



12 | EIS Gas Transmission Pipeline Environmental Management Plan



## Section 12

# EIS Gas Transmission Pipeline Environmental Management Plan

The respondent comments provided in this section have been collated from all stakeholder submission comments relating to EIS Section 12 Gas Transmission Pipeline Environmental Management Plan. Please refer to **Attachment A** for copies of all submissions received.

### 12.1 Introduction

No submissions were received for this section.

### 12.2 Objectives

No submissions were received for this section.

### 12.3 Links to EIS

No submissions were received for this section.

### 12.4 Legislation

No submissions were received for this section.

### 12.5 Santos Environmental, Health and Safety Management System (EHSMS)

No submissions were received for this section.

### 12.6 Responsibilities

No submissions were received for this section.

### 12.7 Monitoring Programs

No submissions were received for this section.

### 12.8 Reporting and Auditing

No submissions were received for this section.

### 12.9 Training and Communications

No submissions were received for this section.

### 12.10 Review

No submissions were received for this section.

### 12.11 Description of Relevant Petroleum Tenures

No submissions were received for this section.

### 12.12 Description of Relevant Petroleum Activities

No submissions were received for this section.

**Section 12**

**EIS Gas Transmission Pipeline Environmental Management Plan**

**12.13 Description of Environmental Values, Potential Impacts and Proposed Management Strategies**

No submissions were received for this section.

**12.14 Rehabilitation Program and Financial Assurance**

No submissions were received for this section.

**12.15 Gas Transmission Pipeline Fields Environmental Plan Overview**

No submissions were received for this section.

**12.16 Environmental Management Plans – Construction**

Respondent Comment

*Department of Environment and Resource Management requested to include sections in the EM plans on marine flora and fauna.*

Santos Response

The following table has been included as part of the, LNG facility Environmental Management Plan (similar tables have been included in the Marine Facilities and Bridge and Service Corridor Environmental Management Plans).

Element/Issue	Marine Flora and Fauna Management
Operational Policy or Management Objective	To limit impacts to the marine flora and fauna as a result of the GLNG project activities to those areas directly affected.
Performance criteria	<ul style="list-style-type: none"> <li>• No unplanned or unapproved damage to marine flora and fauna.</li> <li>• Restoration of disturbed areas to equivalent of surrounding area after construction.</li> </ul>
Implementation Strategy	<p>Strategies outlined below will be implemented to meet the proposed performance criteria for marine flora and fauna depending on the activity being undertaken:</p> <ul style="list-style-type: none"> <li>• Training for personnel of LNG related vessels to identify large aquatic fauna.</li> <li>• Maintain a lookout for Dugongs, turtles, marine mammals and other large fish whilst sailing in Port Curtis.</li> <li>• Lighting for GLNG Project related activities will comply with the Occupational Health and Safety (OSH) guidelines to minimise where practicable light spill on marine fauna.</li> <li>• GLNG Project related vessels will abide by the Port of Gladstone speed restrictions and exclusion zones.</li> <li>• GLNG Project related vessels will be aware of marine mammals in Port Curtis.</li> <li>• A risk assessment of potential marine pest introductions will be carried out for each proposed GLNG Project related vessel.                             <ul style="list-style-type: none"> <li>– For GLNG Project vessels that are considered high risk, inspections of the hulls and/or hoppers may be carried out, and, for overseas vessels, preferably before they depart for Australian waters.</li> </ul> </li> <li>• Santos will promote that all chartered vessels adhere to the International Maritime Organisation's voluntary ballast water management guidelines.</li> <li>• Undertake targeted surveys to confirm absence/presence of water mouse within in any mangrove / or intertidal habitat to be directly disturbed by proposed construction in accordance with relevant guidelines.</li> </ul>

