

Appendix N

Social Impact Assessment
Trans Territory Pipeline, Northern Territory
prepared by ImpaxSIA Consulting





Social Impact Assessment Trans Territory Pipeline, Northern Territory



**Report prepared for the Sponsors of the Trans Territory Pipeline
Alcan Gove Pty Ltd (Operator) and the Blacktip Joint Venture
(Woodside Energy Ltd and ENI Australia)**

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Front cover photo courtesy of Palumpa Council

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Executive summary

Alcan Gove Pty Ltd and the Blacktip Joint Venture (Woodside Energy Ltd and ENI Australia), as joint sponsors, propose to construct a gas pipeline from Wadeye to Alcan's bauxite mine and alumina refinery located on the Gove Peninsula. The Project is referred to as the Trans Territory Pipeline (TTP).

This Report presents the findings of the Social Impact Assessment (SIA) for the Project. The findings are based on the outcomes of individual and small group interviews with 360 people, primarily comprising of Traditional Owners affected by the Project, who attended SIA consultations in 24 locations. Representatives from 63 organisations were also interviewed.

Awareness, understanding, support and opposition

Generally, along the route of the proposed pipeline, there is a high *awareness* of the Project. However, among some Traditional Owners and particularly among community members and staff of regional and community organisations *understanding* of the Project appears to be low. Many organisations and some key Traditional Owners asked that more information be provided to them on a range of matters relating to the TTP Project.

Overall, the support for the TTP Project appears to be high, providing that compensation is adequate, delivered to both Traditional Owners and to communities, and includes a community development emphasis and set of priorities; and providing that the Project creates jobs for Traditional Owners and local Aboriginal people, contributes to regional economic development and supports outstation development.

There were, however, pockets of opposition to the Project. Here objections centred mainly on potential damage to sacred sites and areas, damage to the environment and that the Project would facilitate unauthorised entry onto Aboriginal lands. There were also people whose opposition stemmed from a strong cultural consideration of the land as being a part of themselves, integral to one's identity, and believing, therefore, that the land should not be disturbed. One key group of Traditional Owners expressed the need to consult more widely with senior lawmakers before they could develop a position on the Project.

There appears to be a fair consensus amongst the non-Indigenous organisations that the Project presents a positive development for the Northern Territory.

Key findings

The capacity of affected Indigenous people to respond positively to the potential impacts of the proposed TTP Project would be enhanced if the following were implemented:

- More resources invested in the provision of training and employment planning and support.
- More resources invested in supporting local Traditional Owners to respond adequately to new land management demands arising from the Project.
- Timely provision of information about possible business opportunities associated with the proposed Project provided to local Indigenous organisations.
- A sound communication strategy for the dissemination of information about the Project.
- Assistance and advice in managing and investing compensation monies.

Aspirations

Aspirations in relation to the TTP are high, in particular regarding Community Benefits, employment, training and business opportunities, capacity-building arising out of engagement with the TTP process, royalties, and provision of gas and infrastructure, including road upgrades.

Those interviewed provided a wide range of proposals for possible inclusion in a Community Benefits Package. There was a clear view that the Project would impact not only on Traditional Owners but also on Aboriginal people living in communities and at homelands that are adjacent to the proposed TTP route, in particular through additional traffic and hazards to pedestrians and motorists using the same roads as construction teams.

Traditional Owners, particularly in the East and West regions, and to a lesser extent in the Central region, view homeland development as one of their major priorities and hope that the Project will assist them to further develop their outstations. They have an expectation that this will occur through provision of royalty income over the 25 year

period and that they could use these funds to purchase vehicles and equipment; to upgrade housing and essential services including water and power and to improve road and air access through upgrades to outstation roads and airstrips.

There is a widespread belief that the Project is capable of and likely to lead to, the provision of natural gas for the generation of community and regional power needs. Our discussions with the Northern Territory Power and Water Authority indicate that these hopes are misplaced. There is a need to provide better information to those affected about the current situation in relation to free gas. Given how high people's expectations are, the Proponent can likely expect a backlash in some areas.

A number of communities expressed the hope that the Project will lead to infrastructure upgrades in their communities, specifically in relation to airstrips, access roads, rubbish dumps, energy generation equipment and additional bores.

