

Section 1

Introduction



1. Introduction

1.1 Purpose of the EIS

This Draft Environmental Impact Statement (EIS) presents the findings and conclusions of an Environmental Impact Assessment (EIA) undertaken for the proposed Trans Territory Underground Pipeline Wadeye to Gove in the Northern Territory Project (hereafter referred to as TTP).

The objective of the EIA process is to ensure that potential environmental and social impacts associated with the project during both construction and operations, are identified and appropriately assessed. In doing so, relevant preventative and management measures are developed to ensure that adverse environmental impacts are managed to be as low as reasonably practicable (ALARP).

The Draft EIS has been prepared in accordance with Clause 8 of the *Environmental Assessment Administrative Procedures of the Environmental Assessment Act 1982* of the Northern Territory. The structure of the document is based on the guidelines issued in response to the Notice of Intent (NOI) and EPBC Act referral (Woodside 2003a & 2003b) submitted by the TTP sponsors to the Northern Territory (NT) Government and Commonwealth Government on 1 September 2003. Following regulatory review, the level of environmental assessment required for the proposed project was set as an EIS. The guidelines issued jointly by the Northern Territory and Commonwealth Government are attached in **Appendix A, Volume 1**.

The key objectives of this Draft EIS are to provide:

- A source of information from which stakeholders may gain an understanding of the proposal, the need for the proposal, the economic and other benefits that might arise from the proposal, the alternatives, the environment that it would affect, the impacts that may occur, the significance of these potential impacts and the measures adopted to minimise these impacts.
- A basis for public consultation and informed comment on the proposal.
- A framework against which regulatory authorities can consider the environmental aspects of the proposal, set conditions for approval to ensure environmentally sound development and recommend an environmental management and monitoring programme.
- A cornerstone document to aid in the development of the project's ongoing Environmental Management System (EMS).

1.2 Overview of the Proposed Development

Alcan in association with the Blacktip Joint Venture comprising Woodside Energy Ltd (Woodside) and Eni Australia B.V have developed the TTP proposal, which will require a third party to construct and operate a 940 km long high pressure buried gas pipeline between Wadeye and Gove in the Northern Territory (**Figure 1-1** and **Volume 3** of this Draft EIS). The pipeline will consist of a buried high-tensile steel pipe located within an approved 30 m wide construction corridor, which will be developed within a 100 m wide temporary pipeline corridor.

In addition to access roads, certain above ground facilities such as meter stations, scraper stations, mainline valves and compressor stations will be required at intervals along the route.

The gas will be sourced from the offshore Blacktip gas field in the Joseph Bonaparte Gulf; approximately 250 km southwest of Darwin in exploration permit WA-279-P. The Blacktip Project involves the installation of a remotely operated wellhead platform and a 107.5 km subsea pipeline to an onshore gas plant near Wadeye. The TTP will commence at the eastern boundary of the proposed Blacktip gas plant and will terminate north of the Alcan Gove Refinery on the Gove Peninsula.

1.3 Project Proponent

The TTP's revenue is underwritten by Alcan's payment of a gas transportation tariff in shipping Alcan's gas from Blacktip. Alcan has sought by means of a competitive bidding process, to identify and select a builder, owner and operator (BOO) of the TTP that is both technically and financially competent and has the ability to work collectively with major stakeholders in the Northern Territory such as the NT Government, traditional Aboriginal owners and native title groups. The BOO proponents have within their consortia, experienced and competent Australian pipeline industry participants.

The TTP sponsors are responsible for the EIA process and submission of the Draft EIS, as the initial developers of the project. The BOO consortium will be assigned the obligations of the EIS environmental commitments and will hence develop the subsequent Environmental Management Plan (EMP) accordingly.

Alcan: Alcan Gove Pty Ltd is a wholly owned subsidiary of Alcan Inc. Alcan is a multinational, market-driven company and global leader in aluminium and packaging, as well as aluminium recycling. With world-class operations in primary aluminium, fabricated aluminium as well as flexible and specialty packaging, aerospace applications, bauxite mining and alumina processing. Alcan employs 88,000 people and has operating facilities in 58 countries and regions.

Aluminium is often described as the 'sustainable metal' due to its lightweight, high strength to weight ratio, resistance to corrosion and ease of recycling.

Alcan Gove Pty Ltd operates the bauxite mine and alumina refinery on the Gove Peninsula in the Arnhem Land region of the Northern Territory. It is the Territory's largest exporter and the second largest employer with a workforce of 1,100 people. The Alcan Gove Refinery commenced construction in the 1960s with first production of alumina beginning in 1972. Since commissioning over 150 million tonnes (Mt) of bauxite have been mined and around 40 Mt of alumina produced and exported. Alcan Gove currently produces approximately 2 Mt of alumina per annum for export and is expected to increase to 3.8 Mt per annum after the completion of the Alcan Gove Expansion Project in early 2007.

Blacktip Joint Venture: The Blacktip Joint Venture (Blacktip) is made up of the following participants with Woodside as operator:

- Woodside 53.85%
- Eni Australia 46.15%

Woodside is a leading Australian oil and gas company with substantial assets and a growing international reputation as a successful oil and gas explorer, developer and operator. Formed in 1954 as Woodside (Lakes Entrance) Oil NL to search for oil in Victoria's Gippsland region, Woodside is now based in Perth, Western Australia (WA). The company operates Australia's biggest energy resources development, the North West Shelf Project, supplying most of WA's domestic gas requirements and exporting liquefied natural gas (LNG), liquefied petroleum gas (LPG) and crude oil.

Eni Australia BV (Eni) is one of the world's major international integrated energy companies operating large upstream projects, downstream gas and power generation infrastructure, refining and marketing activities, as well as oil field services and engineering.

