

Australia Pacific LNG Project

Volume 3: Gas Pipeline

Chapter 18: Indigenous Cultural Heritage

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18. Indigenous cultural heritage

18.1 Introduction

18.1.1 Purpose

This chapter describes the potential effects of constructing and operating the main gas transmission pipeline element (the gas pipeline) of the Australia Pacific LNG Project (the Project) on Indigenous cultural heritage. It also identifies suitable management and mitigation measures to minimise impacts. The assessment of potential impacts has been conducted in accordance with the environmental impact statement (EIS) terms of reference for the Project. The detailed Indigenous cultural heritage assessment is provided in Volume 5 Attachment 37.

In the preparation of the EIS and going forward with the Project, Australia Pacific LNG will be guided by its sustainability principles when identifying potential impacts the Project may have on Indigenous heritage values and sites, and in the development and implementation of Indigenous cultural heritage management plans (CHMPs). Of the 12 sustainability principles, the principles most relevant to cultural heritage include:

- Minimising adverse environmental impacts and enhancing environmental benefits associated with Australia Pacific LNG's activities, products or services; conserving, protecting, and enhancing where the opportunity exists, the biodiversity values and water resources in its operational areas
- Respecting the rights, interests and diverse cultures of the communities in which Australia Pacific LNG operates
- Engaging regularly, openly and transparently with people and communities affected by Australia Pacific LNG's activities, considering their views in its decision-making and striving for positive social outcomes
- Working cooperatively with communities, governments and other stakeholders to achieve positive social and environmental outcomes, seeking partnership approaches where appropriate.

Under these principles, cultural heritage values are reflected in a number of ways. The primary role of Indigenous people in custodianship of their heritage is recognised. The development of CHMPs will occur through negotiation and agreement with the identified Aboriginal party.

Identification of unrecorded Indigenous heritage resources within the project areas will be undertaken during dedicated field surveys. Where practicable, the gas pipeline and associated facilities will generally be sited to avoid locations of Indigenous cultural heritage. In instances where this cannot be avoided, measures to mitigate impacts will be undertaken with Aboriginal parties, in accordance with agreed CHMPs.

Through the CHMPs, procedures will be developed covering the management of cultural heritage sites and values. To promote an understanding of cultural heritage in the workplace, cultural heritage induction for site personnel will be developed.

This chapter provides an outline of the assessment and management of potential development impacts on Indigenous cultural heritage of the main transmission pipeline construction and operation. It provides a context for assessing Indigenous occupation, recognises the presence of registered

Indigenous heritage sites and provides an overview of the framework in which Indigenous cultural heritage will be identified and managed. Australia Pacific LNG is committed to working with identified Aboriginal parties to develop and implement CHMPs that provides agreed and appropriate protection for Indigenous cultural heritage.

Australia Pacific LNG aspires to be at the forefront of sustainable practices, contributing to a positive future for its customers, communities, investors and people by delivering a positive benefit to people, communities and the environment.

18.1.2 Scope of work

As part of the overall assessment of development impacts, Indigenous cultural heritage has been assessed in accordance with the requirements of the terms of reference (TOR) for the Project. The aims of the Indigenous cultural heritage assessment are to:

- Provide a context for assessing Indigenous occupation within the project area
- Recognise the presence of registered Indigenous heritage sites in the project area
- Outline the management and protection strategies to be implemented for the Project through the development CHMPs with identified Aboriginal parties regarding the proposed project works, in accordance with the *Aboriginal Cultural Heritage Act 2003* and the Cultural Heritage Management Plan Guidelines that were gazetted on 22 April 2005.

The CHMPs will define the process by which Indigenous cultural heritage is identified within the gas pipeline corridor and propose mechanisms for the development of site management strategies to maximise the retention of Indigenous heritage values.

18.1.3 Legislative framework

In Queensland, both Commonwealth and state legislation protects Indigenous heritage sites. The following section discusses both Queensland and Commonwealth legislation of relevance to this assessment.

Commonwealth legislation

Three pieces of Commonwealth legislation serve to protect Australia's heritage. These are the *Environment Protection and Biodiversity Conservation Act 1999*, the *Australian Heritage Council Act 2003* and the *Aboriginal and Torres Strait Islander Heritage Protection Act 1984*. The Commonwealth designated authority responsible for the administration of this legislation is the Department of the Environment, Water, Heritage and the Arts.

Environment Protection and Biodiversity Conservation Act

The *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) provides protection for items and places with world, national or Commonwealth heritage values. Natural, historical and Indigenous heritage sites, either nominated or approved, are protected under this Act.

The Act provides for the National Heritage List and the Commonwealth Heritage List. The National Heritage List provides protection for areas that demonstrate outstanding heritage value to the nation, while the Commonwealth Heritage List provides for protection of areas that have significant values that are on Commonwealth land. The Act also provides protection for cultural heritage items and places on the World Heritage List. The criteria used for inclusion on the National (and Commonwealth) Heritage List is outlined within the Act.

