standard to ensure the AIE manages these aspects and impacts in a manner that is planned, controlled, monitored, recorded, and audited, using a management system that drives continual improvement.

6.1 Environmental Management Systems

AIE is a relatively new company established specifically for the delivery of the Port Kembla Gas Terminal. AIE is in the process of developing a range of systems consistent with the requirements of ISO 14001 Environmental Management Systems, ISO 18001/45001 for Occupational Health and Safety and ISO 9001 for Quality Management Systems and will consider seeking certification in the future.

6.2 Environmental policy

AIE is committed to pursuing industry best practice in environmental performance. This is demonstrated through the AIE's Environment Policy presented in Appendix A.

7. Communication and complaints

Effective communication between the Project Director, Project team, contractors and external stakeholders will be undertaken throughout the Project to ensure effective implementation of this EMS and associated Sub-Plans.

Project communication can be categorised into internal and external communications, as well as communications specifically dealing with complaints. The specific communication methods for each category are discussed below.

7.1 Internal communications

Communication on environmental issues within the Project team will be maintained, as a minimum, through the following forums (organiser as noted):

- Weekly project construction team meetings (AIE Construction Manager or delegate).
- Weekly Environmental management team meetings with relevant contractors (AIE HSE Manager or Delegate).
- Toolbox talks and daily pre-start briefings (Principal Contractor Project Manager or delegate).
- Minutes of formal meetings will be taken and distributed to record issues raised and actions required, with action status established at subsequent meetings.
- Monthly review of the internal AIE Environmental Compliance Tracking register (AIE HSE Manager or delegate).

All internal meetings include appropriate documentation in the form of agenda and formal distribution via the Project's document system.

In addition to the above, the AIE Environment Team will also undertake informal planning sessions and resource review meetings to plan and forecast for upcoming key construction dates, critical issues and other relevant matters associated with environmental planning and approvals.

7.2 External communications

AIE is committed to keeping the local community and relevant agencies informed about the development of the Project. The principal external communication objectives are, therefore, to:

- Continue to maintain open communication with relevant stakeholders.
- Minimise environmental impacts.
- Be proactive in addressing any concerns that the community / external stakeholder may express.

AIE will build upon the stakeholder and community engagement phase undertaken during project development including multiple group or one on one briefings. A project website (www.ausindenergy.com) has been developed and provides comprehensive, clear, and accessible information that is updated on a regular basis.

As well as the local Port Kembla and broader community of the Wollongong region, extensive engagement was also undertaken with a range of other interested key stakeholders, such as local commerce organisations, the Port Authority and local and state government.

Consultation with key stakeholders and the wider community on the Project will continue throughout Stage 2A and subsequent construction phases. Table 7.1 below provides details of the key methods of engagement to be provided on an on-going basis.

These measures will ensure the stakeholders, including the wider community, remain informed of the project's progress.

Table 7.1 Ongoing community consultation tools

Engagement tool	Description
Community Information Line	1800 789 177, community enquiries number established for the Project.
Company Website	Provides extensive FAQs, fact sheets, and project updates. Also provides clear information on alternative ways to seek information: email, 1800 telephone number and/or subscription service.
Website Enquiries	info@ausindenergy.com established for community enquiries.
Subscriber updates	A range of individuals / organisations have recorded their interest in receiving regular email updates on Project developments through the Subscriber feature on the AIE website. These subscribers will receive regular updates around key Project milestones.
Community newsletter	Community newsletters will be prepared, published, and distributed (hardcopy & electronic) to provide an update on key milestones for the Project.
In-person group briefings	Briefing of local business and community groups such as Illawarra Business Chamber & Regional Advisory Council, i3net, Australian Industry Group, Port Kembla Chamber of Commerce, Community Neighbourhood Forums 5 & 7.
NSW EPA	Fortnightly EPA focussed discussion which is aligned with program schedule. Frequency dependent on activity and works.
DPIE	Ad hoc.
NSW Ports	Monthly meeting which includes environmental, safety and relevant approval discussions. The meeting also includes a project update and commercial discussions.
PKCT	Ongoing consultation, as required.
CCC briefings	e.g., Port Kembla Harbour Environment Group – meetings organised by group.
1:1 meetings/telephone /discussions/email exchanges	Daily activity, as required.
Media engagement	On-going responsiveness to media enquiries, as well as proactive distribution of key Project developments to local, state and national media.

7.3 Complaints management

All complaints, where a third party has identified a construction activity as being unsatisfactory or unacceptable, will be dealt with promptly and efficiently in accordance with the complaint and dispute response flow chart shown in Figure 7.1.

AIE will operate a free 24-hour Community Information Line (1800 789 177) where members of the community can leave details about an inquiry, they may have regarding construction activities and this message will be passed on to site personnel and/or the Stakeholder Engagement Team, as appropriate. The phone number is listed on the AIE website (<https://ausindenergy.com/contact-us/>) and will be provided on all community newsletters. The AIE HSE Manager has notified the Port Kembla Harbour Environment Group of the Community Information Line.