In Australia, Eni has a 65% stake and is Operator of the Woollybutt oilfield in offshore Carnarvon Basin in WA, with a 12% interest in the Bayu-Undan gas condensate project, as well as a 46% interest in the Blacktip Project. Eni has an active exploration programme in Australia with interests in 12 permits, of which it currently operates four.

1.4 Project Background

In February 2003 Alcan commenced the preparation of an environmental assessment and feasibility study to expand its existing alumina refinery and bauxite mining plant at Gove, Northern Territory. As part of the expansion of the Gove refinery, Alcan proposed converting its plant from fuel oil to natural gas and undertook investigations into possible sources of natural gas.

The Blacktip gas field was identified as a potential source of gas for the 'Expansion Project', with negotiations between Alcan, Woodside and Eni to secure a natural gas supply. Subsequently, in June 2003, a 'heads of agreement' between the three parties was signed for the supply of 40 PJ/year of gas for 20 years to the Alcan Gove Refinery.

On 5 November 2004, Alcan and Blacktip signed a conditional Gas Sales Agreement (GSA) for the supply of 800 PJ of natural gas over a 20-year period starting in late 2007. The GSA is conditional on the Blacktip Project receiving all joint venture and Government approvals by mid-2005 and the development of the TTP to the satisfaction of Alcan. It follows a heads of agreement signed with Alcan in June 2003.

The TTP Draft EIS is one of three separate EISs submitted to Government in association with the expansion and conversion to gas of the Alcan Gove Refinery. As shown in **Figure 1-2**, the three projects undergoing separate EIA processes include:

- Trans Territory Pipeline Project (TTP): Approximately 940 km of onshore pipeline from Woodside's onshore gas plant at Wadeye to Gove, Northern Territory.
- Alcan Gove Expansion Project: Expansion of the Alcan Gove Refinery to increase plant capacity to 3.8 million tonnes per annum.
- Blacktip Project: Offshore gas field development and associated transport of gas via 107.5 km subsea and 2.5 km onshore pipeline to an onshore gas plant near Wadeye, Northern Territory.

The TTP schedule is presented in **Figure 1-3**.

1.5 EIS Scope

The scope of the Draft EIS is comprised of the following major components:

- Construction, operation and decommissioning of a 940 km onshore-buried gas transmission pipeline between Wadeye and Gove.
- Construction and operation of above ground facilities including compression stations, meter stations, scraper stations, mainline valves and other ancillary facilities.
- Construction of temporary camps.
- Construction of temporary and permanent access roads and laydown areas.