Australian Heritage Council Act

The *Australian Heritage Council Act 2003* established the Australian Heritage Council, to administer the National Heritage List and Commonwealth Heritage List. The Act established the Australian Heritage Council as the principal advisory body to the Australian Government for heritage matters, particularly in relation to administering the lists now created under the EPBC Act. It replaced the Australian Heritage Commission, the authority responsible for assisting in the administration of Commonwealth Heritage legislation. The Australian Heritage Council maintains an online searchable database.

Aboriginal and Torres Strait Islander Heritage Protection Act

This legislation was enacted for '...the preservation and protection from injury or desecration of areas and objects in Australia and in Australian waters, being areas and objects that are of particular significance to Aboriginals in accordance with Aboriginal tradition'.

It gives Indigenous people the right to request the responsible Federal Minister to intervene to protect cultural sites and places that Indigenous people believe to be at risk.

Queensland legislation

Aboriginal Cultural Heritage Act

The primary piece of Queensland legislation protecting Aboriginal cultural heritage sites is the *Aboriginal Cultural Heritage Act 2003* (ACH Act). The intent of the Act is to effectively recognise and protect Aboriginal cultural heritage and to establish a process whereby this can be achieved. It places onus on project proponents, or on anyone whose activities might harm Aboriginal cultural heritage, to observe a 'duty of care'. It provides for an assessment of significance to be undertaken by identified Aboriginal parties, to be decided in a manner consistent with tradition and emphasises that the definition of areas and objects goes beyond archaeological sites to include those where there are no physical traces. It requires that a CHMP be developed when a project is required to develop an environmental impact statement (EIS). Major elements of the ACH Act are:

- Protection of areas and objects of traditional, customary and archaeological significance
- Recognition of the primary role of traditional owners in cultural heritage protection and management
- Establishment of a cultural heritage register and database
- The provision a general duty of care with the onus on developers to manage their duty of care
- The mandatory requirement to prepare CHMPs in situations where an EIS is required for any project approvals
- Substantial penalties for harming Aboriginal cultural heritage in breach of the Act.

Queensland Heritage Act

The *Queensland Heritage Act 1992* primarily provides for the protection of non-indigenous heritage places, but also for those with joint Indigenous and non-indigenous values.

Local legislation

The *Queensland Heritage Act 1992* requires local government agencies to establish registers of heritage places. These places may have Indigenous or non-indigenous values.

Although the requirement for local heritage lists was established under the Queensland Heritage Register and therefore would not apply to sites solely significant to Indigenous people, some local heritage overlays do include Indigenous sites. This is the case with the Calliope Shire, which includes Curtis Island. These sites could therefore be subject to provisions of the *Sustainable Planning Act 2009*. However, indigenous heritage sites are offered greater protection under ACH Act.

18.2 Methodology

Assessing and minimising the potential impacts of Australia Pacific LNG's gas pipeline construction on Indigenous heritage values has been a multi-stage process. The initial phase of this study was the collation of site information from the following sources:

- Online resources, principally for heritage site databases and regional history
- Commonwealth Heritage lists (World Heritage List, National Heritage List, and Register of the National Estate) for sites of international and national significance
- Indigenous Cultural Heritage Register and database; held by the Department of Environment and Resource Management
- The Queensland Heritage Register
- Australia Pacific LNG cultural heritage database
- Register of the National Trust of Queensland
- Data from heritage studies previously carried out in nearby areas
- Publicly available books and local histories
- Targeted field inspections to test the validity of models of Indigenous site distribution developed from the literature review.

The second stage involved a high level constraints analysis to identify patterns in the data and to identify zones of high site occurrence and high potential site occurrence. These zones, together with engineering restrictions, landholder requirements and biodiversity conservation requirements, assisted in the initial route selection process and led to the rejection of gas pipeline alignments that would have led to potentially adverse impacts to known significant cultural landscapes and heritage sites.

The final stage of the assessment process to further refine the route will be through targeted field investigations to identify further heritage features that need to be managed prior to or during gas pipeline construction. Only a small portion of the targeted field surveys have been undertaken to date. The process to be following for future field investigations will be incorporated into the CHMPs.

In accordance with Part 7 of the ACH Act, CHMPs are being developed for this Project. Part 4 of the ACH Act provides a framework for the identification of an Aboriginal party or parties for a particular area. These identified Aboriginal parties are required to be consulted with regard to developing CHMPs. The identified Aboriginal parties for the gas pipeline route are outlined in the cultural values section.

18.2.1 Limitations

There are limitations in the data collected both for the earlier constraints analysis and for this assessment. One of the main limitations of the heritage constraint analysis lies in the quality and coverage of the site data obtained from the various heritage registers and reports. Most information

came from minor studies, predominantly assessing impacts of small, localised or linear developments, aiming to avoid site-rich landscapes, or in clusters at mines and other facilities, rather than wide-ranging studies attempting to identify sites and the relationship between site distribution patterns and landscape features. There have been regional site recording studies along the Southern Curtis Coast, to the south of the pipeline route (Ulm 2006) and some excavations in the Dawson River district (Morwood and Godwin 1987). Although not regional surveys, such excavations of stratified deposits can yield information applicable across a region. There has been no systematic attempt to check the data contained in the heritage databases and so there may be errors in the accuracy of the site information contained therein. Registered site locations should be considered only approximate for planning purposes. In the constraints analysis a buffer of up to 250m radius was applied to such locations.