Section 12

EIS Gas Transmission Pipeline Environmental  
Management Plan

Element/Issue	Marine Flora and Fauna Management
	<ul style="list-style-type: none"> <li>• Provide training for staff regarding the sensitivity of wetland ecosystems.                             <ul style="list-style-type: none"> <li>– Signage will be used to notify construction staff of the reasons why trespassing on these ecosystems is prohibited and the impacts this might have.</li> <li>– Fences will be erected around ecologically sensitive areas to visually and physically enforce the need for avoidance of disturbance to these areas.</li> </ul> </li> <li>• A ban on fishing and crabbing activities being undertaken by any person employed or contracted by GLNG while on the LNG facility site or associated project areas.</li> <li>• Appointment of a Fisheries Liaison Officer.</li> </ul>
Monitoring and Auditing	<p>The following records will be maintained:</p> <ul style="list-style-type: none"> <li>• Records of quarantine clearances and ballast water management will be maintained for ships servicing the GLNG Project.</li> <li>• Records of hull inspections of all high risk ships will be maintained.</li> <li>• The marine facilities' marine monitoring program will include surveys for potential introduced marine pests.</li> </ul>
Reporting and Corrective Action	<p>Reporting of environmental performance data will be conducted in accordance with Section 13.7.</p> <p>Reporting, investigation and management of corrective actions associated with environmental events (including incidents, hazards, near misses, non-compliance events and third party complaints) will be managed through the use of the IMS and reported to the appropriate authority as required.</p> <p>Non-compliance and incident reports will be closed out by senior management.</p> <p>Any third party complaints will be recorded in the Santos complaints register (which forms part of the EHSMS) and appropriate corrective actions will be implemented and closed out by the Project Environmental Manager.</p> <p>The Project Environmental Manager will report any incidents of marine flora disturbance to the Construction Manager or the Project Manager as necessary.</p> <p>The following constitute an incident or failure to comply in regard to marine flora management:</p> <ul style="list-style-type: none"> <li>• Unauthorised disturbance of marine vegetation outside the defined construction areas.</li> <li>• Unauthorised disturbance of marine habitat.</li> </ul> <p>In the event of a failure to comply, investigations will be undertaken into the cause of the incident or failure to comply and the appropriate corrective actions taken to overcome the problem and prevent recurrence.</p>

Refer to **Attachment B** for revised EMPs.

### 12.16.2 Clearing and Grading

#### Respondent Comment

*Banana Shire states that it would appear that under section 12 Transmission Pipeline Environment Management Plan the comments and approach to dealing with suppression is repetitive. Although this provides consistency, it by no means addresses the specific constrains and challenges that will be present in the day management, access and operation for the pipeline. Common sense would indicate for example, that the majority of Council operated roads, (maintained and managed by Council at the rates payers' expense) are unsealed. With increased volumes of traffic, the roads will become degraded at a greater rate than currently experienced and the dust will become a common event for those residents located along the road verge. There does not appear to be a clear complaint process or non-compliance or mitigation methods surrounding the daily operations should Council or landowners need to communicate with the proponent. As indicated above there needs to be far more detail on the operational techniques. The proponent has sited regularly throughout the document that they will be using 'Best*

## Section 12

# EIS Gas Transmission Pipeline Environmental Management Plan

*Practice'. Council's experience indicated that heavy vehicle movements and workers vehicle movements occur early in the morning as the contractor's progress to the construction site, again in the afternoon when the vehicles have finished work for the day. Considering this a standard and common practice, and judging by the indication that there are to be no 'night works', it would be plausible to ask that on road, where residents experience high levels of dust and are located within 500 m of the road verge, that the water truck be utilised during the morning between 6 – 7 am and again the completion of either an 8 hour or 12 hour shift period. This ensures that any affected residents would be protected for the hour duration of high traffic movements. This would seem a logical and 'best practice' approach. Council feels that dust suppression is a serious issue already highlighted by current mining and gas infrastructure developments. If the proponent could take the time to commit a plausible process and the community feels empowered enough to communicate its concerns this would result in far better outcomes than those so literally detailed in the EIS.*

### Santos Response

Santos operates a Freecall number (1800 761 113) where complaints regarding the GLNG Project or related matters can be lodged. Once a complaint is lodged the following internal procedure will be followed.