All Traditional Owners expect to receive royalty income from the Project. Most expressed the aspiration that royalty monies (their words) would provide income to their estate group to purchase vehicles, build up homelands and fund funerals, ceremony and other cultural activities. Many groups of Traditional Owners were keen to invest royalty income to provide an income stream for future generations, particularly for education purposes.

Those community and regional organisations interviewed consistently expressed the view that they had a range of capacities and expected to be able to take advantage of the TTP to create local business and employment opportunities for Traditional Owners and local Aboriginal people. There was a view that contracts to local communities was the most viable way to create employment opportunities for Aboriginal people.

Perceptions among non-Indigenous business organisations in Katherine regarding potential benefits being available to local businesses varied. Some informants expect there will be opportunities for local service contracts to provide food, ice, fuel and service parts while others said that they did not expect any benefits to come from the Project.

A key point which emerged from the consultations was that all informants had high expectations and expressed strong a desire for the Proponent to develop Indigenous employment and training opportunities, particularly with a focus on youth and males and to give priority to Traditional Owners and local Aboriginal people.

Overall, with few exceptions, expectations of benefits from the TTP are generally very high amongst Aboriginal people. Since Project details are not yet available, we are not in a position to assess how realistic these aspirations are. However, we are concerned that these expectations may be unrealistic and that there may be a need to manage expectations. Of concern is that while the Proponent is in the approval seeking phase, expectations within the community still need to be aptly managed and that, to date, the focus of the NLC's information activities appears to have been with Traditional Owner groups. It is the Proponent's responsibility to manage these expectations with the help of the NLC. The SIA has highlighted issues for the Proponent and the NLC to be aware of and which need to feed into the community consultation strategy in order to appropriately and reasonably manage these expectations.

Generally, non-Indigenous informants were realistic in their understanding that many jobs were specialist in nature and they were not expecting great numbers of employment opportunities for Traditional Owners and local people should the Project go ahead. They did, however, express the expectation that the TTP construction process would create increased business for local small businesses providing goods and services.

Concerns

Many concerns were raised including concerns about damage to sacred sites, safety of gas, possible negative social and health impacts of a large construction workforce, increased heavy traffic sharing the roads, impacts on the environment, security, shortcomings in the consultation and agreement-making process associated with the Project and the possible lack of capacity of Indigenous organisations to cope with the demands of a major project

The possibility of damage to sacred sites was raised in most consultations, although it was in the Central and East Arnhem Regions where there appeared to be the most concern. People were particularly concerned about the possibility of unauthorised

trespass by construction workers into sacred areas. Informants did, however, express confidence in the NLC's process for identifying and protecting sacred sites and sites of significance

There was widespread safety concern about the possibility of gas leaks and explosions that might be caused by fire and/or youths or people under the influence of alcohol vandalising scraper stations or throwing lighters in the vicinity of gas pipes. A large number of Aboriginal people asked about whether it would be possible to continue traditional burning practices and expressed concerns relating to gas explosions in the event of a bushfire. There is a clear need for more bi-lingual information to be made widely available in each region about these safety issues with the aim of allaying the fears of Traditional Owners and Aboriginal community members.

Concerns were raised about the possible negative social impacts associated with possible distributions of cash compensation, which, it was felt, could lead to fighting and increased domestic violence. Concerns were also raised that compensation payments to Traditional Owners directly affected by the Project would result in "the haves and the have-nots" in the community. Others expressed concern that Traditional Owners would not be provided free reign to use their compensation benefits the way they saw fit.

A number of Aboriginal people expressed concerns in relation to the presence of a large construction force associated with the Project. These concerns included:

- the possibility of potentially harmful interactions with Aboriginal communities and the impact on community social relations, including impacts for Aboriginal women in the event that sexual jealousies might arise,
- construction, operational and maintenance workers wandering away from camps unaccompanied by Traditional Owners and/or using firearms,
- the possibility of two-way trafficking of alcohol and drugs where construction camps were located in close proximity to communities.

High on the list of concerns about traffic was the possibility of increased road accidents, injuries and death resulting from:

- an increased number of company vehicles and equipment using local roads and main thoroughfares during the pre-construction and construction periods,
- increased alcohol consumption by local community members associated with cash distributions of compensation monies,
- people walking along the roads at night and setting up camps alongside the road at night not being visible to drivers of heavy vehicles who are using the roads at night.