18.3 Cultural heritage values

Included in this section is an evaluation of the archaeological context for Indigenous use of the Australia Pacific LNG's gas pipeline study area, the outcomes of the register searches and the constraints analysis. Following this, an update about CHMP negotiations with the identified Aboriginal parties is provided. A detailed outline of the historical context of Indigenous use of Australia Pacific LNG's gas pipeline study corridor can be found in Volume 5 Attachment 37.

18.3.1 Archaeological context

Recent archaeological studies (Lance 2009) have been carried out in the Yuleba district at the southern end of the pipeline route, although 60km west of the gas pipeline corridor. These studies provide the first radiocarbon dates in the area, demonstrating an Aboriginal presence of at least 6,700 years. As there are no deep, dated archaeological sequences from the region, various sites in surrounding regions have been considered for comparative stone tool sequences, particularly those from the central Queensland sandstone belt. These sites include Kenniff Cave, The Tombs, Rainbow Cave, Cathedral Cave, Buckland Bower and Wanderers Cave (Mulvaney and Joyce 1965; Mulvaney and Kamminga 1999; Beaton 1977, 1991a and b; Morwood 1979, 1981, 1984) and provide evidence of Aboriginal occupation dating back nearly 20,000 years.

The oldest tools in these stratified rock shelter sites are simple retouched flakes, believed by the researchers to have been hand-held tools. From around 4,100 years at Kenniff Cave and 3,500 years ago at The Tombs, a suite of small implements was added to the toolkit. These implements including backed artefacts (points and microliths) and adzes. These were interpreted by the researchers as having been hafted into handles and used as composite tools. About 2,500 years ago, the small, retouched tools were dropped from the tool assemblage and the long, retouched Juan knife was added, although it did not necessarily functionally replace the small tools. The main raw material used for tool manufacture throughout the sequence was quartzite, although within the last 4,000 years volcanic stone was also used.

Sites excavated in the Balonne River sub-catchment area (Lance 2009) contain stone artefact assemblages more similar to those from the Dawson River catchment investigated by Morwood and Godwin than from the central Queensland sandstone belt sites. In both sets of open sites, there is an absence of formal tool types, such as adzes, backed artefacts and extensively retouched flake tools. While there is an overlap in the times these sites were occupied, there appears to be little overlap in the tool industries present. The sites in the Yuleba district were occupied by Aboriginal people using unspecialised flake tool industries with an absence of formal tool types, at the same time as Aboriginal people occupying shelters in the sandstone belt were using specialised tool industries, with large

numbers of retouched tools and formal tool types. One possible explanation is that there were cultural differences between those using the sandstone belt sites and those occupying sites in the Balonne River sub-catchment. As the formal tool types are known from open sites elsewhere in the study region, such an interpretation is unjustified. The discrepancy can better be explained as resulting from differences in activities occurring in rock shelters compared with open sites.

Morwood and Godwin (1987) excavated several open and rock shelter sites along the Dawson River near Nathan Gorge, 21km to the west of the pipeline route. These sites include shell middens and occupation deposits with stone artefact assemblages and date from the last 1,500 years. Tools found at these sites were only partially retouched or had edge damage indicative of use. There were few formal tool types (backed artefacts, adzes, 'scrapers'). At Site 3, 21.5% of the 79 pieces bore traces of retouch or use (Morwood and Godwin 1987:103). At Site 5, a hearth associated with shell midden and small numbers of stone artefacts was excavated and recovered charcoal revealed the hearth dated from 300±60bp (Morwood and Godwin 1987:105). Shell midden recovered from the same site gave a date of 610±50bp. The middens were small and discrete, characteristic of the 'dinner-time camp' identified in ethno-historical studies carried out in northern Australia (Meehan 1982, 1988).

A previous study directly relevant to the gas pipeline area is Hall's (1988) archaeological assessment of the Wallumbilla-Gladstone State gas pipeline. The area surveyed for this assessment initially passed to the west of the present pipeline route, before turning eastward towards Gladstone. In the area to the west of Gladstone, the most of the located sites were low density background scatters around the major creek crossings around the Calliope River (Hall 1988).

Studies in the Boyne Valley, 40km to the south of the gas pipeline route, revealed a diverse suite of sites, including isolated artefacts and stone artefact scatters, rock shelter habitation sites, stone arrangements, ceremonial sites, burials, massacre sites, scarred trees and raw material sources (Hiscock 1982; Archaeo Cultural Heritage Services 2000; Gorman 2002). These studies seem to indicate the valleys were used as a transition zone between the coastline and hilly hinterland area.