Initial responses to complaints will be provided within 24 hours of the complaint being received. As part of the response, a review of the activity will be undertaken. If required and possible, immediate changes will be made to reduce any impact on the community. In some cases, the issues cannot be resolved immediately, and ongoing actions might be required to resolve the issue.

All complaints will be recorded in a Complaints and Disputes Register. The following information will be recorded for each complaint:

1. The date and time of the complaint.
2. The method by which the complaint was made.
3. Any personal details of the complainant which were provided by the complainant or, if no such details were provided, a note to that effect.
4. The nature of the complaint.
5. The action taken by the licensee in relation to the complaint, including any follow-up contact with the complainant.

6. If no action was taken by the licensee, the reasons why no action was taken.

The Complaints and Disputes Register will be maintained by the Project's HSE Manager or delegate, and will detail what the issue was, initial response provided, how and when the issue was resolved, and by whom. Records will be kept for at least four years after the complaint was made and will be produced on request by any authorised officer of the EPA.

Where resolving a complaint with a third party is protracted or develops into a dispute, the AIE HSE Manager shall escalate proactively to Senior Project Leadership (e.g., AIE Project Manager and/or Project Director) to assist with resolution. AIE will work proactively with the complainant to resolve the dispute including having face to face meetings, site familiarisation sessions and agreeing on actions to resolve the dispute. All communications and agreed actions shall be documented.

For the management and reporting of corrective actions (which may be required in response to a complaint), refer to Section 8.6.

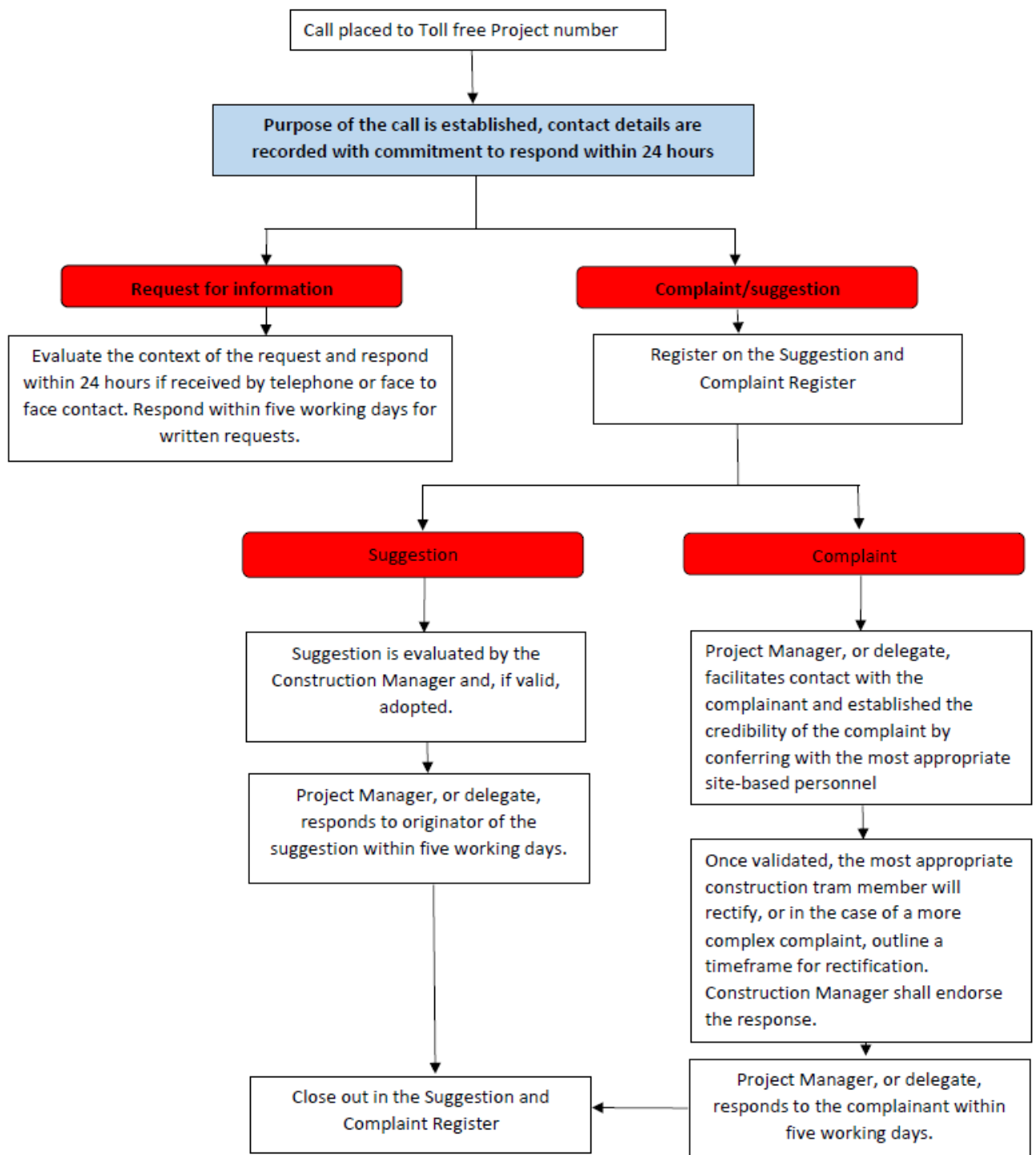


Figure 7.1 Complaint and dispute response flow chart

8. Inspections, monitoring and audits

Monitoring and auditing will be undertaken to determine the impact on the environment and identify opportunities for improvement. Monitoring to be implemented for specific actions or environmental issues (e.g., water quality monitoring, air quality monitoring) will be detailed in their relevant sub-plan and will specifically address the monitoring requirements for those issues.