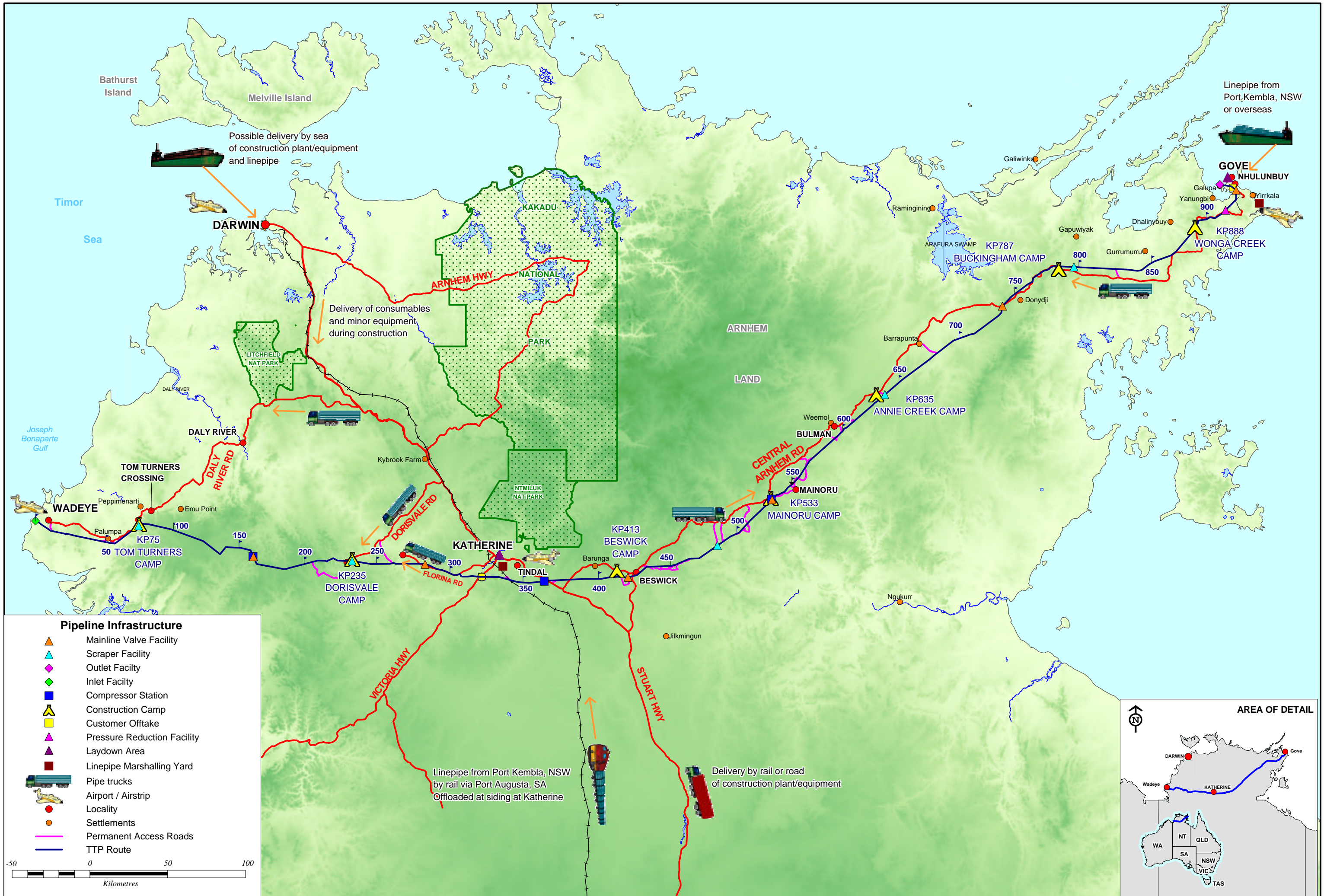
1.6 Project Net Benefits

The main environmental benefits of the project can be attributed to the substitution of natural gas for fuel oil at the Alcan Gove Refinery. Natural gas produces less particulate matter, sulphur dioxide and greenhouse gas emissions when compared to the fuel oil currently used at the Alcan Gove Refinery. Supplying natural gas to Alcan will result in a cleaner production process and positive impacts on existing atmospheric quality (Alcan 2003a). The development of the TTP will also support gas supply to additional markets, in the event that these markets should mature and the necessary gas reserves are identified.

The construction phase of the TTP has the potential to provide social and economic benefits for communities along the pipeline corridor as well as regional and national benefits for the Northern Territory Government and Commonwealth Government by expanding economic activity, employment, income and expenditure.

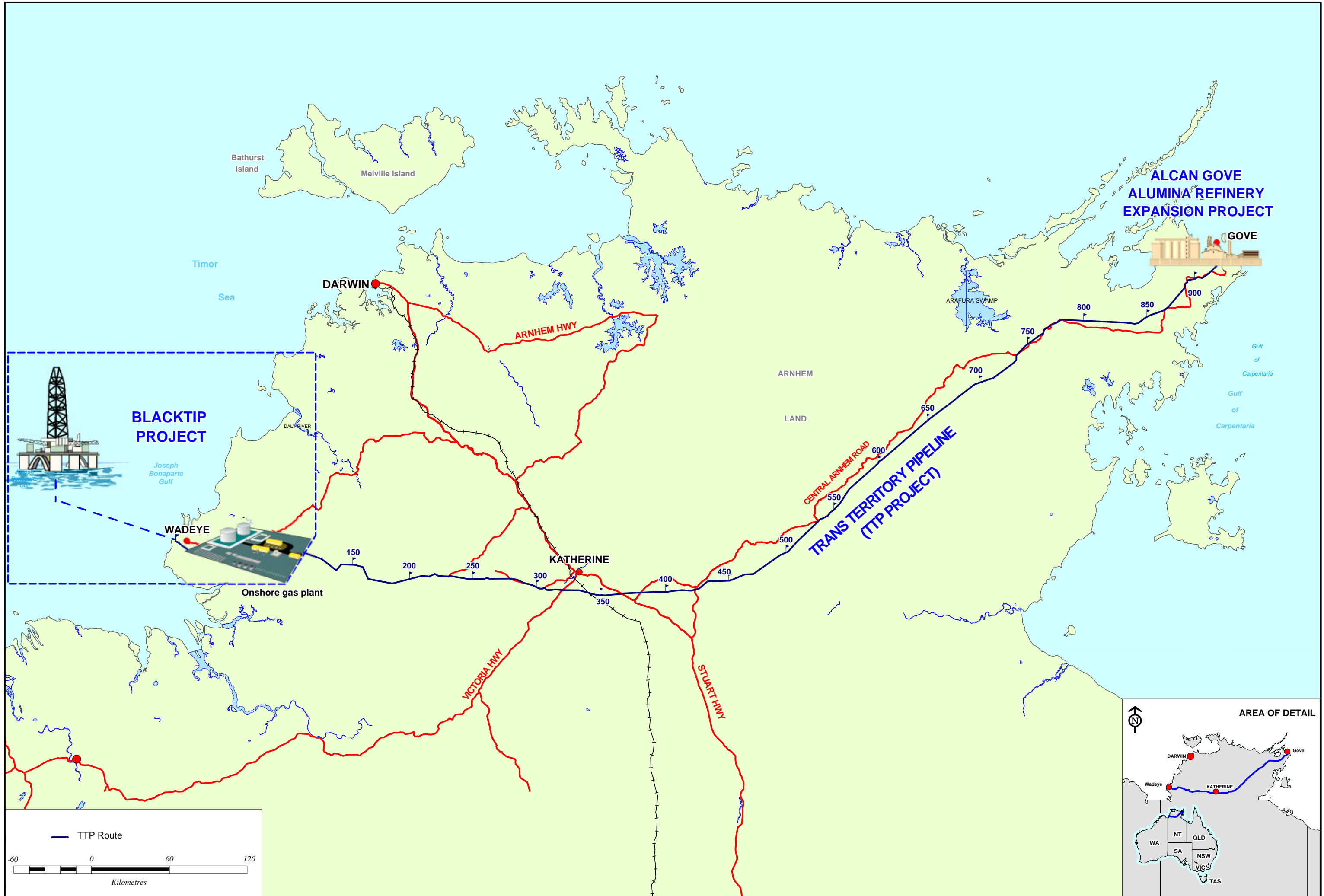
The objectives and potential benefits of the project are described in greater detail in **Section 2** of the Draft EIS.

Figure 1-1: Proposed TTP Route and Ancillary Infrastructure



Source: Topographic Data Geoscience Australia, Design Pipe Alignment Data Rev 6 (2004-09-27) Alcan, Prepared by Mipela GIS.

Figure1-2: Blacktip Project, Trans Territory Pipeline Project and Alcan's Expansion Project



Source: Topographic Data Geoscience Australia, Design Pipe Alignment Data Rev 6 (2004-09-27) Alcan. Prepared by Mipela GIS.