Since the late 1980s there has been a considerable amount of site clearance work undertaken in the Gladstone region for infrastructure development (Alfredson 1989, 1992; Ann Wallin and Associates 1995, 1997, 1998, and 1999a,b,c,d; Archaeo Cultural Heritage Services 2000, 2002, 2004a,b,c, 2005a,b, 2006a,b, 2007a,b). These studies reveal a consistent pattern of selective resource use with habitation sites generally located on higher ground in close proximity to fresh water and near food sources or suitable stone resources for flaking.

An investigation of the Port Curtis area was undertaken by Burke (1993). Extensive shell middens and artefact scatters were found along the coast and also on the offshore islands including Curtis, Facing, South Trees and Hummock Hill Islands. The investigation also located a quarry at Monte Cristo Creek on Curtis Island. Extensive oyster shell middens were found on the mainland adjacent to The Narrows.

There has been a substantial concentration of fieldwork on the Curtis Coast in recent years by researchers conducting investigations as part of the Gooreng Gooreng Cultural Heritage project (see Ulm 2006). This interdisciplinary study has examined Indigenous sites and associated histories in coastal and hinterland settings in the region between Gladstone and Bundaberg. A number of reports have emerged from these investigations, including a series of archaeological, ethnographic, ethno-historical and linguistic studies.

18.3.2 Constraints analysis

Patterns of site distribution and heritage site sensitivity were sought from sites mapped using geographic information systems (GIS) software. These assisted with the evaluation of factors potentially affecting the selection of the gas pipeline route.

A high-level constraints analysis was undertaken to examine the environmental setting of previously located sites and compare these with Indigenous land use patterns found elsewhere in the region. Based upon this information, it was possible to develop a model of pre-contact Indigenous settlement in the area to explain site distribution. This allowed site patterning to be predicted in areas where no sites had previously been found, based upon the distribution of key resources (food, water, raw materials for tool manufacture).

A similar investigation of site distribution in the wider South East Queensland bioregion was undertaken by Rowland and Connelly (2002) using a larger data set. The types of sites and the distribution patterns they detected have direct relevance to the present study. They observed that near the coast, between 50 to 75% of recorded sites are shell middens, while stone artefact scatters and scarred trees are the site types that predominate in inland land systems (Rowland and Connolly 2002:51). Rowland and Connolly (2002:57) observed that inland and to the south of Gladstone, nearly 50% of sites occur within 200m of water sources and 91.5% within 700m of a water source. Along the gas pipeline route, 75% of sites are located within 200m of watercourses and almost all (95%) within 700m of water.

Generalised models of site distribution tally with the patterning of known sites recorded in the Project area, suggesting the models have widespread application. It is possible to observe clustering of sites and the presence of further resource-rich zones in the site provinces. The location of these site provinces was used in the selection of the preferred gas pipeline route. One such province of relevance to the gas pipeline route is the Coastal Fringe site province (refer Figure 18.1). Sites in this zone include shell middens, stone artefact scatters and scarred trees; areas within this province are likely to be rich in sites. The Coastal Fringe site province covers an area of approximately 46km² and is crossed by approximately 2km of the gas pipeline route.

Another site rich province of relevance to the gas pipeline route is the Callide Range site province. This encompasses the portion of the Callide Range located in the pipeline corridor and particularly the area to the south of the gas pipeline route. The site province covers an area of approximately 230km² and is crossed by approximately 5.5km of the gas pipeline route. Previous studies have revealed a small number of sites in this area. These are mainly sites containing stone artefacts, including stone artefact scatters and quarry sites. Additionally, rock art has been recorded in sandstone outcrops in the Callide Range.

As the geological formations in which the art and quarries occur are widespread in the area, there is a strong probability that these will also be present in the vicinity of the gas pipeline route. As the route parallels an existing road alignment through the Callide and Calliope Ranges, sites may have already been disturbed. The Callide Range was nominated for inclusion in the Register of the National Estate, for its natural features, geology and vegetation, including rare plant species. Given the presence of large numbers of previously detected sites, it could have equally been nominated on the grounds of Indigenous heritage.

General comments, predictions and recommendations from the constraints analysis of the gas pipeline route are as follows:

- a) Of the 2,262 sites identified from the cultural heritage database for the wider region in which the gas pipeline is located, a small range of sites occur. These site types are listed in Table 18.1. It

- is noted that further sites of these types may be found during field survey of the gas pipeline route
- b) Isolated stone artefacts and stone artefact scatters are clearly the main evidence of prior Aboriginal habitation across the main transmission pipeline corridor and reflect the durability of this form of evidence. Isolated stone artefacts may represent the discarding or loss of maintenance tools during foraging expeditions or may result from incomplete exposure of larger concentrations of artefacts left during more intensive activity. These traces may also point to the presence of other, more substantial archaeological sites, such as stratified occupation deposits
 - c) There is a strong likelihood cultural heritage areas and objects, particularly isolated stone artefacts and artefact scatters, scarred trees, shell middens and hearths will be identified throughout the main transmission pipeline corridor. In all instances where previous surveys have been carried out, sites and isolated artefacts have been detected. These heritage places are most commonly found near water
 - d) Site densities decline with distance from water sources. The decrease reflects the concentration of Indigenous domestic activities near water sources. Beyond 200m, sites with stone artefacts are usually smaller (unless they comprise raw material sources), reflecting shorter periods of continuous use
 - e) Where the pipeline crosses site rich landscapes, such as the Coastal Fringe site province or the Callide Range site province, or where it crosses within the vicinity of previously recorded sites, detailed impact mitigation measures may be required
 - f) Burial sites are most often uncovered from soft sediments (source bordering dunes, friable silts) near water, or as bundle burials or cached secondary interments in sandstone shelters.