8.1 Environmental inspections

8.1.1 AIE and Principal Contractor joint environmental weekly inspection

As a minimum, the AIE HSE Manager (or nominated delegate) will undertake weekly inspection of the work sites with the relevant Principal Contractor's environmental personnel (Environmental Representative or similar) to evaluate the effectiveness of environmental controls (inclusive of erosion and sediment control measures) and general compliance with the implementation of the EMS (and associated sub-plans) for site-based activities.

If any maintenance and/or deficiencies in environmental controls or in the standard of environmental performance are observed, they will be recorded on the checklist form. Records will also include details of any maintenance required, the nature of the deficiency, any actions required and an implementation priority.

Actions raised during inspections will be documented on the *Weekly Environmental Site Checklist* and will be issued formally through the Project's document management system to the relevant Contractor for action. If they represent an actual or potential significant environmental risk, these issues shall be reviewed at the Project Planning meetings and will have non-conformances raised if not closed out in the nominated timeframe (Nonconformance Report).

8.1.2 Contractor environmental inspections

In addition to the joint weekly environmental site inspection with AIE, the Contractor will be required to undertake daily site environmental inspections, targeting key environmental risks commensurate with the activity being undertaken. The daily environmental site inspection will be documented on a checklist or similar to be prepared and completed by the Contractor.

Copies of the daily environmental site inspection records are to be provide to AIE on request.

8.1.3 EPL inspection requirements

In accordance with Condition O4.4 of the EPL No 21529, the Contractor will undertake wet-weather inspections daily during periods of rainfall and within 24 hours of cessation of a rainfall event causing runoff to occur on or from the premises (based on site observation, this equates to 10 millimetres of rainfall in a 24 hour period).

The Principal Contractor must record all such inspections including observations and works undertaken to repair and/or maintain erosion and sediment controls.

8.2 Monitoring

Monitoring will be undertaken to validate the impacts predicted for the work, to measure the effectiveness of management plans, environmental controls, and implementation of this EMS, and to address approval requirements. The monitoring requirements for required aspects are included in the relevant Sub-Plans and are summarised in Table 8.1. Monitoring locations required under the EPL No 21529 are included in Figure 2.2.

All environmental monitoring equipment shall be maintained and calibrated according to manufacturer's specifications and appropriate records kept.

Table 8.1 Summary of environmental monitoring required by Infrastructure Approval (SSI 9471) and EPL No 21529

Reference	Description	Relevant sub-plan	Reporting requirements
Infrastructure Approval SSI-9471 Schedule 3, Condition 9 EPL No. 21529 Condition E1.1	<p>Emplacement Cell Report</p> <p>Prior to the commencement of dredging, disposal and emplacement activities, the Proponent must prepare an Emplacement Cell Report to the satisfaction of the Planning Secretary. This report must be prepared in consultation with the EPA, NSW Ports, DPIE Water, the PANSW and an EPA accredited site auditor, and must:</p> <ul style="list-style-type: none"> (a) be prepared by a suitably qualified and experienced expert/s approved by the Planning Secretary (b) include details of the emplacement cell design and construction methodology, including the final shape, depth, and capping (c) demonstrate that the design would achieve the performance objectives in condition 8 of this schedule, including a description of the measures to be implemented to achieve this outcome (d) includes details of the stormwater drainage design for managing runoff and tidal flows from and into stormwater systems discharging into the disposal area, including the Salt Creek and Darcy Road drains (e) describe the contingency measures that would be implemented in the event of a failure or deficiency; and (f) include details of the process and timing for transferring responsibility for the long-term monitoring and maintenance of the emplacement cells to NSW Ports or another entity. 	Emplacement Cell Report	Not applicable to Stage 2A.
Infrastructure Approval SSI-9471 Schedule 3, Condition 11(c) EPL No 21529 Condition P1.2 Condition L3.4 Condition L3.6 Condition M1.1-1.3 Condition M2.3 Condition M5.1	<p>a Water Quality Monitoring Plan that includes:</p> <ul style="list-style-type: none"> – a description of the water quality monitoring that would be undertaken to monitor turbidity and pollutant concentrations surrounding dredging and disposal works, including real-time turbidity monitoring – a broader program to monitor harbour-wide water quality trends and the ecological health of Port Kembla Harbour – objectives and performance criteria, including trigger levels for investigating any potential or actual adverse impacts associated with construction activities on water quality and the ecology of Port Kembla Harbour – a plan to respond to any exceedances of the trigger levels and/or performance criteria, and minimise any adverse water quality impacts of the development; and – reporting procedures for the results of the monitoring program. 	WQMP	<ul style="list-style-type: none"> – Turbidity and pollutant concentrations, including real-time turbidity monitoring. – Harbour-wide water quality and ecological health. – Trigger levels and plan to respond to exceedances of trigger levels. – Reporting procedures for results of monitoring program. – Monitoring requirements as per the EPL No. 21529 – Reporting requirements as per the EPL No. 21529.
Infrastructure Approval SSI-9471 Schedule 3, Condition 33 EPL No 21529 Condition P1.1 Condition O3.1 Condition M1.1-1.3 Condition M2.2-2.2	<p>Air Quality Management Plan</p> <p>Prior to commencement of construction, unless otherwise agreed by the Secretary, the Proponent must prepare an Air Quality Management Plan for the development to the satisfaction of the Secretary. This plan must:</p> <ul style="list-style-type: none"> (a) be prepared in consultation with the EPA (b) describe the measures that would be implemented to ensure compliance with the 	AQMP	<ul style="list-style-type: none"> – Objectives and performance criteria. – Emissions trigger levels. – Management measures for air emissions. – Response plan to exceedance of trigger levels. – Detailed description of

