# PORT KEMBLA GAS TERMINAL
# Vegetation Clearing Procedure

## Document Number
## SCSB-AIE-PKGT-ENV-PRO-002

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# Table of Contents

**ACRONYMS**

| Term | Definition |
|---|---|
| AIE | Australian Industrial Energy |
| APGA | Australian Pipeline and Gas Association |
| BCT | Biodiversity Conservation Trust |
| CEMP | Construction Environmental Management Plan |
| CSSI | Critical State Significant Infrastructure |
| EIS | Environmental Impact Statement |
| EP&A Act | Environmental Planning and Assessment Act 1979 |
| LNG | Liquified Natural Gas |
| NSW | New South Wales |
| OEH | Office of Environment and Heritage's |
| PKGT | Port Kembla Gas Terminal |
| SCSB JV | Spiecapag Soletanche Bachy Joint Venture |
| SEPP | State Environmental Planning Policy |
| SRD | State and Regional Development |
| SWMS | Safe Work Method Statement |

## 1.  Introduction

This Vegetation Clearing Procedure has been developed as a sub-plan document to the Project's is Construction Environmental Management Plan (CEMP). This Procedure interfaces with the other associated sub-plans, which together describe the overall project management system for the Port Kembla Gas Terminal (PKGT) project during the construction phase.

This Plan has been prepared to address the requirements of the Minister's Infrastructure Approval conditions (SSI 9471) and meet the expectations set out in the project Environmental Impact Statement (EIS).

### 1.1.      PROJECT BACKGROUND

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

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) and Schedule 5 of the State Environmental Planning Policy (SEPP) State and Regional Development (SRD). The Project received Infrastructure Approval from the Minister for Planning and Public Spaces on the 24th of April 2019.

The Project comprises four key components:

- LNG carrier vessel;

- Floating storage and re-gasification unit;

- Wharf facilities; and

- Pipeline.

### 1.2.      EXISTING ENVIRONMENT

**The project site contains prominently cleared land comprising exotic grass species, planted native/exotic flora in varying states of maturity and environmental weeds. Only a single small area of native vegetation occurs (approx. 0.25ha) within the project site requiring clearing to facilitate the construction of the 6.3km pipeline.**

**Table 1:  Vegetation clearing requirements**

| Vegetation zone | Conservation significance | Area w/in project site (ha) |
|---|---|---|
| 1326_Moderategood (Woollybutt – White Stringybark – Forest Red Gum grassy woodland) | Does not comprise an occurrence of a listed TEC | 0.25 |
| Non-native vegetation | n/a | 14.30 |

Pipeline construction corridor will avoid removal of established tree planting along road corridors (i.e. Springhill road).

## 2. PURPOSE AND SCOPE

This Procedure has been developed by the Spiecapag Soletanche Bachy Joint Venture (SCSB JV) to cover all clearing activities associated with the construction of the Project.

Vegetation clearing is a necessary part of most construction activities. Disturbance to vegetation can lead to environmental impacts such as soil degradation, erosion, disturbance and removal of native flora species and loss or fragmentation of habitat for native fauna or weed invasion. Other likely environmental impacts from vegetation clearing may include air emissions, dust, noise and wastes.

However, it is possible to mitigate and manage many of these impacts though disciplined site management and appropriate protections. The Procedure is in place to:

- Ensure the JV implement industry best practice to minimise the impact to native flora and fauna as of a result from land clearing activities, and

- Comply with the requirements of the EIS; Environmental Protection Licence; Infrastructure Approval CSSI9471 and the Australian Pipeline and Gas Association (APGA) Code of Environmental Practice.

The Procedure does not cover progressive rehabilitation or post-construction rehabilitation activities which are covered by the Projects Rehabilitation Management Plan.

## 3. LEGISLATIVE REQUIREMENTS

| Legislation and Regulation | Relevance |
|---|---|
| **Federal** | |
| Environment Protection Biodiversity Conservation Act, 1999 (EPBC Act) | Provides for the protection of matters of national environmental significance including species, populations, communities and their habitat that could be impacted by the work. |

| State | |
|---|---|
| Environmental Planning and Assessment Act 1979 (EP&A Act) | Describes the processes for consenting development in NSW, managing land use and implementing environmental planning instruments. Describes certain permitting and licencing streaming and exclusion provisions that will apply to the work.<br><br>This project has been approved under Section 5.19 of the EP&A Act as Critical State Significant Infrastructure (CSSI). SSI 9471. |
| Biodiversity Conservation Act 2016 | The 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.<br><br>Approval Condition 20 - Prior to the commencement of construction, unless otherwise agreed by the Planning Secretary, the Proponent must retire biodiversity credits of a number and class specified in the Infrastructure Approval in consultation with OEH and to the satisfaction of Biodiversity Conservation Trust (BCT).<br><br>The retirement of these credits must be carried out in accordance with the NSW Biodiversity Offsets Scheme and can be achieved by:<br><br>(a) acquiring or retiring 'biodiversity credits' within the meaning of the Biodiversity Conservation Act 2016;<br><br>(b) making payments into an offset fund that has been developed by the NSW Government; or<br><br>(c) funding a biodiversity conservation action that benefits the threatened entity impacted by the development, consistent with the 'Ancillary Rules: Biodiversity conservation actions'. |