Table 18.1 Cultural heritage database results in region gas pipeline passes through

Site type	Number	Percentage
Isolated stone artefacts and stone artefact scatters	1,902	84.08
Scarred trees	238	10.52
Hearths	42	1.86
Quarries or raw material sources	20	0.88
Shell middens	19	0.84
Hatchet head grinding grooves	14	0.62
Burials	10	0.44
Art sites	6	0.27
Stone pathways/bora rings	4	0.18
Wells	3	0.13
Potential archaeological deposits	3	0.13
Rockshelters	1	0.04
Total	2,262	100.00

18.3.3 Results of register searches

Within the 10km wide gas pipeline corridor route a small number of Indigenous cultural heritage sites are listed on the various local, state and Commonwealth heritage registers. An outline of the identified sites is provided in the following section.

Register of the National Estate or World Heritage Area

One site listed on the Register of the National Estate or World Heritage register exist within the gas pipeline corridor. This sites is outlined in Table 18.2

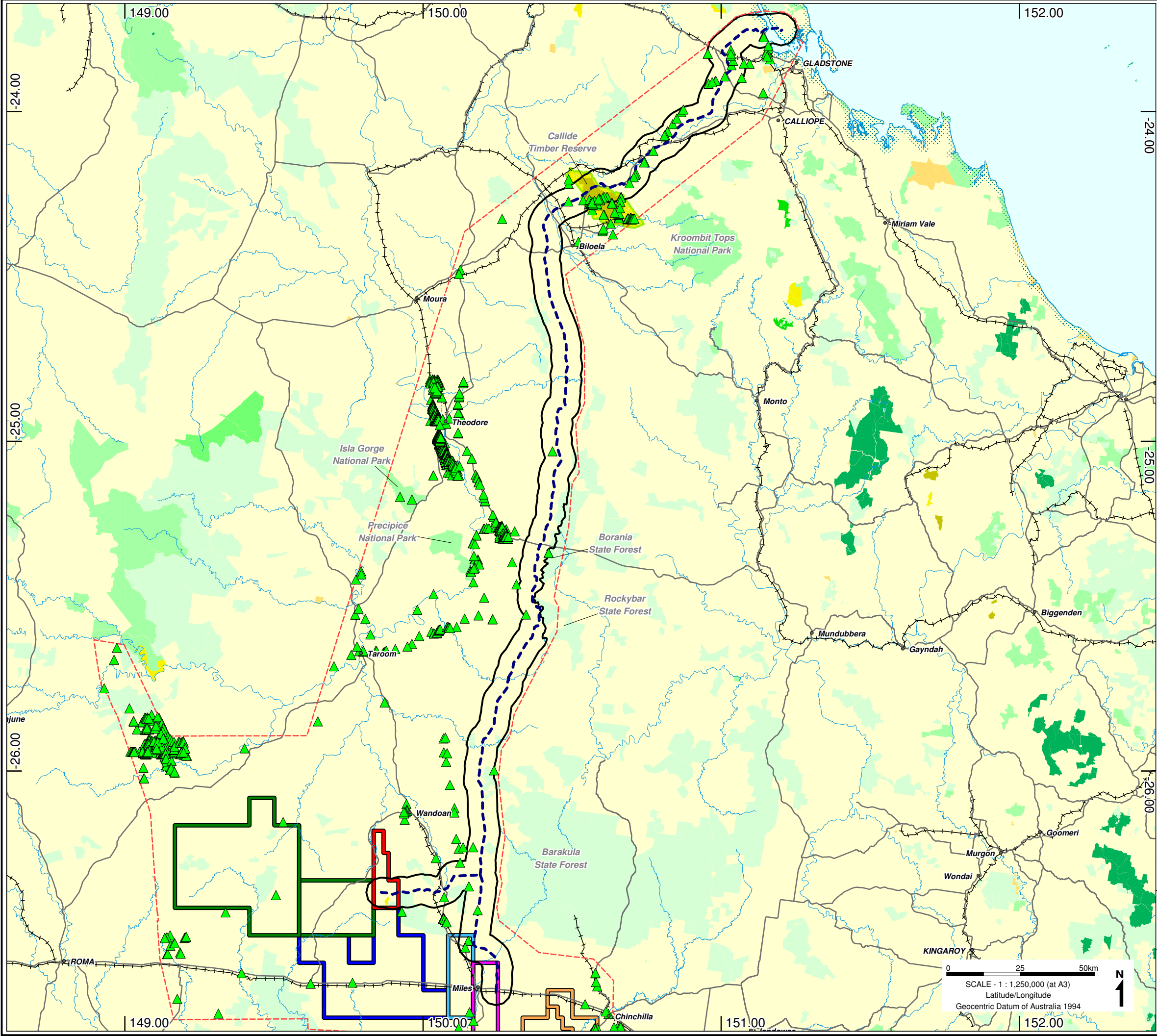
Table 18.2 Registered National Estate and World Heritage sites in gas pipeline corridor