Those consulted at Katherine were particularly concerned about the possibility of large trucks driving through the township at night when it would be difficult to see Aboriginal people walking along and crossing roads. Community organisations and some Traditional Owners expressed strong concerns about increased traffic on the roads, particularly in relation to:

- People hunting at night and using the roads at night not being seen and being run over by trucks,
- Children playing on the roads,
- People who had been drinking at Peppimenarti Club using the road to return to Palumpa, Port Keats or Daly River and so being on the roads when trucks are also using them,
- People who are gathering outside dry community access roads to drink off limits being close to the roads that trucks would be using,
- People around Katherine who were out at night not being seen because of poor street lighting,
- People not being accustomed to sharing the road with large trucks, and large trucks not being accustomed to sharing the road with Aboriginal drivers,
- Damage to roads by large trucks,
- Trucks not seeing Aboriginal people camped by the side of the road if their car breaks down or they are taking a rest from driving,
- Trucks not seeing local Aboriginal people, including those affected by alcohol, commonly sleeping and walking on the road at night time after becoming tired or their cars breaking down.

Informants suggested a number of ways to reduce the risk of road accidents. Police suggested that a Traffic Management Plan would need to be developed and it is understood that the

Proponent will be preparing one. The Traffic Management Plan should address harm avoidance strategies, including those suggested below in the body of this Report, and should address the issue of funding as part of its planning activities.

Environmental concerns were expressed by most groups along the length of the TTP route in relation to:

- Soil and wind erosion,
- Introduction and spread of weeds,
- Spread of feral animals via the four wheel drive access track,
- The introduction of uncontrolled fire into environmentally sensitive areas,
- Leaching of chemicals or corrosive-proof paint from the pipe into the soil and water bodies and waterways and possible effects of same on fish,
- Fuel spillages,
- That the course of rivers would be altered by the pipeline,
- Silting of rivers,
- That the ground would sink where the pipe was buried,
- The use of dynamite in rocky country.

Non-Indigenous informants raised concerns about environmental impacts in relation to:

- the potential impact on rivers during the pipeline construction period,
- potential impacts from pipeline corrosion, and
- impacts on the surrounding environment from a potential gas leak.

Security concerns were raised in relation to the Project, not only during construction, but also post construction. Police and other informants warned that vandalism and, near some communities, theft by Aboriginal male youths in particular were major concerns and strategies needed to be put in place to prevent and sensitively handle such matters.

Informants, particularly Northern Territory Police, Department of Business, Industry and Tourism and Northern Territory Housing and Business Services keenly expressed a

desire to see the Proponent implement proper, robust security measures for the pipeline infrastructure.

A number of people raised concerns about what they considered to be the high likelihood that once the TTP has been constructed, that the cleared area over the buried pipe would facilitate unauthorised access to Aboriginal land by tourists, pig hunters and other outsiders.

There were a number of concerns also raised specifically in response to the possibility of upgraded roads. These concerns were particularly evident in the East region where people expressed concerns about improved access roads would lead to increased tourist and fisher traffic to their Homelands. In the West at Palumpa and Wadeye, there was concern that an improved road to Peppimenarti would facilitate increased access to alcohol at the Peppimenarti Club.

Concerns in relation to the processes surrounding gaining consent, included:

- Not enough information being provided in advance and pressure being placed on Traditional Owners to make a quick decision,
- Not enough recognition of the complexity of Aboriginal decision-making and the obligations on custodians to consult correctly and adequately in relation to possible impacts on sacred and other significant sites; and
- Information being directed exclusively at senior Traditional Owners and not enough information being provided to wider family members, other affected community members or community service organisations.

Capacity concerns raised included issues on emergency response and health. Informants from Katherine Police were especially concerned about the capacity for local policing, health services and hospital resources to deal with a major emergency response call out. It was felt that the Proponent's Emergency Response Plan needed to be robust in view of the high number of employees anticipated for working on each pipeline construction team. Wadeye Police stated it would need to increase its capacity in order to cope with the additional policing demands during the Blacktip/TTP construction period.

NT Government Health Centres at Wadeye and Gapuwiyak and Wurli Wurlinjang Health Service at Katherine also expressed concerns about their lack of capacity to provide additional health services to TTP construction trainees and workers.