## 3.1. INFRASTRUCTURE APPROVAL REQUIREMENTS

| Ref Number | Condition requirements |
|---|---|
| 1 | In addition to meeting the specific performance criteria established under this approval, the Proponent must implement all reasonable and feasible measures to prevent, and if prevention is not reasonable or feasible, minimise any material harm to the environment that may result from the construction and operation of the development, and any rehabilitation required under this approval. |
| 2 | The Proponent must carry out the development: <br><br> (a) generally, in accordance with the EIS; and <br><br> (b) in accordance with the conditions of this approval. |
| 11 | The Proponent must design and construct the gas pipeline in accordance with the relevant Australian Standards, in particular AS2885 Pipelines – Gas and Liquid Petroleum, or its latest version. |
| 20 | As noted in Section 4. Biodiversity offsets will be obtained by AIE prior to construction. |

## 4. VEGETATION CLEARING PROCEDURE

| Vegetation Clearing Procedure | |
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| **Aim** | *To implement industry best practices to minimise impact to native flora and fauna during land clearing activities and to comply with all AIE and regulatory requirements.* |
| **Potential Impacts** | • Disturbance or removal of significant flora or wildlife habitat <br><br> • Habitat fragmentation <br><br> • Loss of fauna individuals <br><br> • Introduction of pests, disease and weeds of significance <br><br> • Disturbance to cultural heritage sites, or loss of heritage values <br><br> • Soil compaction, erosion and sediment release to land and water <br><br> • Disturbance of problematic soils such as dispersive, acid sulphate or contaminated soils |
| **Management Objectives** | • To manage clearing and minimise disturbance to flora as much as possible <br><br> • To minimise impacts on threatened species and native fauna <br><br> • To minimise impacts on soil and water |

## Vegetation Clearing Procedure

- To minimise impacts on visual amenity

- To minimise or prevent the introduction or spread of weeds of significance from construction activities

- To minimise impacts on sites of cultural and historic heritage significance

- To optimise promote and maintain stable vegetation cover in reinstated areas

| Measure/Requirement | Responsibility | Reference/Approval Requirements | Evidence |
|---|---|---|---|
| **General CEMP / Approval Requirements** | | | |
| Pre-construction 'walk-through' to record areas of value and sensitivity (including site access/egress). | Environment Manager | Industry Best Practise | Pre-clearance Report |
| Environmental induction will include guidance on expected behaviour and clearing guidance. | Environment Manager | Industry Best Practise | Induction Records |
| Clearing crew will be provided with a specific pre-start on extent of clearing and required management measures in proximity to sensitive areas and identified areas of native vegetation. | Environment Manager | Industry Best Practise | Pre-start record |
| Where possible, mature vegetation within the pipeline construction corridor will be retained (with arborist advice where necessary). | Environment Manager Arborist | Industry Best Practise | Arborist Report |
| During clearing activities vegetation shall be cleared separately and stockpiled adjacent to the cleared area to facilitate re-spreading. Vegetation clearing should avoid damage to adjacent live vegetation. | Environment Manager | Industry Best Practise | Inspection Reports |
| Ensure that vegetation clearing protocols include appropriately stockpiling cleared vegetation, topsoil and trench spoil to facilitate rehabilitation. | Environment Manager | Industry Best Practise | Inspection Reports |
| **Trained Ecologist** | | | |
| A suitably trained ecologist will be available during construction activities including clearing activities which have the potential to harm fauna, in particular, clear and grade, trenching and reinstatement activities. | Environment Manager Ecologist | EIS condition TB3 | Daily Reports |

| **Vegetation Clearing Procedure** | | | |
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| The ecologist will also undertake pre-clearance surveys including habitat assessment and targeted fauna surveys within 2 weeks of clearing activities and visibly mark identified habitat features and weeds of significance. | Environment Manager<br><br>Ecologist | EIS condition TB3 | Daily Reports |
| 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. | Environment Manager<br><br>Ecologist | EIS condition TB3 | Daily Reports |
| A trained ecologist will be present for construction activities that may impact frog habitat which includes dewatering / removal of detention basins (x4) and trenching immediately adjacent to Typha drainage line. | Environment Manager | EIS condition TB3 | Record of credentials |
| **Pipeline Clear and Grade** | | | |
| Approved disturbance areas are to be delineated prior to the commencement of clear and grade activities. | Environment Manager | Industry Best Practise | Inspection Reports |
| Habitat and mature trees are to be avoided where possible. | Environment Manager | Industry Best Practise | Inspection Reports |
| The following clearing methods will be employed when clearing habitat trees containing a feature (e.g. hollows, openings, cracks, and loose bark) suspected to be used by bats, birds or arboreal animals:<br><br>• immediately prior to clearance, the tree will be shaken with machinery to encourage animals to move to an alternative tree;<br><br>• the tree will be lowered slowly using an excavator (or similar), with the tree hollow facing upwards (to enable animals to exit);<br><br>• the felled tree will be visually inspected for animals; | Environment Manager<br><br>Ecologist | Industry Best Practise | Daily Reports |