Site name	Location	Listing	Comments
Great Barrier Reef	Curtis Island (World Heritage Land) and surrounding waters (World Heritage Marine)	World Heritage List, indicative listing on the National Heritage and Commonwealth Heritage lists and Register of the National Estate.	While it has been listed for natural values, Indigenous cultural values are also recognised, although no locations are identified specifically.

Aboriginal Cultural Heritage Register and database

A total of 71 Aboriginal heritage sites are listed on the Aboriginal Cultural Heritage Register within the 10km wide gas pipeline corridor. These are listed in Volume 5 Attachment 37 and shown in Figure 18.1. Of these, 11 listed sites are within 1km of the gas pipeline route, with the nearest site approximately 230m from the route.

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LEGEND

- Major towns
- Major watercourses
- Road
- Railway

Proposed Infrastructure

- Gas pipeline route
- Pipeline study corridor

Walloons gas fields development areas

Combabula / Ramyard	Talinga / Orana
Woleebee	Dalwogan
Carinya	Kainama
Condabri	Gilbert Gully

Protected Areas

Conservation park	National park scientific
Forest reserve	Resources reserve
National park recovery	State forest
National park	Timber reserve

Indigenous Cultural Heritage

- Registered indigenous cultural heritage site
- DERM Cultural Heritage register search area
- Coastal fringe province
- Callide Range site province

Source Information

Cadastral and Easements
Department of Natural Resources and Water, Queensland 2009
Protected Areas (Queensland_ estates)
Environmental Protection Agency 2009
Registered Indigenous Cultural Heritage Sites
Heritage Consulting Australia (07/01/2010)



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Figure 18.1 - Registered Indigenous Cultural Heritage Sites and Identified Site Provinces along Pipeline Study Corridor

Local heritage lists and heritage overlays

Table 18.3 outlines outcomes from searches of local heritage lists for registered sites with Indigenous values.

Table 18.3 Sites listed on local government heritage registers with Indigenous heritage values

Local government area	Site
Gladstone Shire (part of Gladstone Regional Council)	No sites recorded with Indigenous heritage values.
Calliope Shire (part of Gladstone Regional Council local heritage overlay)	A small number of sites with solely Aboriginal significance have been placed on the local heritage overlay; however, these sites are located outside the study corridor.
Banana Shire Council	No sites recorded with Indigenous heritage values.
Western Downs Regional Council	No sites recorded with Indigenous heritage values.

While register searches provide a small catalogue of sites to be considered and avoided during gas pipeline route planning, the results of these searches cannot be construed as a comprehensive record of the cultural heritage sites in the regions traversed by the gas pipeline route. Site registers document unusual sites known to the community, or Indigenous objects and areas identified during previous intensive cultural heritage clearances.

18.3.4 Cultural heritage management plan development

Aboriginal party identification

Australia Pacific LNG has undertaken appropriate steps to identify correct Aboriginal parties in accordance with the ACH Act. Identified Aboriginal parties for the gas pipeline are outlined in Table 18.4. Figure 18.2 provides an outline of Native Title claims within the gas pipeline study area.

Table 18.4 Identified Aboriginal parties

Name of Aboriginal party	Category of Aboriginal party
Barunggam People (QC99/05)	Aboriginal party (previously registered Native Title claim)
Western Wakka Wakka (QC99/04)	Aboriginal party (previously registered Native Title claim)
Iman People #2 (QC97/55)	Aboriginal party (registered Native Title claim)
Wulli Wulli People (QC00/7)	Aboriginal party (registered Native Title claim)
Gangulu People (QC97/36)	Aboriginal party (previously registered Native Title claim)
Gap Area (the Narrow's)	Public notification undertaken to identify Aboriginal party
Port Curtis Coral Coast (QC01/29)	Aboriginal party (registered Native Title claim)

The majority of the gas pipeline corridor is covered by an Aboriginal party that can be identified by being a currently registered Native Title claim group or by being a previously registered Native Title claim group for an area where there is no currently registered Native Title claimant. Because there is no identified Aboriginal party for the marine area of the gas pipeline corridor, Part 7 of the ACH Act requires that public notification be undertaken to identify appropriate Aboriginal parties.

Public notices seeking to identify Aboriginal parties were placed in the Courier Mail, Gladstone's Observer and the Koori Mail in early December 2009. As required by legislation, respondents were endorsed by Australia Pacific LNG as Aboriginal parties.