Project Stage	2003				2004				2005				2006				2007			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Commercial Market Development	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue								
Land Management Approvals	Magenta	Magenta	Magenta	Magenta	Magenta	Magenta	Magenta	Magenta	Magenta	Magenta										
Engineering	Teal	Teal	Teal	Teal	Teal	Teal	Teal	Teal	Teal	Teal	Teal	Teal								
Draft EIS/Public Consultation								Yellow	Yellow											
Gas Sales Agreement								Cyan												
EIS Government Approval									Olive	Olive										
Pipeline Construction Activities											Purple	Purple			Purple	Purple			Purple	
Commissioning															Green	Green			Green	Green
First Gas																				Red

Figure 1-3: TTP Schedule

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1.7 Environmental Approval Process

1.7.1 Bilateral Agreement

In 2002, the Northern Territory Government signed a Bilateral Agreement with the Commonwealth Government under Section 45 of the EPBC Act that accredits the Northern Territory's assessment process. This enables the Commonwealth to rely on the Northern Territory environmental impact assessment process, as per the *Northern Territory Environmental Assessment Act 1982 (Environmental Assessment Act)*, and ensures that a single assessment process can be carried out to satisfy both Northern Territory and Commonwealth requirements. The bilateral agreement covers all land within the Northern Territory and waters extending to 3 nm offshore.

TTP was declared a 'controlled action' by the Commonwealth Government under the EPBC Act because it was considered likely to have an impact on listed 'threatened species' and communities, and listed migratory species. Consequently, the Draft EIS will be assessed in accordance with schedule 1 to the 'Agreement between the Commonwealth of Australia and the Northern Territory Government under s.45 of the EPBC Act relating to environmental impact assessment' (ie the Bilateral Agreement).

1.7.2 Northern Territory Environmental Approval Process

The Northern Territory environmental assessment process is based on the *Environmental Assessment Act 1982*. Under this Act a proposal is referred to the Minister for the Environment and Heritage, who sets the level of assessment. The Office of Environment and Heritage then prepares Draft Guidelines in consultation with relevant advisory bodies. The Draft Guidelines are available for public comment for a 14 day period. At the end of this period the Office of Environment and Heritage has 14 days to finalise the Draft Guidelines for Ministerial Approval. When approved, the guidelines are forwarded to the proponent.

If, as in the case of the TTP, the level of assessment is set as an EIS, the proponent then prepares a Draft EIS which, after being submitted to the Minister, is subject to review and comment by Government agencies and the general public for a minimum of 28 days. Any comments received are forwarded to the proponent who addresses the issues in a Supplement to the Draft EIS. Government agencies review the Supplement and if necessary, the Minister can request further information from the proponent.

The Office of Environment and Heritage then has 35 days to prepare an Environmental Assessment Report and Recommendations, based on the Draft EIS and Supplement. Following approval by the Minister, these are forwarded onto the responsible Minister(s) for inclusion in permit or licence conditions and other regulatory requirements. A flow chart of the approval process is illustrated in **Figure 1-4**.