In relation to potential social impacts of the TTP construction camps on Indigenous people resident on or near the Gove Peninsula, the impacts of the presence of a TTP construction workforce is not expected to be as significant as the social impacts of the presence of the proposed workforce for the Alcan refinery expansion (which will occur concurrently), and so social impacts of the TTP would be best managed as part of the social impact management regime for the construction of the Alcan refinery expansion. ImpaxSIA Consulting is currently providing assistance and advice to Alcan to assist it to develop a Social Impacts Management Strategy in relation to the Refinery Expansion Project, and to plan the research necessary to undertake a comprehensive social impact assessment of the Project on local communities.

Abbreviations

AQIS	Australian Quarantine and Inspection Service
BRACS	Broadcasting for Remote Aboriginal Communities
CDEP	Community Development Employment Projects Scheme
CFCU	NLC's Caring for Country Unit
ICCP	Indigenous Communities Coordination Pilots
NLC	Northern Land Council
NT	Northern Territory
NTG	Northern Territory Government
PAWC	Power and Water Corporation
SIA	Social Impact Assessment
STIs	Sexually Transmitted Infections
TTP	Trans Territory Pipeline
TCA	Territory Construction Association

1 Introduction

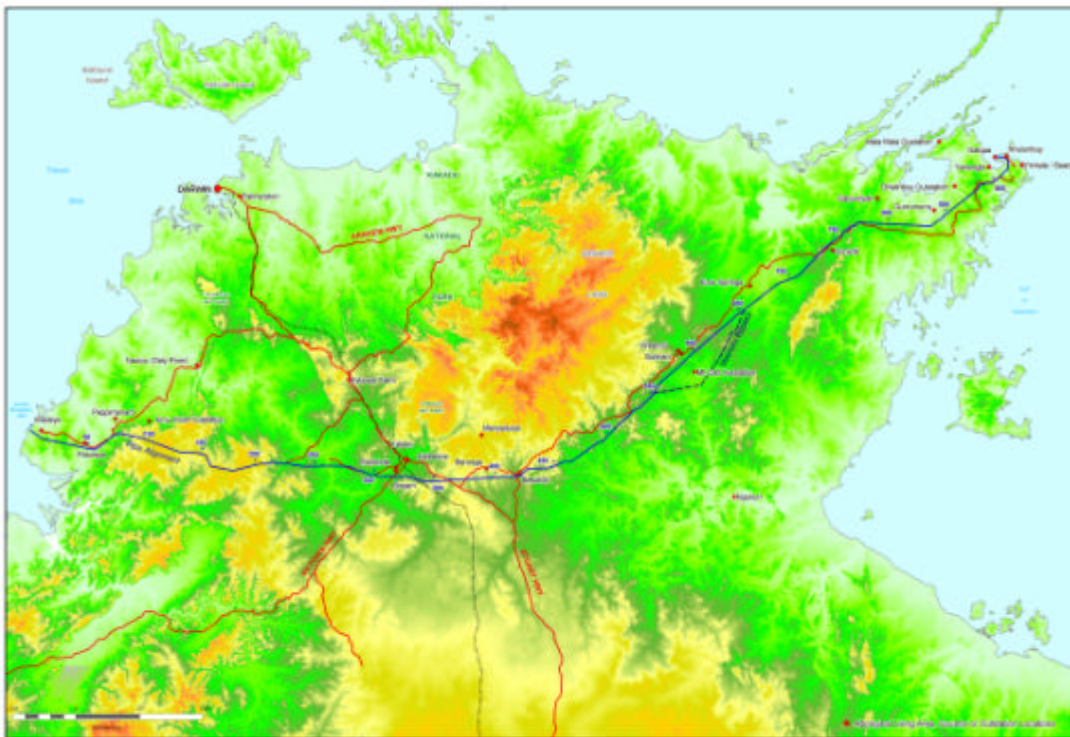
Alcan Gove Pty Ltd and the Blacktip Joint Venture (Woodside Energy Ltd and ENI Australia), as joint sponsors, propose to construct a gas pipeline from Wadeye to Alcan's bauxite mine and alumina refinery located on the Gove Peninsula. The Project is referred to as the Trans Territory Pipeline (TTP).

Should the Aboriginal Traditional Owners give their consent to the TTP Project, (and subject also to the Proponent's commercial decision to proceed), this will be the first major development in the Top End's West region of the Northern Territory (defined here as from west of Katherine to Wadeye).