The Aboriginal parties identified in Table 18.4 were endorsed as Aboriginal parties in January 2010. Table 18.5 provides an update for the status of CHMP negotiations with Aboriginal parties. It is currently proposed that all CHMPs will be submitted for approval to the chief executive of the Department of Environment and Resource Management, in June 2010.

Engagement with Aboriginal parties

Table 18.5 provides an update on the status of CHMP negotiations with Aboriginal parties.

Table 18.5 Status of CHMP negotiations

Aboriginal party	Consultations commenced	Number of meetings	CHMP status	Expected timing for CHMP
Barunggam People (QC99/05)	August 2009	4	Negotiations are ongoing	May 2010
Western Wakka Wakka (QC99/04)	December 2009	1	Negotiations are ongoing	May 2010
Iman People #2 (QC97/55)	June 2009	5	CHMP has been agreed	N/A
Wulli Wulli People (QC00/7)	August 2009	4	CHMP has been agreed	N/A
Gangulu People (QC97/36)	August 2009	4	Negotiations are ongoing	May 2010
Gap area (The Narrows)	February 2010	0	Negotiations are ongoing	May 2010
Port Curtis Coral Coast (QC01/29)	April 2009	4	Negotiations are ongoing	May 2010

Engagement of Aboriginal parties has been undertaken through an agreed communication protocol where Australia Pacific LNG requests formal meetings with the appropriate representatives of the Aboriginal party. The meetings have discussed the project and appropriate management and mitigation strategies for Indigenous cultural heritage and have generally included representatives of the Aboriginal party and their technical or legal advisors. CHMPs that have been agreed to date have generally addressed similar issues, but the negotiation process has resulted in CHMPs being specific and unique for each Aboriginal party. Agreed CHMPs have generally addressed:

- Ongoing communication protocol's between Australia Pacific LNG and the Aboriginal party
- Processes for the assessment of Indigenous cultural heritage sites and values
- Processes for the management of Indigenous cultural heritage sites and values
- Processes in case of an accidental find of cultural material
- Procedures if human remains are found.

It is currently proposed that all CHMPs will be submitted for approval to the chief executive of the Queensland Department of Environment and Resource Management in June 2010.

18.3.5 Site survey

Full surveys of the gas pipeline route are proposed to occur by June 2010. To date, cultural heritage surveys have been undertaken for approximately 120km of the proposed route. The survey was

undertaken by representatives of the Aboriginal party with the assistance of their technical advisor. Various sites and locations of cultural heritage significance were identified during the survey. The exact locations of these areas cannot be outlined as a result of confidentiality requirements of the agreed CHMP. It is likely that all agreed CHMPs will include confidentiality clauses to ensure the location and integrity of cultural material is maintained.

18.3.6 Cumulative impacts

In addition to impacts that will arise from construction of the gas fields, additional infrastructure will occur along the main gas transmission pipeline and an LNG plant on Curtis Island at the northern end of the pipeline. Flexibility relating to the placement of these facilities will minimise the impacts to Indigenous heritage sites and places and any potential impacts will be managed through the mechanism of negotiated agreements with the relevant Aboriginal parties.

The potential effects of several planned third-party projects also need to be considered. These other projects could potentially place other Indigenous cultural heritage at risk. However, these third parties are also required to develop CHMPs to manage risk. Other land uses (agriculture and pastoralism) and natural processes (erosion and decomposition) also contribute to the loss of, or harm to, Indigenous cultural heritage.

Australia Pacific LNG commits to developing and implementing Part 7 CHMPs in accordance with the ACH Act to ensure cultural heritage is preserved and managed appropriately.

18.3.7 Matters of national environmental significance

A review of the Australian Heritage Places Inventory was undertaken to identify sites with Indigenous heritage values in areas to be affected by gas pipeline construction. No items with strictly Indigenous heritage values are recorded on the world, national or Commonwealth heritage lists or the Register of the National Estate for the gas pipeline study area. Indigenous heritage values are recognised in the listing and management of the Great Barrier Reef Marine Park as a national and world heritage area, although it has primarily natural heritage values. To ensure that Indigenous heritage values are retained, the Great Barrier Reef Marine Park Authority consults with Traditional Owners, recognised Native Title claimants and Aboriginal representative bodies. The same groups with an interest in the project area have been consulted for the World Heritage portions of the project area.

18.4 Potential impacts

The gas pipeline alignment will not have any impacts to registered cultural heritage sites. However, results of the systematic survey undertaken for a portion of the gas pipeline alignment identified numerous cultural heritage objects. The management of these locations will be undertaken in accordance with the agreed CHMP process.

In addition to the impacts to identified sites and isolated stone artefacts, is the potential for previously undetected Indigenous cultural heritage to be revealed during further investigations and impact mitigation work prior to construction. Unrecorded items of Indigenous cultural heritage may occur in unexamined areas of the alignment. These impacts will be managed through the implementation of approved CHMPs.