## Vegetation Clearing Procedure

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| • the felled tree will be left in situ overnight to enable remaining animals to exit at night. | | | |
| Vegetation shall be cleared separately to topsoil stripping and stockpiled adjacent to the cleared area within the approved RoW to facilitate re-spreading. Clearing should avoid damage to adjacent live vegetation. | Environment Manager | Industry Best Practise | Inspection Reports |
| Topsoil material is to be stripped up to the project nominated 100mm depth or visible topsoil profile layer. | Environment Manager | Industry Best Practise | Inspection Reports |

### Cultural Heritage

| | | | |
| --- | --- | --- | --- |
| SCSB JV will develop an Unexpected Finds Protocol for approval by the Department of Planning in consultation with the Illawarra Local Aboriginal Land Council prior to works commencing. | Environment Manager | EIS condition H1 and H2 | Approved Protocol |
| Should any artefacts be found, during the Works, SCSB JV will respond in accordance with the Unexpected Finds Protocol. | Environment Manager | EIS condition H1 and H2 | Daily Reports |
| SCSB JV will be required to cease works immediately in the vicinity of the material and isolate the location and implement protection measures to prevent inadvertent damage until such time as the site can be further investigated. | Environment Manager | EIS condition H1 and H2 | Daily Reports |
| As part of the environmental induction, all project staff will be briefed on importance of the Unexpected Finds Protocol and will be taken through its content. This will include guidance on how to identify a heritage item. | Environment Manager | EIS condition H1 and H2 | Induction Records |

### Bushfire Management

| | | | |
| --- | --- | --- | --- |
| Vehicles and machinery fitted with fire extinguishers | Plant Manager | Industry Best Practise | Inspection Reports |
| Vehicles are not to park in long grass where possible | Site Supervisor | Industry Best Practise | Inspection Reports |
| Water trucks or trailers to be available during periods of high fire danger | Project Manager | Industry Best Practise | Inspection Reports |

| Vegetation Clearing Procedure | | | |
|---|---|---|---|
| Dedicated smoking areas and butt bins in locations away from flammable material | Environment Manager | Industry Best Practise | Inspection Reports |
| Assist the NSW Rural Fire Service and emergency services if there is a fire within the site area | Project Manager | Industry Best Practise | Daily Reports |
| Hot works and clearing activities which may ignite a fire cannot be carried out on total fire ban days without written exemption/permit from the NSW Rural Fire Service | Environment Manager | Industry Best Practise | Daily Reports |
| Total Fire Bans and Harvest bans are to be monitored by the JV | Environment Manager | Industry Best Practise | Daily Reports |
| Performance Indicators | • No threatened species deaths caused by project activities<br>• No clearing or ground disturbance outside of the approved construction footprint<br>• All habitat trees inspected and cleared prior to clearing | | |
| Pre and Post Clearance Report | **Pre-clearance Inspection Report**<br>• A pre-clearance inspection report will be produced using the iAuditor application. This report will record details of specific habitat features identified during walk through and proposed management measures for relocation/removal.<br><br>**Post-clearance Report**<br>• A post clearance report will be produced as part of the daily environment report which will confirm that clearance activities are in accordance with approved footprints. | | |
| Reporting and record keeping | • The environment team will produce a daily environment report that will document vegetation clearing and fauna interaction<br>• Fauna Register<br>• Environmental Monitoring Checklist<br>• Corrective Actions Register<br>• Incident Reports and Register<br>• Toolbox Talks and Register<br>• Induction Presentation | | |

## Vegetation Clearing Procedure

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| | • Fauna Management SWMS |
| Monitoring, and Corrective Action | **Monitoring:**<br><br>• Inspections of the construction footprint to verify the correct alignment of the gas pipeline and clearing is within the restricted width of the RoW and other specified areas required for the Project.<br><br>**Auditing:**<br><br>• Audits of the CEMP will be undertaken, and recommendations and corrective actions shall be implemented<br><br>• The JV will assist and facilitate AIE and third-party audits<br><br>**Incidents/Corrective Action:**<br><br>• Incidents will be immediately reported to the environment manager/advisor to ensure they are dealt with in accordance with the CEMP requirements;<br><br>• Non-Compliance and Incident Reporting will be reported to senior management to ensure prompt rectification and change management as required;<br><br>• Complaints will be recorded and appropriately acted upon;<br><br>• Daily inspections and audit results will be used to form a corrective action register. This register will be prioritised in terms of risk to the project and items closed out as soon as possible in accordance with the CEMP. |
| Training | • All personnel shall attend an environmental and Cultural Heritage induction prior to entering the work site.<br><br>• Staff will be inducted and informed of the limits of clearing and the areas of vegetation to be retained (TB2).<br><br>• The environment team will be suitably trained in habitat identification and fauna handling techniques.<br><br>• The environment team will carry out regular fauna and clearing themed toolbox talks and address specific requirements each day in prestart talks. |