In the Eastern region, (North East Arnhem Land from Beswick to Nhulunbuy), the TTP will allow for the gasification of the Alcan alumina refinery, should the decision to convert to gas power generation be taken.

In the Central region, (Katherine and the surrounding areas), the TTP follows close on the heels of another recent linear Project impacting that region, the Alice Springs to Darwin Railway (ADRail).

Map One: The TTP route



The SIA aims to assess if and how human populations along the pipeline route might be affected by the Project. The SIA was required to assess potential impacts, both positive and negative and then advise which impacts might need specific strategies in order to be managed. That is, to optimise the potentially positive impacts and mitigate any potentially negative impacts.

The preparation of the SIA has been undertaken in order to enable the Proponent to meet its statutory requirements to assess and manage social impacts associated with the Project, and to provide information to the statutory regulators responsible for undertaking the Project's approvals processes. It is also expected that the findings of the SIA could feed into the agreement-making process with the Northern Land Council (NLC) on behalf of the Aboriginal Traditional Owners.

The proposed TTP Project is also linked to the proposed Blacktip Project, which would process the gas to make it ready for export from the Blacktip gas processing plant located near the Wadeye community, to Alcan's facilities at Gove. The Blacktip Project and the expansion at Alcan's operations are each subject to separate approval processes and separate SIAs. ImpaxSIA Consulting was also engaged to conduct the SIA for the Blacktip Project.

This Report represents the findings of a consultation program conducted with Traditional Owner groups, members of the wider Aboriginal community and members of the non-Indigenous community who are likely to be affected by the Project. Interviews were also conducted with representatives of Indigenous community organizations and enterprises, both Indigenous and non-Indigenous regional representative bodies and with relevant Government departments.

The Report has been prepared for the Sponsors of the TTP, with the assistance of Alcan Engineering (representing Alcan Gove as the Operator) and Woodside (as operator of the Blacktip Joint Venture) in the provision of information materials used in the consultations, and assistance from the NLC in the organisation and conduct of fieldwork involving Aboriginal people.

1.1 SIA background

ImpaxSIA Consulting was approached by Woodside Energy Ltd to undertake an SIA of the Trans Territory Pipeline and Blacktip Projects in order to assist it to meet its obligations under the Environmental Protection and Biodiversity Conservation Act 1999 (Cwlth).

The Consultant was appointed after consultation with the Northern Land Council regarding the appointment, the Terms of Reference and the structure of the report.

The SIA to assess the potential social impacts of the expansion of Alcan's alumina refinery at Gove was conducted by Environmental and Engineering Consultants URS Australia. At the commencement of the ImpaxSIA consultancy, the Principal of ImpaxSIA sought a meeting with the SIA consultants for the Alcan Expansion Project at URS. She suggested that fieldwork be coordinated to minimise demands on organisations and individuals who would need to be consulted and to avoid duplication, and sought advice on issues and outcomes that had emerged from the URS

consultations to date. However, the time frames were such that the latter's field work had finished prior to the commencement of ImpaxSIA's field work and there was therefore no opportunity for collaboration. ImpaxSIA requested to view a draft copy of the URS Report but were advised that this would not be possible as it was not yet available and that we should wait until it was in the public comment phase. In the event, the URS Report did not address a wide range of issues which we regard as critical, in particular to the Indigenous population.

In relation to the social impacts of the TTP at the Western end of the pipeline, a separate Report has been prepared by ImpaxSIA that presents the findings and recommendations of the SIA we conducted at Wadeye on the Blacktip Project, and should be read in conjunction with this Report on the impacts at Wadeye of the TTP.

1.2 TTP Social Impact Assessment terms of reference

Draft terms of reference were prepared in consultation with the Proponent and with the Northern Land Council. Both organisations signed off on the terms of reference in February 2004. The purpose of the TTP SIA is to:

- Identify the nature and magnitude of any potential social impacts, both positive and negative,
- Contribute to a better understanding of the Projects by those potentially affected and those with responsibilities towards potentially affected groups and individuals,
- Facilitate the expression of views, concerns and aspirations about the Projects by those potentially affected,
- Assist the Proponent and potentially affected people, communities and organisations, to plan activities associated with the Projects in such a way as to optimise the potential positive impacts and mitigate any potential adverse impacts on affected communities, and
- Provide the basis for compiling a Social Impact Management Plan for the Projects.