Reference	Description	Relevant sub-plan	Reporting requirements
Condition M3.1-3.2 Condition M4	<p>conditions of this approval and EPL including:</p> <ul style="list-style-type: none"> objectives and performance criteria, including trigger levels for investigating any potential or actual adverse impacts associated with air emissions proactive and reactive management measures for air emissions a plan to respond to any exceedances of the trigger levels and/or performance criteria, and minimise any adverse air quality impacts of the development <p>(c) include an air quality monitoring program that includes:</p> <ul style="list-style-type: none"> a detailed description of the air quality monitoring that would be undertaken real-time dust monitoring during construction and point source discharge monitoring from the FSRU during operations a gas leak detection and repair program*; and reporting procedures for the results of the monitoring program 		<p>the air quality monitoring, including real-time dust monitoring and point source discharge monitoring.</p> <ul style="list-style-type: none"> Reporting procedures for results of monitoring program Reporting requirements as per the EPL No. 21529.
Infrastructure Approval SSI-9471 Schedule 3, Condition 35 EPL No 21529 Condition P1.3 Condition M1.1-1.3 Condition M6.1-6.2	<p>Meteorology</p> <p>Prior to commencement of construction, the Proponent must ensure that there is a suitable meteorological station operating in the vicinity of the site. The meteorological station must be maintained so as to be capable of continuously monitoring the following parameters: air temperature, wind direction, wind speed, rainfall, relative humidity, and any requirement specified in an EPL. Unless a suitable alternative is approved by the Secretary following consultation with the EPA, the meteorological station must be capable of monitoring weather conditions in accordance with:</p> <ol style="list-style-type: none"> AM-1 Guide to Siting of Sampling Units (AS 2922-1987) AM-2 Guide for Horizontal Measurement of Wind for Air Quality Applications (AS 2923-1987); and AM-4 On-Site Meteorological Monitoring Program Guidance for Regulatory Modelling Applications. 	AQMP	<p>Meteorological station to continuously monitor:</p> <ul style="list-style-type: none"> Air temperature. Wind direction. Wind speed. Rainfall. Relative humidity. Monitoring requirements as per the EPL No 21529.
EIS C08	<p>A dredge management plan will be prepared prior to the dredging of Berth 101, outlining the contamination management measures, including:</p> <ul style="list-style-type: none"> surface water monitoring, which will be implemented during the course of the works to minimise potential impacts to the receiving waters use of a turbidity curtain to restrict the generation of turbidity plumes and localise any water quality issues 	DEMP	Not applicable to Stage 2A

* Not applicable to Stage 2A.

8.3 Auditing

AIE will conduct internal audits at frequencies as determined in the risk-based auditing schedule. The purpose of auditing is to verify compliance with:

- This EMS and associated Sub-Plans.

- Compliance with the requirements of relevant components to this EMS, including but not limited to, site inspection compliance, document control / management, non-compliance, and incident management etc.
- Monitoring and reporting requirements as set out under EPL No. 21529.

The undertaking of the internal audits will be in accordance with the Project's risk-based internal audit schedule, developed to assess the risk associated with various audit elements with an assigned auditing frequency based on perceived risk.

A brief audit report / table will be prepared for each internal audit, documenting the audit outcome and compliance status against each of the key elements of the audit. The purpose of the internal audits is to assist in the identification of non-compliances and environmental management gaps, with an overall objective of identifying improvement opportunities and driving a process of continual improvement. Any observed non-compliances and improvement opportunities will be managed in accordance with Section 8.6.

