

Esso Highlands Limited



Papua New Guinea LNG Project

**Environmental and Social Management Plan
Appendix 12: Induced Access Management
Plan**

PGGP-EH-SPENV-000018-014

CONTENTS

| | | |
|-----|--|---|
| 1.0 | Objectives | 3 |
| 2.0 | Legal and Other Requirements | 3 |
| 3.0 | Surveys | 3 |
| 4.0 | Management and Monitoring | 3 |
| | 4.1 Controlled Access to Project Roads | 3 |
| 5.0 | Roles and Responsibilities | 6 |
| 6.0 | Training, Awareness and Competency | 6 |
| 7.0 | Performance Indicators | 6 |
| 8.0 | Reporting and Notification | 6 |
| | Papua New Guinea Laws and Regulations | 8 |
| | International Financial Institution Requirements | 8 |

TABLES

| | |
|--|---|
| Table 1: Management and Monitoring | 5 |
| Table 2: Performance Indicators | 6 |

ATTACHMENT

| | |
|--|----|
| Attachment 1: Legal and Other Requirements | 7 |
| Attachment 2: Map of Roads in the Project Area | 10 |

1.0 OBJECTIVES

Esso Highlands Limited (Company) has developed this Induced Access Management Plan as part of its Environmental and Social Management Plan (ESMP).

The objectives of the Induced Access Management Plan are to control access to new Project roads and reduce the occurrence of potentially damaging non-Project activities (i.e., via improved access).

The Induced Access Management Plan should be read in conjunction with other Company plans:

- Ecological Management Plan
- Weed, Plant Pathogen and Pest Management Plan
- Community Engagement Plan
- Stakeholder Engagement Plan
- Project Safety Plan.

2.0 LEGAL AND OTHER REQUIREMENTS

Legal and other requirements applicable to this plan are identified in Attachment 1.

3.0 SURVEYS

No surveys are required for the Induced Access Management Plan.

4.0 MANAGEMENT AND MONITORING

Table 1 presents a summary of the potential environmental impacts related to induced access, together with mitigation and management measures to avoid or reduce these impacts.

Contractor shall develop an Induced Access Management Plan, which will as a minimum incorporate the measures described in Table 1 but shall not be limited to these measures.

Due to differing scopes of work and work locations, not all management and mitigation measures in the Induced Access Management Plan are applicable to all Contractors. Company's Environmental and Social Mitigation Register defines which management and mitigation measures are applicable to each Contract scope of work.

In Table 1, any mitigation and management commitments that were contained in the PNG LNG Project Environmental Impact Statement (EIS) are identified by a code commencing with an 'M' in the 'Mitigation Item Reference Number' column. Some mitigation measures have been reworded to provide further clarity or more detailed information regarding required measures. In these instances, the code is displayed in italics, and these reworded measures supersede what is in the EIS.

Other mitigation and management commitments required by Company are identified in Table 1 with a code commencing with an 'A'.

Monitoring required in relation to the Induced Access Management Plan is also described in Table 1.

Contractor shall develop site-specific procedures for the monitoring program, to be agreed by Company.

4.1 Controlled Access to Project Roads

Company has, as part of the EIS, committed to controlling access to new Project roads. To support this commitment, definitions and management hierarchy are presented below.

Definitions:

Project Road:

New Project specific and Project use only roadways, no public access to be permitted.

Public Roads:

Existing and gazetted roadway, access is not and will not be controlled or limited to private or exclusive use.

Controlled Access Roads:

Existing roadways having controlled access, access is and will continue to be controlled by other operators.

Wellpad Access Tracks:

New tracks, only Project vehicle access to wellpads, no public access to be permitted.

During construction, access shall be controlled on all new Project Roads.

Upon finalisation of construction in any area, measures shall be put in place to enable post-construction access control, in accordance with the hierarchy described below.

Hierarchy for Controlling Access

Controlling access is an integrated process that involves, in the following hierarchy:

- a) Use of natural terrain features and conditions e.g. steep slopes, watercourses
- b) Removal of strategic Project infrastructure
- c) Installation of operational controls e.g. security guards, physical barriers.