The full text of the terms of reference is provided in the Appendix.

1.3 Role of the Northern Land Council

Since the majority of the affected land by the proposed TTP Project is Aboriginal Land Trust land, the focus of consultations was primarily on affected Traditional Owners and Aboriginal people.

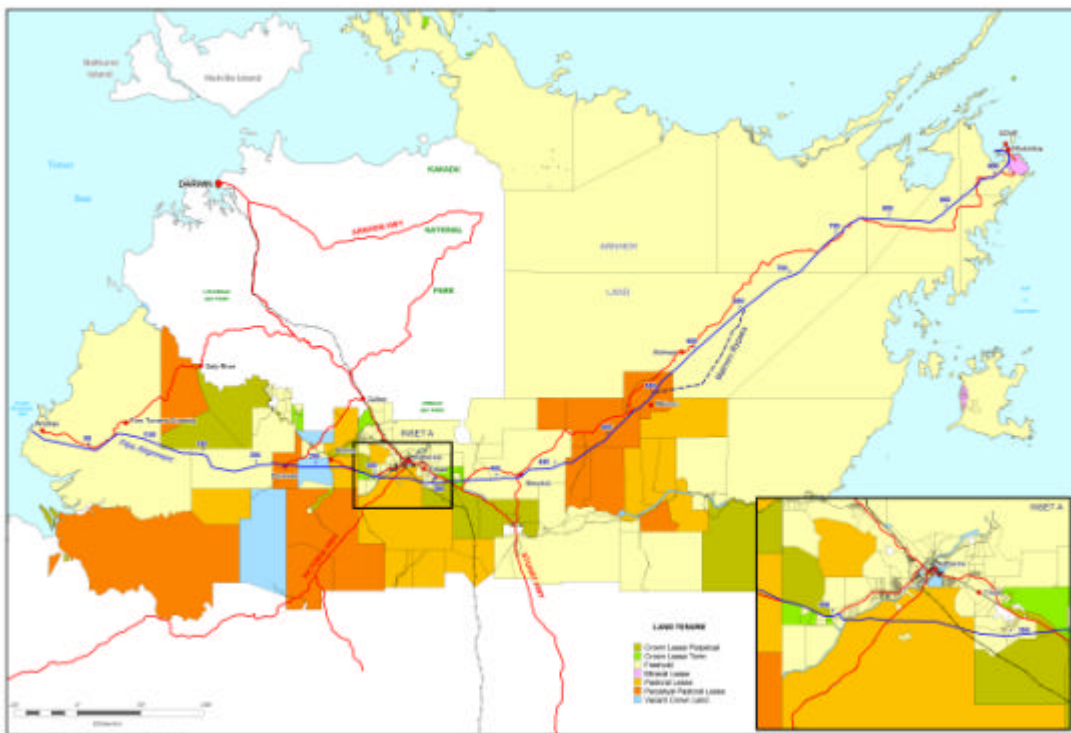
The Northern Land Council (the NLC) provided the Consultants with detailed information on the identity and location of Aboriginal Traditional Owners, Native Title claimants and Aboriginal people with strong social and historical associations with the affected country. The NLC also provided the Consultants with maps of the Project area which identified the location of communities and groups of people associated with the Project area. The maps and identity of titleholders remain confidential and are not included in this Report. The NLC was also responsible for arranging interpreter services as required, and

provided competent field officers who took responsibility for logistics and for assisting in setting up interviews with Councils, organisations and individuals. Those field officers, who had ties to the affected country themselves, also attended some consultations.

1.4 Land tenure and maps

The existing land tenure along the proposed alignment comprises primarily Aboriginal Land Trust land, Pastoral Lease and NT Crown lease.

Map Two - TTP Route and Land Tenure



1.5 Legislative framework

The proposed development will be undertaken in accordance with a range of Territory, State and Commonwealth legislation pertaining to planning, environmental management and Aboriginal Affairs. The primary State, Territory and Commonwealth legislations governing project approvals are:

- Environmental Protection and Biodiversity Conservation Act 1999.
- Northern Territory Environmental Assessment Act.
- Petroleum Submerged Lands Act 1967.
- Petroleum Submerged Lands (Management of Environment) Regulations 1999.
- Aboriginal Land Rights (Northern Territory) Act 1976 - negotiation pursuant to s19 (4A). - (ALRA).