8.4 Environmental reporting

8.4.1 DPIE reporting

Regular reports on compliance and other matters will be provided during the construction phase of the Project. This will include reporting to the DPIE in accordance with Schedule 4, Conditions 7 and 8 of the Infrastructure Approval (SSI 9471), with specific reference to the *Compliance Reporting Post Approval Requirements* (2020). Monthly reporting will be provided with results from the air and water monitoring program as required by the Infrastructure Approval (SSI 9471). In addition, DPIE will be notified in writing of the date of commencement of each of the relevant phases of the Project in accordance with Schedule 2, Condition 8 of the Infrastructure Approval (SSI 9471).

8.4.2 EPL Annual Return

In accordance with Condition R1 of the EPL No. 21529, AIE are responsible for the preparation and submission of an Annual Return to the EPA comprising the following:

- Statement of Compliance,
- Monitoring and Complaints Summary,
- Statement of Compliance of Licence Conditions,
- Statement of Compliance regarding the requirement to prepare a PIRMP Management Plan (refer to Section 9.2)
- Statement of Compliance regarding the requirement to publish pollution monitoring data; and
- Statement of Compliance regarding the implementation of the EMS and associated practices.

8.4.3 Other reporting requirements

A monthly environmental monitoring report will be developed for each calendar month which will include details of the monitoring results and frequencies and inclusion of any exceedance of EPL No. 21529 limits / criteria. A copy of the monthly environmental monitoring report will be made available on the AIE Project website.

Specific monitoring requirements outlined in Infrastructure Approval (SSI 9471) and EPL No 21529 are outlined in Section 8.2. Details of reporting results/data are included in the applicable Sub-Plan, as per Table 8.1. In addition to monitoring data reported in monthly reports as per Section 8.4.1, EPL No 21529 monitoring results will also be included.

In addition, refer to Section 9.1 for reporting requirements associated with notifiable environmental incidents, and Section 8.6 with regards to the reporting requirements for non-compliance issues.

8.5 Compliance tracking register

A Compliance Tracking Register has been developed as a monitoring tool to assist with the compliance reporting requirement as set out under Condition 7, Schedule 4 of the Infrastructure Approval (SSI 9471) as follows:

Compliance Reporting

The proponent must provide regular compliance reports to the Department on the development in accordance with the relevant requirements of the Department's guideline Compliance Reporting Post Approval Requirements (2020), or its most recent edition.

The compliance tracking register includes a breakdown of the requirements from the following key approval and project documents:

- Infrastructure Approval (SSI 9471).
- EPL No. 21529.
- EMS and Sub-Plan requirements.

The Compliance Tracking Register includes tabulation of reference conditions, the requirements, responsibility, status (i.e., ongoing, close-out, not triggered, etc.) and supporting evidence where required.

A routine review of the Compliance Tracking Register is undertaken by the AIE HSE Manager (or delegate) with input sought from the relevant contractors as required. The Compliance Tracking is a live document which is kept up to date for each stage of the construction works.

8.6 Non-compliance, corrective, and preventive actions

Non-compliances or potential non-compliances are situations or events that do not comply with the requirements and or safeguards / procedures stipulated in this EMS or the associated Sub-Plans.

Non-compliances or potential non-compliances may be identified in any of the following situations:

- As part of site inspections, supervision or monitoring of construction activities.
- During internal audits.
- Following justified / supported verbal or written third party complaints.

All non-compliances will be managed and reported using the non-compliance function of the Project's document management system. Each non-compliance event and follow-up action will be documented and traceable, including identification of key dates and responsible personnel.

All non-compliance related correspondence will be copied to the AIE HSE Manager who will be responsible for ensuring that they are investigated and the appropriate / agreed corrective and preventive actions are taken.

Corrective and preventive actions will be identified and recorded on the non-compliance of the Project's document management system. Corrective and preventive actions provide the mechanism to:

- Undertake corrective (reactive) action to eliminate the causes of non-compliance.
- Undertake preventive (proactive) action to eliminate potential causes of non-compliance.
- Suggest improvements to the EMS.

Corrective actions recorded against public complaints are addressed in Section 7.

The AIE HSE Manager in consultation with the person responsible for the non-compliance activity shall determine:

- How the non-compliance can be successfully remedied to ensure sound environmental management and ongoing compliance with environmental management requirements.
- Whether the regulatory authority requires to be notified of the non-compliance.
- Notify the complainant of any action taken to address the complaint, where appropriate.

The AIE HSE Manager can respond to complaints if required.

At regular intervals the AIE HSE Manager (or nominated delegate) reviews outstanding non-compliance, assesses progress or reasons for lack of, and arranges further actions as required, to ensure completion in a reasonable timeframe.

8.6.1 DPIE non-compliance notification

The Department must be notified in writing to compliance@planning.nsw.gov.au within 7 days after the identification of any non-compliance issue. The notification must identify the development, including the application

number, set out the condition of approval that the development is non-compliant with, the way in which it does not comply, the reasons for the non-compliance (if known) and what actions have been taken, or will be taken, to address the non - compliance.