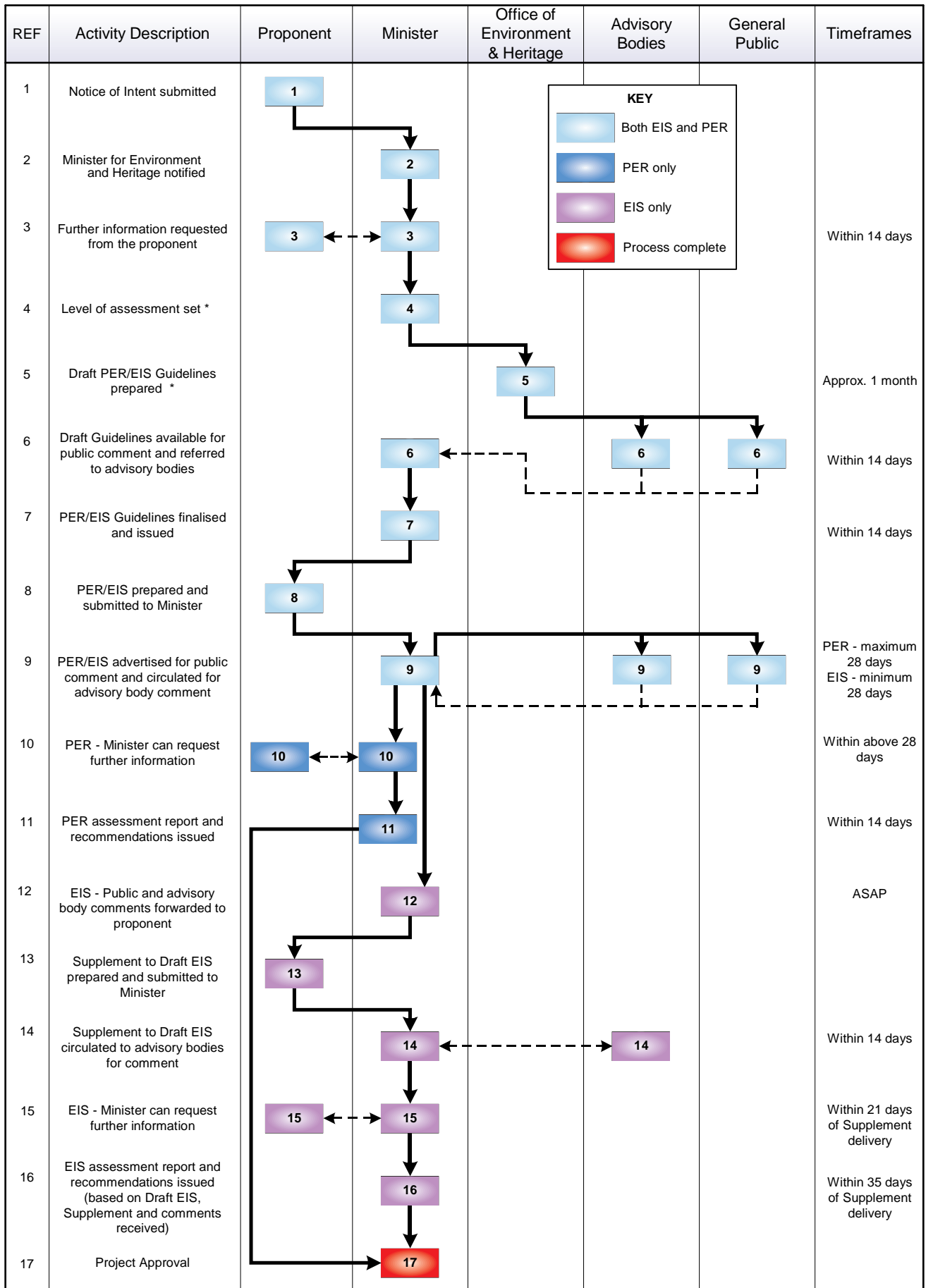
1.8 Regulatory Framework

The TTP will be required to comply with the legislative requirements established under the Northern Territory Government and Commonwealth Government framework for which the TTP will receive environmental, planning and development approvals and authorisations.

1.8.1 Northern Territory Primary Legislation

The major Northern Territory statutory requirements applicable to the TTP are summarised below:

- *Aboriginal Land Act 1978*: Controls entry on to Aboriginal land. Entry permits are required pursuant to this Act.
- *Lands Acquisition Act*: Allows for the compulsory acquisition of land if necessary.
- *Northern Territory Aboriginal Sacred Sites Act 1989*: Provides protection to Aboriginal Sacred Sites and Objects. The Act requires development proponents to comply with a process for consulting with site custodians and an Authority Certificate will need to be obtained from the Aboriginal Areas Protection Authority prior to development.
- *Northern Territory Heritage Conservation Act 1991*: The Act provides a system for the identification, assessment, recording, conservation and protection of places and objects of prehistoric, protohistoric, historic, social, aesthetic or scientific value. The Heritage Conservation Branch maintains an Archaeological Sites Register and Heritage Register, which protects sites of heritage value prescribed under the *Heritage Conservation Act*. Should a place or object under this Act be required to be disturbed because of the project, then the Minister's permission must be obtained.
- *Territory Parks and Wildlife Conservation Act*: Applies statutory obligations in relation to the protection of vegetation, flora and fauna to the project. The Act allows the listing of threatened species with special conservation status and requires a permit to be granted prior to interference with these species.
- *Weed Management Act 2001*: The Act has been developed to protect the Territory's economy, community, industry and environment from the adverse impact of weeds. Under Section 32 of the Act a person must not move or drive an animal or vehicle that contains a declared weed on a public road or from the person's land to another person's land unless the animal or vehicle has been cleaned in accordance with a declared weed management plan or in compliance with the direction of an officer.
- *Waste Management and Pollution Control Act 1998*: Provides for the protection of the environment through encouragement of effective waste management and pollution prevention measures. The Act does not apply to wastes that are confined to the site on which they are generated, but requires licensing and registration for wastes that are discharged offsite.
- *Water Act 1992*: Provides for the protection of waterways, groundwater and tidal water from pollution. The Act also controls the drilling and abstraction of water from bores and the construction of dams or water storage facilities.



* Both EIS and PER environmental assessment processes are shown. However, an EIS level of assessment, not PER, has been set for Blacktip Project

Figure 1.4 Northern Territory Environmental Assessment Process

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- *Water Supply and Sewerage Act 1983*: Provides for the protection of the Northern Territory's water supply system or any water source from which water is drawn for human consumption. Any abstraction or diversion of water from the Territory's supply system must not be undertaken unless authorised by the appropriate authorities. Penalties are in place for pollution of any water supply or source.
- *Soil Conservation and Land Utilisation Act 1969*: Makes provision for the prevention of soil erosion and for the conservation and reclamation of soil.
- *Energy Pipelines Act 1981*: This Act makes provision for the construction, operation, maintenance and cessation of use or abandonment of pipelines for the conveyance of energy-producing hydrocarbons, as well as environmental management requirements. This act does not exempt a person from the need to comply with the *Dangerous Goods Act* in relation to the storage, conveyance or use of dangerous goods, within the meaning of that Act, or in connection with the construction, maintenance or repair of a pipeline. Under the Act, discrete licences, permits and plans are required for the construction and operation of a pipeline.
- *Public Health Act 1997*: This act and associated regulations apply to the health of the public. Particular regulations prescribe to matters in relation to prevention of disease, maintenance of health, sanitation, the designation of diseases and measures for the control of diseases to name a few.
- *Environmental Assessment Act 1982*: This Act provides for the assessment of the environmental effects of development proposals and for the protection of the environment. The object of the Act is to ensure that each matter affecting the environment is fully examined and taken into account in relation to the formulation of proposals and the carrying out of works and other projects.
- *Dangerous Goods Act 1998*: provides for the safe storage, handling and transport of certain dangerous goods, of which petroleum gas is a dangerous good.

A comprehensive list of applicable Northern Territory legislation can be found in **Appendix B, Volume 1** of this Draft EIS.

In addition to legislative requirements, applicable Northern Territory environmental guidelines and strategies will be adhered to during the project life. Such guidelines include:

- *Northern Territory Parks & Conservation Plan*: The Department of Infrastructure, Planning and Environment is developing a new Northern Territory Parks and Conservation Masterplan. The Masterplan will be prepared in partnership with the Commonwealth Department of Environment and Heritage and the Northern Territory's Aboriginal Land Councils. The purpose of the project is to provide a vision and blueprint for the conservation of the Northern Territory's extensive variety of plants and animals.
- *A Strategy for Conservation through the Sustainable Use of Wildlife in the Northern Territory of Australia 1997*: Enhances the conservation of Northern Territory plants and animals through the development of programs incorporating their sustainable use.