- Lands Acquisition Act (NT) - access for surveys and compulsory acquisition of all privately held interests in land - (LAANT).
- Native Title Act (Commonwealth) 1993 – negotiation of Indigenous Land Use Agreements (ILUAs) or consultations about / negotiations over impacts on native title rights.
- Energy Pipelines Act (NT) - access for surveys and pipeline licence - (EPA).
- Sacred Sites Act (NT) 1978 - Authority Certificate to ensure indemnity against inadvertent disturbance of sacred sites - (SSA).
- Heritage Conservation Act (NT) - Ministerial permission to disturb sites of Aboriginal, Macassan or European heritage - (HCA). (Woodside 2004), if required.

The development of the TTP is contingent upon the Project receiving timely regulatory and environmental approvals. Alcan, as the proposed operator of the TTP is responsible for obtaining all approvals required for the Project, as listed above.

The responsibility of the NLC is to consult with Traditional Land Owners and Indigenous communities located along the pipeline route. The NLC is responsible for ensuring that Aboriginal Traditional Owners as a group give their informed consent before the Land Council or a Land Trust enters into any agreement, or takes action affecting their land. The NLC is also responsible for ensuring that affected Indigenous communities and groups have the chance to express their views and that land use agreements entered into are reasonable. These principles are fundamental to the Aboriginal Land Rights (Northern Territory) Act 1976.

The NLC also acts as a representative body for native title claimants in its area under the Native Title Act 1993.

1.6 TTP Project overview

TTP proposes to construct a high pressure gas pipeline, approximately 950 km in length, between Wadeye and Gove. Figure 1 below shows the proposed pipeline corridor and a number of alternative segments of pipeline corridor currently being evaluated. Overall cost of the Project is estimated at \$550 million.

The pipeline will transport treated gas from the Blacktip field in the Bonaparte Gulf, west of Wadeye, to supply fuel to Alcan's alumina plant in Gove. The pipeline will consist of a buried high tensile steel pipe located in a corridor of up to 30 metres wide. Above ground facilities at intervals along the pipeline route will include a compressor station, metering stations, scraper stations, mainline valves and other ancillary facilities. The pipeline will commence near Wadeye. It then traverses in a generally easterly direction passing some 12 kilometres to the south of Katherine. At a point near Beswick the pipeline turns to the north east toward the Mitchell ranges, at which point the route corridor is aligned to the east. The final approach to Gove is to the north east and then follows the Gove Peninsula. Along certain sections of the route alternative corridors are proposed (EPBC Referral Notice 2003).

The development of the Blacktip Field and construction of the TTP is intrinsically linked to the proposed gasification plans for Alcan's Aluminum plant at Gove. This

development will also provide an alternative gas supply to other potential gas customers in the Northern Territory (Woodside 2004).

The key project milestones, as set out in the Referral Notice, are as follows:

Activity	Year
Commercial and Market Development	2003 – 2005
Land Management and Approvals	2003 – 2004
Engineering	2003 – 2005
Commence Construction	2005 – 2006
Commissioning	2006
First Gas Delivered to Gove	2007

The Referral Notice also provides the following description of the activities involved in the construction of the proposed TTP:

Construction of a pipeline typically involves a number of sequential activities, collectively named a 'spread,' which are outlined below; the action may comprise more than one 'spread'. Construction is undertaken within a cleared corridor, typically 30m wide.

Temporary Facilities - A range of temporary facilities are required during the pipeline construction. These include work areas for equipment and pipe delivery and storage, worker accommodation camps, offices and borrow pits to source additional fill material (if required). The location of the temporary facilities is based on logistical requirements and the objectives for the pipeline route selection.

Access - During construction, access tracks will be required to access areas such as the pipeline corridor, work areas and campsites. Existing roads, tracks and disturbed areas will be utilised as far as practicable to minimise disturbance to the surrounding areas. The selection of access track routes will be based on the objectives for the pipeline route selection.