9. Incident management and emergency response

9.1 Incident management

9.1.1 Overview

Incidents are defined as an occurrence or set of circumstances that causes or threatens to cause material harm and which may or may not be or cause a non-compliance. The consequences of such incidents may result in material environmental harm, damage, or asset loss. 'Near misses' are extraordinary events that could have reasonably resulted in an incident.

All incidents including those of the Principal Contractor, its subcontractors, and visitors that occur during the undertaking of the construction works for the Project will be managed to satisfy the requirements of AIE's Incident Reporting and Investigation System Requirements. Whilst it is noted that key Contractors will be implementing their own environmental management system procedures and processes, AIE will be responsible for ensuring that these systems and processes satisfy the requirements of the AIE EMS, including the incident management components. The Contractor will be responsible for providing all necessary documentation with regards to the incident investigation and close-out actions where required. The timing of the provision of this documentation is to align with the AIE requirements.

The AIE HSE Manager must be notified immediately of any environmental incident or near miss. These may include, but are not limited to the following:

- Exceedance of monitoring criteria as required under the Project EPL (EPL No. 21529) (refer to the individual Sub-Plans for specific criteria and incident reporting requirements for individual environmental aspect such as air quality, water quality, traffic management, waste and resource management and noise and vibration management).
- Spill of any dangerous goods or hazardous substance to ground or water.
- Substantiated complaints received from members of the community or regulatory authorities.
- Regulatory breaches such as fines, prosecutions, improvement notices, breaches of licence conditions.
- All incidents of third-party property damage or loss.
- Incidents involving impact or potential damage to items or places of cultural heritage significance.
- Land-based off-site sediment loss to the environment, including sediment tracking onto the roadway.

The AIE HSE Manager will be responsible for regulatory notification of all notifiable environmental incidents (refer to Section 9.1.2 for notifiable incidents). All environmental incidents will be reported immediately to DPIE in writing via the Planning Portal after AIE becomes aware of the incident, as per Schedule 4 Condition 5 of the Infrastructure Approval (SSI 9471). The notification must identify the development, including the application number, and set out the location and nature of the incident.

In the event of a notifiable non-compliance incident arising, the Principal Contractor will notify the AIE HSE Manager immediately to allow the AIE HSE Manager to notify DPIE in writing (via the Planning Portal) within 7 days of AIE becoming aware of the non-compliance, as per Schedule 4 Condition 6 of the Infrastructure Approval (SSI 9471). The notification must identify the development, including the application number, set out the condition of approval that the development is non-compliant with, the way in which it does not comply, the reasons for the non-compliance (if known) and what actions have been taken, or will be taken, to address the non-compliance.

9.1.2 Notifiable incident under the POEO Act

In the event of a Notifiable Incident as defined under the POEO Act, AIE is responsible for immediately notifying the EPA, and any other relevant authority, of pollution incidents on or around the site via the EPA Environment Line (telephone 131 555) in accordance with Part 5.7 of the POEO Act. The circumstances where this will take place include:

- *If the actual or potential harm to the health or safety of human beings or ecosystems is not trivial.*

- *If actual or potential loss or property damage (including clean-up costs) associated with an environmental incident exceeds \$10,000.*

Follow-up written notification to the EPA and any other relevant authorities will be required in accordance with the POEO Act and requirements of the EPA. This includes the provision of written details of the notification to the EPA within 7 days of the date on which the incident occurred.

All notifiable incidents will also be managed, documented, and reported in accordance with the AIE *Incident Reporting and Investigation System Requirement*.

In addition, an authorised officer of the EPA has the right to request a written report (in accordance with Condition R3 of the EPL No. 21529) if they suspect on reasonable grounds that an event has occurred at the licensed premises which has caused, is causing or is likely to cause material harm to the environment (whether the harm occurs on or off premises to which the licence applies). The written report is to address all the requirements under Condition R3 of the EPL.

9.1.3 Notifiable incident under the Infrastructure Approval (SSI-9471)

In accordance with Condition 5 of Schedule 4, DPIE must be notified in writing to compliance@planning.nsw.gov.au immediately after AIE becomes aware of an incident on site. The Infrastructure Approval (SSI 9471) defines an incident as an occurrence or set of circumstances that causes or threatens to cause material harm and which may or may not be or cause a non-compliance. Furthermore, material harm is defined as unauthorised harm that:

- *Involves actual or potential harm to the health or safety of human beings or to the environment 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)*

9.2 Emergency response

Actual or potential emergency situations will vary in type and severity. The required level of response and notification will be at the discretion of the AIE Construction Manager in consultation with the AIE HSE Manager.

Any emergency situation may require only isolated containment and control or may require the complete evacuation of the site and notification of relevant emergency services. Consideration should be made of the response requirements for different situations. If at any time there is uncertainty on how to proceed, response should be for the worst possible scenario. Ultimately, the AIE Construction Manager or representative has authority and responsibility to instigate an evacuation if he/she feels it is warranted.

In the event of an emergency, the following plans listed in Table 9.1 shall be consulted and implemented, as relevant.