- *A Strategy for the Conservation of Species and Ecological Communities Threatened with Extinction in the Northern Territory of Australia 1998*: Enables those species and ecological communities threatened with extinction to survive and prosper in their natural habitats, and to minimise the chance of more species and communities becoming threatened.
- *Strategy for the Conservation of Biological Diversity of the Wetlands of the Northern Territory of Australia 2000*: The Strategy has been developed to conserve and enhance wetland biodiversity in the Northern Territory.
- *Draft Management Programme for Cycads in the Northern Territory 2003–2008*: Developed and implemented, to ensure viable wild populations of all cycads and cycad habitats across the Northern Territory are maintained. The major aims of this Management Programme are to promote the conservation of cycad populations through wise land management practices, develop and apply strategies for their sustainable use and promote public awareness and education.
- *Procedures and Records for the Administration of Petroleum Activities 2002*: These guidelines provide assistance on the application of pipeline permits, licences and management plans under provisions of the *Energy Pipelines Act 1981*.

1.8.2 Commonwealth of Australia Primary Legislation

Major Commonwealth legislation applicable to the TTP includes:

- *Aboriginal and Torres Strait Islander Heritage Protection Act 1984*: Aboriginal and Torres Strait Islander Heritage Protection Act 1984 is available to Aboriginal people as a mechanism to protect sites of heritage significance in addition to State or Territory heritage legislation. It is not a requirement in this situation but is able to be used by Aboriginal people should they so decide.
- *Environmental Protection and Biodiversity Conservation Act 1999*: Requires that any proposal impacting upon an area with environmental significance under Commonwealth authority be referred to the Commonwealth for approvals in addition to approvals required at a state level.
- *Native Title Act 1993*: Allows for the recognition of native title through a claims and mediation process and also sets up regimes for obtaining interests in land or waters where native title may exist. The proponent will seek to enter into Indigenous Land Use Agreements, pursuant to this Act, with the relevant native title groups, if any, in relation to the land associated with the TTP.
- *Environment & Heritage Amendment Act No. 1 2003, No 88 2003 (repealed the Australian Heritage Commission Act)*: Schedule 1 and 3 incorporate new heritage protection into the EPBC Act that provide for:
 - inclusion of ‘national heritage places’ as a new matter of national environmental significance;
 - establishment of a National heritage list;
 - establishment of a Commonwealth heritage list;
 - nomination, listing, management and protection arrangements for places on the two new lists (DEH 2004a).

- *Aboriginal Land Rights (Northern Territory) Act 1976*: Recognised Aboriginal land and sets up a claims process, and processes through which development proponents can obtain interests in Aboriginal Land.

Further details of relevant Commonwealth legislation can be found in **Appendix B, Volume 1** of this Draft EIS.

1.8.3 Technical Standards & Codes of Practice

Australian Standards (AS): The pipeline will be designed, constructed, operated and maintained in accordance with *AS 2885 Gas and Liquid Petroleum, Parts 1, 2, 3 and 5*.

AS 2885-1: Design and Construction

AS 2885-2: Welding

AS 2885-3: Operation and Maintenance

AS 2885-5: Field Pressure Testing

APIA Code of Environmental Practice (1998): The Australian Pipeline Industry Association (APIA) Code of Practice has been established to encapsulate the Best Practice Techniques and Methods presently available to mitigate or eliminate the environmental impact of pipeline construction and operation on the receiving environment. Essentially the code aims to provide guidance and direction in the management of the environmental aspects of pipeline planning, design, construction, operation and decommissioning. The Decommissioning Code of Practice (2003) is currently in draft form.

Other Australian Standards and Codes of Practice applicable to the TTP are included in **Appendix B, Volume 1**.

1.8.4 International Treaties and Conventions

Australia is a member of a number of international organisations which have an interest in and responsibilities for conservation, the environment and pollution control. Numerous international agreements relate to the management of environmental impacts from petroleum developments. Where Australia has ratified these agreements, they have duly been incorporated into domestic law. As such the international obligations contingent on the TTP are addressed by abiding by the relevant Commonwealth or Territory legislation as detailed in **Section 1.8.1** and **Section 1.8.2**. Certain agreements however, have particular relevance to the TTP and include:

- *Convention on the Conservation of Migratory Species of Wild Animals (Bonn Convention) (1979)*;
- *Convention on Biological Diversity (1992)*;
- *Convention of Wetlands of International Importance, (The RAMSAR Convention)(1971)*;

- *Agreement between the Government of Australia and the Government of Japan for the Protection of Migratory Birds and Birds in danger of Extinction and their Environment – (Japan Australia Migratory Bird Agreement or JAMBA);*
- *Agreement between the Government of Australia and the Government of the People’s Republic of China for the Protection of Migratory Birds and their Environment (China - Australia Migratory Bird Agreement or CAMBA).*

1.9 Pipeline Approvals

The *Energy Pipelines Act 1981 & Regulations 2001* stipulate requirements for the construction, operation, maintenance and decommissioning of onshore pipelines in the Northern Territory, as well as environmental management requirements. This applies to the entire length of the TTP from Wadeye to the Alcan Gove Refinery. Under the Act, discrete licences, permits and plans are required for the construction and operation of a pipeline. These documents are not related to the Draft EIS approval process and need to be obtained independent of the *Environmental Assessment Act 1982*.