Controlling Access for the Southern Access Route

The road from Gobe to Kantobo shall be closed at the end of the construction phase to prevent induced access. Access control shall be achieved through a combination of the above hierarchy.

Kantobo Section

Access control shall be achieved in the Kantobo area through both natural terrain and culvert removal. The removal of saddle culverts MK058 and MK201 at the end of the construction at each end of a 14% steep slope will achieve access control.

Gobe Section

Access control in the Gobe area shall be achieved through the removal of culverts GS002 & GS211 at the end of construction. Both are 900 x 600 arch culverts in 3.4m and 3.8 m high embankments. This section of road is elevated over poor ground and the culvert to be removed is located at the end of Gobe Airfield property. Access to a service road beside the airfield will be maintained after the construction phase however a vehicle turning area will be constructed at the end of this road section in order to prevent through traffic.

Attachment 2 shows the planned management of the Southern Access Route.

Table 1: Management and Monitoring

| Table 1: Management and Monitoring | | | | | | |
|---|--|---|----------------------------------|--------------|----------------------|------------------------|
| Source of Impact | Potential Impact and Relevant Management Plan Objective [†] | Mitigation and Management (Design Feature/Specific Measure) | Mitigation Item Reference Number | Monitoring | Monitoring Frequency | Responsibility |
| Hunting by Project Workers and Contractors | Direct and indirect impacts to Habitat, Flora, Fauna | Control access for all new project road sections constructed for logistics transfer between Kopi and the Hides Gas Conditioning Plant, for project use only following completion of construction. | M88 | Verification | Ongoing | Company |
| Hunting by Non - Project Personnel | | Make the new project roadways and all pipeline RoW's between the Omati River Landfall and the Kopi deviation impassable at the end of project construction. | M89 | Verification | Post construction | Contractor |
| Collecting Flora by Project Workers and Contractors | | Control access to Hides Ridge west of Hides Wellpad A and implement a permit system for vehicle access for the duration of construction. | M90 | Verification | Ongoing | Contractor and Company |
| Collecting Flora by Non - Project Personnel | | Limit work vehicles and machinery to designated access and work site areas. | M10 | Verification | Ongoing | Company and Contractor |
| Improved Access to Project Area | | Limit the movement of employees and contractors to within project-defined areas and designated traffic and transport routes or locations. | M244 | Verification | Ongoing | Company and Contractor |

[†] See Section 1.

5.0 ROLES AND RESPONSIBILITIES

Contractor shall ensure sufficient resources are allocated on an ongoing basis to achieve effective implementation of the Induced Access Management Plan.

Contractor's Induced Access Management Plan shall describe the resources allocated to and responsible for the execution of each task and requirement contained therein, and shall describe how roles and responsibilities are communicated to relevant personnel.

Company shall ensure sufficient resources are allocated on an ongoing basis to achieve effective implementation of Company's responsibilities in the Induced Access Management Plan.

6.0 TRAINING, AWARENESS AND COMPETENCY

Contractor shall ensure that all personnel responsible for the execution of the tasks and requirements contained within the Induced Access Management Plan are competent on the basis of education, training and experience.

Contractor's Induced Access Management Plan shall describe the training and awareness requirements necessary for its effective implementation.

Contractor's training activity associated with the Induced Access Management Plan shall be appropriately documented by means of a training needs assessment, training matrix/plan and records of training undertaken.

Company shall ensure that all Company personnel responsible for the execution of Company's tasks and requirements in the Induced Access Management Plan are competent on the basis of education, training and experience.

Company's training activity associated with the Induced Access Management Plan shall be appropriately documented by means of a training needs assessment, training matrix/plan and records of training undertaken.

7.0 PERFORMANCE INDICATORS

Table 2 outlines the indicators for measuring and verifying performance in relation to this Induced Access Management Plan.