Table 9.1 *Emergency plans*

Plan	Reference	Application
Principal Contractor Local Emergency Response Plan	-	Principal Contractor's emergency response plan implemented in the event of any incident occurring during a Project activity as per the Contractor's policies and management framework.
AIE Port Kembla Gas Terminal Emergency Spill Plan	PKGT-AIE-PRO-012	Developed as a Sub-Plan to this EMS to be implemented detailing: <ul style="list-style-type: none"> – Response plans in the event of land or water-based spill events. – Inspections, notification and incident management requirements in accordance with the Infrastructure Approval (SSI 9471) and EPL No 21529 in relation to spills.
PIRMP	PKGT-AIE-PRO-007	Implemented immediately in the event of a pollution incident occurring during a Project activity. The

Plan	Reference	Application
		<p>PIRMP:</p> <ul style="list-style-type: none"> – Outlines the actions to be taken during or immediately after a pollution incident. – Lists details of relevant authorities to be notified, as required. – Outlines community and neighbour notification details, as required.
AIE Emergency Management Procedures	PKGT-AIE-PRO-014	<p>Implemented immediately in the event of any emergency incident occurring during the Project. Procedures include:</p> <ul style="list-style-type: none"> – Types of emergencies and the detailed steps to be taken in response. – Notification details to relevant authorities and AIE Project team. – Incident response to follow up from incident and preventative actions to be implemented, if applicable.

10. Document management and review

10.1 Record management

Records and registers specified in the Sub-Plans for the Project shall be maintained as per the applicable Infrastructure Approval (SSI 9471) and EPL No 21529 conditions. Records to be kept may include but will not be limited to the following:

- Environmental Inspection Checklist.
- Environment Reporting.
- Environmental Monitoring Reports / Records.
- Fauna and Weed Register.
- Internal Audit Reports.
- Incident Reports and Register.
- Toolbox Talk Records.
- Induction Presentation and Register.
- Environmental Activities Safe Work Method Statement (SWMS).
- Corrective Actions Register.
- Waste and Resource Register.
- Material Tracking Register.
- Training Register / Matrix.
- Complaints Register.

10.2 Review and revision of EMS

This EMS will be reviewed and updated, as required under Condition 3 of Schedule 4 of Infrastructure Approval (SSI 9471) to ensure the objectives of the applicable approval conditions contained within are being met throughout Stage 2A.

In addition, as required under Condition 4 of Schedule 4 of Infrastructure Approval (SSI 9471), the EMS and associated sub-plans must be reviewed, and if necessary, revised within 3 months (unless otherwise agreed with DPIE) for any of the following:

- Following the submission of an incident report as per Condition 5, Schedule 4 in Infrastructure Approval (SSI 9471) (refer to Section 9).
- Following approval of any modification to the conditions of approval outlined in Infrastructure Approval (SSI 9471).
- At the direction of the Planning Secretary as per Condition 4, Schedule 2 in Infrastructure Approval (SSI 9471).

Where a review leads to a revision of this plan, within four weeks the revised EMS will be submitted to the Planning Secretary for approval unless otherwise agreed with the Planning Secretary.

10.3 Access to information

AIE will make the following information publicly available on the PKGT website, as per Schedule 4, Condition 12 of the Infrastructure Approval (SSI 9471) and the requirements as set-out under the Project EPL (No. 21529):

- The PKGT EIS.
- Current statutory approvals for the Project.
- Approved strategies, plans or programs required under the conditions of Infrastructure Approval (SSI 9471).

- A comprehensive summary of the monitoring results of the development, reported in accordance with the specification of any conditions, or any approved plans and programs relating to Infrastructure Approval (SSI 9471).
- A summary of complaints (updated monthly).
- Any independent environmental audit, and responses to the recommendations in any audit.
- The approved premises map (EPL No. 21259, Condition A2.4).
- PIRMP (EPL No. 21529, Condition E2).
- Any other matter required by the Planning Secretary.

This information will be kept up to date by AIE when required.



References

AS/NZS ISO 14001:2004 *Environmental Management Systems*

AS 2885 *The Standard for Gas and Liquid Petroleum Pipelines.*

AS1742.3 *Manual of uniform traffic control devices, Part 3: Traffic control for works on roads.*

AS 2436:1981 *Guide to noise control on construction, maintenance and demolition sites.*

DAWR 2017, *Australian Ballast Water Management Requirements.*

DECC 2008, *Hygiene protocols for the control of diseases in Australian frogs.*

DECC 2008, *Managing Urban Stormwater: Soil and Construction Volume 2A – Installation of Service.*

Department of Planning, Transport and Infrastructure (SA) 2012, *Underwater Piling Noise Guidelines.*

DoEE 2017, *The Australian Guidelines for Whale and Dolphin Watching.*

DPIE 2020, *Compliance Reporting Post Approval Requirements.*

Environmental Protection Licence No. 21529, dated 5 October 2021.

GHD 2018, *Port Kembla Gas Terminal Environmental Impact Statement.*

Infrastructure Approval SSI 9471, dated 24th April 2019.