Each of these approval processes is summarised below:

Pipeline Permit: Under Section 3 of the *Energy Pipelines Act 1981*, a permit is required to enter land for the purpose of determining the route of the proposed pipeline and the location of proposed apparatus or works and the land. Before a permit can be granted applicants are required to negotiate with any native title parties.

Pipeline Licence: Under the *Energy Pipelines Act 1981* a pipeline licence is required before construction or operation of a pipeline can commence. A penalty may be incurred if a pipeline licence is not obtained prior to commencing any construction work and/or operations.

Pipeline Management Plan: A Pipeline Management Plan is required, covering all aspects of the pipeline project phases including:

- design, construction and commissioning;
- operation, maintenance and inspection;
- modification;
- decommissioning.

The management plan must be submitted within five years of the granting of a pipeline licence. Pipeline Management Plans should be prepared in accordance with the requirements of the *Energy Pipelines Regulations 2001*.

1.10 Planning Schemes

The TTP will pass through three of the Northern Territory’s administrative regions, namely:

- The Darwin Regional Balance – a combination of the sub regions of Daly, Jabiru, South Alligator, Bathurst – Melville and West Arnhem.

- The Katherine Region – a combination of the sub regions of Victoria, Katherine, Elosey Balance and Gulf.
- The East Arnhem Region – a combination of the sub regions of East Arnhem Balance, Groot Eylandt and Nhulunbuy.

In doing so, areas governed by the municipal council of Katherine and three regional councils namely Thamarrurr Regional Council, Nyirranggulung Mardrulk Ngadberre Regional Council and Ngadberre Regional Council will be traversed.

The Northern Territory Government has developed the Northern Territory Planning Scheme through the *Northern Territory Planning Act 1999*. This scheme regulates the use and development of land so that like uses are clustered together (DIPE, 2004a).

The following documents form part of planning schemes within the vicinity of the proposed TTP:

- Katherine Planning Concepts and Land Use Objectives, 2001;
- Katherine Land Use Structure Plan, 1991;
- Katherine Rural Area Plan, 1998 (amended in 2003);
- Katherine Town Plan, 1981 (amended in 2003);
- Wadey Land Use Structure Plan and Infrastructure Development Strategy, 2004;
- Nhulunbuy Town Development Plan;
- Northern Territory Highways Control Plan 1984.

As discussed further in **Section 7.2** the proposed pipeline route will pass within the boundaries of three land use planning areas.

The proponent proposes that an amendment be made to the Act, to exempt the grant of interests in the land to the TTP from amounting to a subdivision.

1.11 Land Tenure Approvals

The forms of land tenure that the project will seek will be as follows.

Aboriginal Land: A long term lease pursuant to Section 19 (4A) of the *Aboriginal Land Rights Act 1976* (ALRA). The length of the lease will be 50 years, plus a further right of renewal of 25 years and will be negotiated with the Northern Land Council (NLC), on behalf of the traditional Aboriginal owners. Under Section 19 (5), the Land Council:

‘...shall not give a direction under this section for the grant, transfer or surrender of an interest or estate in land unless the Land Council is satisfied that:

- a) the traditional Aboriginal owners (if any) of that land understand the nature and purpose of the proposed grant, transfer or surrender and, as a group, consent to it;

- b) any Aboriginal community or group that may be affected by the proposed grant, transfer or surrender has been consulted and has had adequate opportunity to express its view to the Land Council;
- c) in the case of a grant of an estate or interest – the terms and conditions on which the grant is to be made are reasonable.

As the proposed lease is in excess of ten years, under section (7)(b) of the ALRA, the Commonwealth Minister must consent to the grant.

Pastoral, Crown Leases & Freehold Land: A long term lease or sublease directly with the landowner. The length of the leases/subleases will be 50 years, plus a further right of renewal of 25 years.

In respect of vacant Crown land, roads and rivers secure tenure will be sought from the NT Government.

Native Title: In respect of land where native title might exist, it is the proponent's intention to enter into an Indigenous Land Use (Area) Agreement for the relevant land.

Compulsory Acquisition: The proponent will also ask the NT Government to commence the compulsory acquisition process of both private interests in land and any native title interests, pursuant to the *Lands Acquisition Act*, so that in the event that agreement cannot be reached, then the land would be compulsorily acquired.

1.12 Environmental Management Policy

As outlined in **Section 1.3** Alcan is the lead sponsor for the TTP project and, as such, has set the minimum standard for EHS management that will be implemented by the BOO consortium. This section outlines the Alcan EHS Policy.

Alcan's EHS Policy is provided in **Appendix C, Volume 1** of this Draft EIS. Alcan's environmental management is governed by an overriding global focus on sustainability, and includes:

- Improving performance by increasing the social and economic benefits, reducing the environmental impacts of activities and becoming a more profitable and competitive organisation.
- Strengthening relationships and partnerships through recognising and working closely with stakeholders.
- Demonstrating integrity and commitment by maintaining high standards and values in day to day operations.

Alcan has adopted a number of initiatives to support the global sustainability commitment including:

- Environmental, Health and Safety (EHS) Policy that advocates excellence in environmental performance through continuous improvement of awareness, understanding and performance. This policy is the cornerstone of Alcan's global EHS management system (Alcan Gove 2004a).
- Certification to ISO 14001 an internationally recognised standard for environmental management systems (Alcan Gove 2004b).
- Membership of the World Economic Forum's (WEF) Global Greenhouse Gas Register, an initiative to stimulate the disclosure and management by companies of their world-wide climate emissions.
- Greenhouse Gas 'TARGET' Program that seeks compliance with a company-wide initiative for reduction in greenhouse gas emissions (Alcan Gove 2004c). In 2003, reduced emissions by 300,000 tonnes of CO₂ equivalents, more than double the established objective.
- Active in Australian Government's Greenhouse Challenge Program with submission of annual reports to the Australian Greenhouse Office pertaining to performance against emission management targets.
- Continuous improvement principles demanding excellence and sustainability in the environmental area.
- Annual public reporting on the environment, health and safety and community affairs performance.