Table 2: Performance Indicators

| ID # | Performance Indicator | Measurement | Internal Assessment Frequency | Relevant Management Plan Objective† |
|--|--|--|-------------------------------|-------------------------------------|
| 1 | Access to New Project Roads controlled | Measures to control access are effective (no third party vehicle access) - Frequency of third party vehicle access | Quarterly | 1 |
| Performance Indicators to be further developed and agreed between Contractor and Company | | | | |

† See Section 1.

8.0 REPORTING AND NOTIFICATION

Contractor's monthly report to Company shall include:

- Number and results of verification inspections prescribed in Table 1
- Performance Indicators as applicable in the reporting period.

Attachment 1: Legal and Other Requirements

LEGAL AND OTHER REQUIREMENTS

Contractor shall comply with applicable Papua New Guinea Laws and Regulations, applicable International Finance Institution (IFI) requirements and International Treaties and Conventions (where applicable).

Papua New Guinea Laws and Regulations

None applicable.

International Financial Institution Requirements

The following International Finance Corporation (IFC) Performance Standards apply to induced access and ecology:

- IFC Performance Standard 1: *Social and Environmental Assessment and Management System*, which establishes requirements for assessment, management, organizational capability, training, community engagement, monitoring, and reporting.
- IFC Performance Standard 4: *Community Health, Safety and Security*, which requires Projects to avoid or minimize adverse impacts due to Project activities on soil, water, and other natural resources in use by affected communities
- IFC Performance Standard 6: *Biodiversity Conservation and Sustainable Natural Resource Management*

Of particular relevance to this Ecological Management Plan, IFC Performance Standard 6 sets out the following requirements:

- Assess the significance of Project impacts on all levels of biodiversity as an integral part of the Social and Environmental Assessment process
- Minimize any conversion or degradation of modified habitat, and, depending on the nature and scale of the Project, identify opportunities to enhance habitat and protect and conserve biodiversity as part of the Project's operations
- Do not significantly convert or degrade such habitat, unless the following conditions are met:
 - There are no technically and financially feasible alternatives
 - The overall benefits of the Project outweigh the costs, including those to the environment and biodiversity
 - Any conversion or degradation is appropriately mitigated
- Design natural habitat mitigation measures to achieve no net loss of biodiversity where feasible, which may include a combination of actions, such as:
 - Post-operation restoration of habitats
 - Offset of losses through the creation of ecologically comparable area(s) that is managed for biodiversity
 - Compensation to direct users of biodiversity
- In areas of critical habitat, no Project activities will be implemented unless the following requirements are met:
 - There are no measurable adverse impacts on the ability of the critical habitat to support the established population of species or the functions of the critical habitat

- There is no reduction in the population of any recognized critically endangered or endangered species
- Any lesser impacts are mitigated in accordance with point 4 above
- The client will not intentionally introduce any new alien species (not currently established in the country or region of the Project) unless this is carried out in accordance with the existing regulatory framework for such introduction, if such framework is present, or is subject to a risk assessment (as part of the client's Social and Environmental Assessment) to determine the potential for invasive behaviour. The client will not deliberately introduce any alien species with a high risk of invasive behaviour or any known invasive species, and will exercise diligence to prevent accidental or unintended introductions

“Significant conversion or degradation” is defined by the IFC as: “(i) *the elimination or severe diminution of the integrity of a habitat caused by a major, long-term change in land or water use; or (ii) modification of a habitat that substantially reduces the habitat’s ability to maintain viable population of its native species*”.

A “Critical habitat” is defined by the IFC as: “*a subset of both natural and modified habitat that deserves particular attention. Critical habitat includes areas with high biodiversity value¹, including habitat required for the survival of critically endangered or endangered species², areas having special significance for endemic or restricted-range species; sites that are critical for the survival of migratory species; areas supporting globally significant concentrations or numbers of individuals of congregatory species; areas with unique assemblages of species or which are associated with key evolutionary processes or provide key ecosystem services; and areas having biodiversity of significant social, economic or cultural importance to local communities*”.

¹Such as areas that meet the criteria of the World Conservation Union (IUCN) classification.

²As defined by the IUCN Red List of Threatened Species or as defined in any national legislation.

Attachment 2: Map of Roads in the Project Area