ISO 14001:2015 *Environmental Management Systems.*

ISO 18001/45001:2009 *Occupational Health and Safety and ISO 9001 for Quality Management Systems.*

Landcom 2004, *Managing Urban Stormwater: Soil and Construction Volume 1.*

NSW EPA 2014, *Waste Classification Guidelines, Part 1: Classifying Waste and Part 4: Acid Sulphate Soils prior to off-site disposal*

Appendices

Appendix A

AIE Environment Policy



Health, Safety and Environment Policy

Australian Industrial Energy (AIE) cares about the wellbeing of our people, the community, and our impact on the environment. We are committed to conducting our business in a way that minimises harm to the health and safety of people and has no unforeseen impact on the environments in which we operate

Our values underpin the way in which we meet this commitment.

Safety remains front of mind for AIE. If our workplace is not safe, we should not operate. We recognise that risk is present in every task we do. We will take the time to identify and understand these risks and manage them safely and responsibly. Our mantra is “Look out for your mates and yourself” Plan for their wellbeing, and for yours.

AIE **Empowers** and expects all people in the workplace, regardless of role, to “Stop and Step Back” if they see an unsafe workplace situation. We continue only when satisfied we can do so safely and responsibly.

All people working on AIE sites are valued as **Family**. They will be provided with training, equipment and support to undertake their work. All incidents will be investigated, and the people involved will be listened to and treated fairly and with respect.

We have the **Humility** to accept personal coaching and feedback about behaviours which may put us at risk of injury or illness.

AIE acts with **Integrity**. We will comply with all relevant workplace health, safety and environmental laws. We will report, investigate and learn from all workplace incidents, and from any near misses. We will take responsibility for our actions and we will work continuously to improve our processes.

AIE is **Enthusiastic** about protecting our people and the environment by demonstrating initiatives to challenge, communicate and consider the safest way to work and by integrating relevant objectives into every day and strategic business planning processes.

AIE knows that Health, Safety and Environmental performance will only improve when we **Generate Ideas**. AIE is committed to consulting and communicating with our workers. We work together effectively, welcome feedback and recognise that we can always improve. We are open and transparent about our performance and relentless in learning from our experiences.

AIE sets **Stretch Targets** in relation to health, safety, and environmental performance in the workplace. Stretch Targets challenge us to do better.

AIE will work to build a workplace culture which supports safe operations. We have the **Courage** to challenge ourselves and promote a positive workplace culture and the **Determination** to succeed.

Appendix B

Approved Staging Letter

Alexandra Lovell
HSE Manager
Australian Industrial Energy (AIE)
PO Box 1070
Wollongong New South Wales 2500

27/10/2021

Dear Mrs. Lovell

Port Kembla Gas (SSI-9471) -Revised Staging Request

I refer to your Revised Staging Request letter submitted on 21 September 2021 in accordance with Condition 3 of Schedule 4 of the Infrastructure Approval for the Port Kembla Gas Terminal (SSI-9471).

The Department has carefully reviewed the document and is satisfied that the proposed, revised construction staging of the project is consistent with previous approval documentation. Proposed stages, proposed commencement dates and associated summaries of work activities are provided in the table below.

Stage	Package	Proposed commencement	Activities
1	Early Enabling Works	May 2021	Early Enabling Works. Demolition of Berth 101, removal of structures and land-based excavation works, and Cone Penetration Testing (CPT) in the Outer Harbour to inform Emplacement Cell design and relocation of Bunker Oil Pipeline (as approved in Modification 3).
2A	Marine Berth Construction – Land Based	January 2022	Completion of excavation works undertaken during Stage 1. Transport of spoil materials for storage at the Emplacement Cell Construction Site.
		February 2022	Quay wall construction. Installation of communications conduit, potable water line, and 11kV power cable and Padmount (PM) Substation within MBD Site Compound.
		April 2022	Construction of the Onshore Receiving Facilities (ORF), which comprises three areas: Wharf Topside Area; Utility Area; and Common Area.
		June 2022	Pipeline construction and associated ancillary infrastructure within MBD Site Compound delivered as part of ORF scope
2B	Marine Berth Construction and Dredging – Land and Marine Based	March 2022	Continuation of Stage 2A with addition of the following activities: Excavation/dredging and construction of the Emplacement Cell in the Outer Harbour Marine based construction activities including installation of navigational aids and revetment shore protection.

Stage	Package	Proposed commencement	Activities
3	Pipeline Installation including tie-ins (NGP)	June 2022	Construction of an 18" onshore natural gas pipeline approximately 6.3km in length from the Berth 101 site boundary to Tie-in Facility at Cringila for connection to the Eastern Gas Pipeline Pipeline construction to occur concurrently with Jemena, subject to separate set of management plans.

Please note, to date the Department has currently only approved management plans for Stage 1. No construction of any other stages may commence until all relevant management plans have been revised (to reflect each stage's associated work activities), submitted and approved.

If you wish to discuss the matter further, please contact Wayne Jones on (02) 6575 3406.

Yours sincerely



Stephen O'Donoghue
Director Resource Assessments

As nominee of the Secretary



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