1.13 EIS Guidelines

1.13.1 Project Guidelines

EIS guidelines (**Appendix A, Volume 1**) have been developed by the Northern Territory Government to assist Alcan with preparation of the Draft EIS. The objective of these guidelines is to identify those matters that should be addressed in the Draft EIS.

The guidelines are based on the initial outline of the proposal in the Notice of Intent (NOI) (Woodside 2003a). It is recognised that not all matters indicated in the guidelines may be relevant to all aspects of the proposal. Conversely, the guidelines are not seen as exhaustive and have not been interpreted as such. Any matters emerging as worthy of assessment from scientific studies, project design changes, public consultation process have been incorporated into this Draft EIS. Similarly, all such matters raised during the public review period will be assessed and incorporated in the Supplement to the Draft EIS.

The covering letter for the issue of the Final Guidelines references the corridor width as 25 m in accordance with the *NT Energy Pipelines Act*. However, this is a measure that protects the interests of the Pipeline Licence holder for planning and further development purposes, and the final Pipeline Licence area will be defined in the TTP Pipeline Licence. In relation to land tenure, the

TTP sponsors are generally pursuing a 30 m permanent interest in land, which is not inconsistent with the Act.

1.13.2 Project Exclusions

This Draft EIS is structured on the guidelines issued in response to the NOI which was submitted to the Northern Territory Government and the Federal Government seeking the required level of assessment for TTP (**Section 1.1**). At the time the NOI was submitted, the base case comprised the following components:

- Approximately 950 km of buried high tensile steel pipe located in a corridor of up to 30 m wide.
- Above ground facilities located at intervals along the pipeline route including compressor stations, meter stations, scraper stations, mainline valves and other ancillary facilities.
- The potential for a condensate pipeline to be layed in the gas pipeline trench.

Although included in the original NOI and subsequent guidelines, the potential for a condensate pipeline to be layed in the gas pipeline trench has now been excluded from the scope of the TTP.

To facilitate cross-referencing of this Draft EIS with the guidelines, a cross-referencing table has been provided in **Appendix D, Volume 1**.

1.14 EIS Structure

This Draft EIS is presented in three separate volumes and is structured as follows:

Volume 1 – Main EIS Report

- Executive Summary provides a brief outline of the TTP and a summary of each section of the Draft EIS.
- Section 1 provides an introduction to the EIS and background to the TTP sponsors, environmental assessment process and relevant legislation.
- Section 2 discusses the socio-economic objectives and benefits of the TTP on a local, regional and national scale.
- Section 3 outlines a summary of the ongoing TTP community consultation programme.
- Section 4 presents the pipeline route selection process and alternative proposals considered for the development including alternative pipeline routes.
- Section 5 provides a description of the project development. Where appropriate, relevant Northern Territory Government and Commonwealth Government legislation, national and international standards and Northern Territory Government guidelines are referenced.
- Section 6 outlines the existing biophysical environment in the vicinity of the project.
- Section 7 describes the existing economic environment, land uses and archaeology along the route.
- Section 8 presents the approach to the environmental risk assessment.

- Section 9 identifies potential biophysical environmental impacts and associated preventative and management measures.
- Section 10 identifies potential impacts on the economic environment, land uses and archaeology, as well as the associated preventative and management measures.
- Section 11 presents a summary of the Social Impact Assessment (SIA) undertaken for the project.
- Section 12 describes the TTP Environmental Management System, project environmental commitments, Framework Environmental Management Plans and Environmental Monitoring Programme.
- Section 13 summarises the health and safety issues pertaining to the design, construction and operational phases of the TTP.
- Section 14 provides a glossary.
- Section 15 presents references.
- Section 16 presents acknowledgments.
- Appendix A presents guidelines for the preparation of the Draft Environmental Impact Statement.
- Appendix B provides a summary of relevant Commonwealth and Northern Territory legislation.
- Appendix C presents Alcan's Environment Health and Safety Policy.
- Appendix D provides a table to enable the cross-referencing of the EIS guidelines with the relevant EIS section.

Volume 2 - Technical Appendices

Appendix A Trans Territory Pipeline – Environmental Noise Assessment prepared by Air Noise Environment Ltd.

Appendix B Meteorological and Climate Data for the Project Vicinity prepared by EcOz Environmental Services.

Appendix C Geology, Landforms and Soils along the Preferred Pipeline Route prepared by Sinclair Knight Merz & EcOz Environmental Services.

Appendix D Geotechnical Investigation – Trans Territory Pipeline Northern Territory prepared by Golder Associates.

Appendix E Trans Territory Pipeline – Preliminary Risk Assessment of the Trans Territory Natural Gas Pipeline in Accordance with AS2885 prepared by OSD Energy Services.

Appendix F Summary of Ecological Features in the Project Area prepared by EcOz Environmental Services.

Appendix G Hydrology and Water Quality Report prepared by EWL Sciences.

Appendix H Vegetation and Flora Study prepared by EcOz Environmental Services.

Appendix I Terrestrial Fauna Study prepared by EcOz Environmental Services.

Appendix J Aquatic Fauna Study prepared by Aquagreen.

Appendix K Biting Insect Survey prepared by Northern Territory Medical Entomology.

Appendix L Archaeology and Historic Heritage Report prepared by Begnaze Pty Ltd.

Appendix M Environmental Cultural Values Report prepared by Smyth & Bahrdt Consultants.

Appendix N Social Impact Assessment of the TTP prepared by ImpaxSIA Consulting.

Volume 3- Main Infrastructure and Topographical Map Series