- All incidents and complaints will be documented in the Santos Incident Management System (IMS - part of the EHSMS) and will be guided by EHSMS15 (*Incident and Non-Conformance Investigation, Corrective and Preventative Action*).
- The complaints form will document at least the following information:
  - Time, date and nature of complaint;
  - Type of communication (telephone, letter, email, visit);
  - Name, contact address and contact number (if provided);
  - Response and investigation undertaken as a result of the complaint; and
  - Action taken and signature of person investigating complaint.

Each complaint will be investigated as soon as practicable and, where appropriate, corrective action taken to remedy the cause of the complaint.

In regards to dust suppression, the CSG Fields EMP (**Attachment B1**) provides information on various commitments to deal with environmental issues in the Gas Fields. Santos commits to work with Banana Shire Council in the finalisation of this and a Dust Management Strategy to deal with site issues.

## 12.16.11 Soil Management

### Respondent Comment

*Queensland Primary Industries and Fisheries (Department of Employment, Economic Development and Innovation states that where erosion management structures are impacted they should as rapidly as possible be reinstated, or alternative structures should be erected to retain a functional state. This applies to the pipelines associated with the CSG field as well as the larger transmission pipeline.*

### Santos Response

The following text has been included as part of the CSG fields, gas transmission pipeline and LNG facility EMPs.

#### **Clearing and Grading**

- Where erosion management structures are impacted they will be reinstated as quickly as practicable or alternative structures erected to retain an adequate level of erosion control.

## Section 12

# EIS Gas Transmission Pipeline Environmental Management Plan

### Soil Management

- Where erosion management structures are impacted they will be reinstated as quickly as practicable or alternative structures erected to retain an adequate level of erosion control.

Refer to **Attachment B** for revised EMPs.

## 12.16.16 Transport and Traffic Management

### Respondent Comment

*Queensland Police Service states that in delineating the traffic movements, the proponent should provide a breakdown of traffic movements associated with contract works for the project. This should also be considered when assessing traffic volumes and their impact on transport, road safety and traffic management.*

### Santos Response

The elements of contract work assumed as the three main components (CGS field, gas transmission pipeline, LNG facility) of the GLNG Project, have been assessed in terms of traffic generation separately but it is the combined effects of this traffic which has been analysed and reported on in **Attachment C**. This achieves a demonstration of “worst case” traffic impacts within each construction methodology scenario assessed, as certain elements will run concurrently. Therefore, the traffic volumes and their impacts are considered suitable and conservative.

## 12.16.18 Social and Community

### Respondent Comment

*Queensland Primary Industries and Fisheries (Department of Employment, Economic Development and Innovation) states that wherever possible pipeline routes and access roads should avoid traversing currently cropped areas unless specifically negotiated with the landholder. Design of pipeline routes should ideally involve consultation with landholders.*

### Santos Response

EIS Section 2.2.1.1 (route selection criteria) outlines the process Santos has adopted in order to select the optimal gas transmission pipeline route. Part of the route selection criteria includes:

- Minimise crossing specialist agricultural blocks;
- Minimise number of landowners affected and avoid small rural lots; and
- Protection of landscape values.

Within EIS Section 12, the following text has been included in the Clearing and Grading EMP:

- Route alignment, location of accommodation facilities, storage and additional work areas and new access tracks will be based on, to the extent practicable, the following criteria:
  - Avoiding unduly steep or rugged terrain;
  - Avoidance of areas of significant environmental value;
  - Avoidance of areas subject to flooding;
  - Avoidance of conflicting land uses;
  - Maximise the use of existing roads and tracks;

## Section 12

# EIS Gas Transmission Pipeline Environmental Management Plan

- Minimise the width of tracks;
- Landholder requirements;
- Provision of adequate road access; and
- Proximity to existing infrastructure.

Santos believes appropriate measures are in place to locate the pipeline and access roads in suitable locations.

Santos has also consulted (and will continue to consult) with impacted landowners as part of the route selection process.

## 12.17 Environmental Management Plans - Operations

No submissions were received for this section.