18.5 Mitigation and management

For the management and mitigation of impacts on Indigenous cultural heritage, Australia Pacific LNG will utilise a range of cultural heritage management processes and proven procedures that have been effectively implemented by Origin in the Queensland regional areas for projects of a similar nature.

In addition, a number of CHMPs will be developed, based on these existing processes and procedures, and implemented for the Project. These CHMPs will recognise the primary role of Indigenous people in the custodianship of their heritage. The mitigation measures included within the CHMPs will be comprehensive and entail a number of possible procedures that will include (but not be limited to):

- Avoidance of Indigenous cultural heritage, where practicable
- Further detailed field investigations
- Relocation of cultural heritage items in agreement with the relevant Aboriginal party.

Management measures during construction will include:

- Cultural heritage induction for the workforce and monitoring of specific construction activities where there is a high potential of sub-surface finds (if any)
- Procedures for unexpected finds
- A conflict resolution process.

Following completion of the Project, cultural heritage items recovered prior to construction and objects identified and salvaged during construction may require management and safe-keeping. Issues relating to the storage of objects will be agreed upon and specified in the CHMP.

18.6 Conclusions

18.6.1 Assessment outcomes

This assessment of Indigenous cultural heritage for the Project has been designed to avoid and/or minimise any impacts to Indigenous cultural heritage. The assessment has included collation of site data through the gas pipeline study area from a range of sources including the Aboriginal Heritage Register and Database, published and unpublished sources, studies undertaken with the Aboriginal parties in neighbouring areas (including Laird Point on Curtis Island) and modeling of site distribution as part of a constraints analysis.

The gas pipeline route has been modified in light of these findings to minimise impacts to sites. This has led to the situation where no registered site is nearer than 200m from the gas pipeline route. While this result provides an indication of the desire of Australia Pacific LNG to avoid culturally significant sites further unidentified sites are likely to be found along the gas pipeline. Mechanisms for dealing with these unrecorded sites have been anticipated in the preparation of CHMPs being negotiated with the endorsed Aboriginal parties.

A summary of the values, sustainability principles, potential impacts and mitigation measures in relation to Indigenous cultural heritage is presented below in Table 18.6. This table also includes the residual risk levels for Indigenous cultural heritage. Mitigation measures to reduce the risk have been nominated and the residual risk has been calculated. Further details on the risk assessment methodology are provided in Volume 1 Chapter 4.



Table 18.6 Summary of values, sustainability principles, potential impacts and mitigation measures

Values	Sustainability principles	Potential impacts	Possible causes	Mitigation and management measures	Residual risk level ¹
Indigenous cultural heritage values - (design construction and operation)	Minimising adverse environmental impacts and enhancing environmental benefits associated with Australia Pacific LNG's activities, products or services; conserving, protecting, and enhancing where the opportunity exists, the biodiversity values and water resources in its operational areas	Design – Harm to Indigenous cultural heritage associated with facility design or site investigations	Design process does not adequately consider Indigenous cultural heritage issues. Disturbance to Indigenous cultural heritage from site investigations.	CHMP to detail process for the assessment and management of Indigenous cultural heritage. Avoidance principle to be implemented where practicable.	Low
Respecting the rights, interests and diverse cultures of the communities in which Australia Pacific LNG operates Engaging regularly, openly and transparently with people and communities affected by Australia Pacific LNG's activities, considering their views in its decision-making and striving for		Construction - Harm to Indigenous cultural heritage arising from construction activities	Project personnel not aware of Indigenous cultural heritage management procedures Project personnel not following appropriate Indigenous cultural heritage management procedures.	CHMP to include procedures for the management of Indigenous cultural heritage. This will include: <ul style="list-style-type: none"> • Inductions for employees • Procedures in case of a find of cultural material • Procedures in the event human remains are found • Procedures for the management of identified areas or objects 	Low

¹ The risk assessment process for the project is described in Volume 1 Chapter 4.



Values	Sustainability principles	Potential impacts	Possible causes	Mitigation and management measures	Residual risk level ¹
	<p>positive social outcomes</p> <p>Working cooperatively with communities, governments and other stakeholders to achieve positive social and environmental outcomes, seeking partnership approaches where appropriate.</p>	<p>Operation - Harm to Indigenous cultural heritage arising from operational activities.</p>	<p>Operations personnel not aware of Indigenous cultural heritage management procedures</p> <p>Operations personnel not following appropriate Indigenous cultural heritage management procedures.</p>	<p>CHMP to include procedures for the management of Indigenous cultural heritage. This will include:</p> <ul style="list-style-type: none"> • Inductions for employees • Procedures in case of a find of Indigenous cultural heritage • Procedures in the event human remains are found • Procedures for the management of identified areas or objects 	Low

18.6.2 Commitments

Australia Pacific LNG commits to continued engagement and negotiations with endorsed Aboriginal parties and to developing (where not already developed) and implementing an approved cultural heritage management plan for the gas pipeline.

Australia Pacific LNG is seeking to develop long-term relationships with Aboriginal parties and broader Indigenous communities through implementing an Indigenous engagement strategy.

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