Clearing - The pipeline corridor is cleared of heavy vegetation; root stock is left in the ground where practicable to stabilise the area and reduce erosion. Some vegetation will be stockpiled for respreading as part of the restoration process. Breaks will be left in stockpiled vegetation to allow continued access for fence lines, tracks, stock and drainage lines. Harvestable timber and crops may be removed prior to clearing. Gates will be installed where fence lines are required to be breached. Large mature trees, particularly at river crossings, will be preserved wherever practicable to do so.

Grading - The ROW is leveled to the required gradient using graders, backhoes and bulldozers. Topsoil is removed, where required, and stockpiled separately for reuse during rehabilitation.

Trenching – A trench will be dug in which the pipe will lie. This trench will be prepared using excavators, trenching machines, rock saws or by drilling and blasting as required by the nature of the ground. The distance of trench will be left open, controlled and kept to a practicable minimum. Wherever the trench is easily accessed by the public reserve, it will be clearly marked by bunting and hazard lights. Breaks in the trench are left to

facilitate stock and wildlife crossing, and methods will be adopted to prevent fauna entrapment. Typical top of pipe depths in all areas are 750 mm; road crossings 1200 mm; and rivers 1500 mm.

Stringing - Pipe will be transported to site on trucks. The pipe is laid out adjacent to the trench, bent as required and set on skids which protect the pipe coating from damage.

Line-Up and Welding - Once the pipe is strung, a line-up crew will position the pipe using side boom tractors and line-up clamps. The pipes are then welded together.

Radiography - Each weld is subjected to an inspection to test for compliance to specification, thus ensuring the integrity of each weld.

Lowering In and Backfilling – Graded material is placed in the bottom of the trench and the pipe is lifted off the skids and lowered into the trench using side-boom tractors. The pipeline is then covered with more graded material. This material may be screened excavation material or it may be imported. The trench is then filled by returning the remaining excavated material.

Testing - The pipeline will be hydrostatically tested for strength and potential leaks by being filled with water and pressurised to a pressure greater than its normal operating pressure.

Crossings - Several different methods are used when crossing rivers, roads, and major infrastructure corridors. The method used will be dependent on environmental factors and geotechnical constraints, which will be identified during the environmental studies. Typical methods used include open trenching, boring and directional drilling.

Clean up and Rehabilitation - Clean up and rehabilitation measures will be applied to the pipeline corridor, access tracks and camp sites in consultation with the relevant land holder/owner. Generally clean up and rehabilitation will involve removal of foreign material (construction material and waste), surface contouring, respreading topsoil, respreading vegetation and reseeding. In certain areas a low 'formed camber' of material may be allowed to remain over the trench line to allow for possible subsidence. The formed camber is broken at regular intervals to prevent disruption to surface waters.

Given that the pipeline will be underground, land users are able to resume previous land use activities on top of the pipeline provided that this does not include excavation activities (Referral Notice 2003).

1.7 Methodology

The SIA Team was comprised of Dr Annie Holden, economic anthropologist and team leader, and two researchers, Gay English and Justin Beal, both of whom hold degrees majoring in anthropology. A Woodside staffer, Nicole Turner, was seconded to the Team for a short time to assist with some interviews with non-Indigenous stakeholders and to undertake basic statistical research in Katherine. Sensitivity to gender was reflected in the use of male and female consultants on the SIA Team. The NLC advised on the identity of affected Traditional Owners and Aboriginal

people and provided field support in the form of Aboriginal field officers who assisted the SIA researchers with setting up consultations with Traditional Owners, providing introductions and arranging translation services.

One role of the SIA is to contribute to the provision of information to Aboriginal community members about the proposed TTP Project. The Team spent considerable time, before commencing SIA consultations, providing information about the TTP Project, clarifying issues and allaying concerns, particularly about safety issues, that were expressed by informants. The Team has used information tools compiled by the NLC and the Proponents to assist in the dissemination of information.

The NLC made a specific request to the SIA Team that our findings be presented in such a way that they are practical and can assist the proactive and constructive management of impacts. Accordingly, we directed the Team's resources primarily to the understanding of issues and the development of practical ways to manage these. Our Report reflects this emphasis.

The SIA Team was requested by the Proponent to include in our interview schedules questions in relation to what people would like to see included in a proposed Community Benefits Package. Such questioning needed to be undertaken sensitively, since we had no information on the likely allocated value of any such package that the Proponent might be considering, or how or when such a package might be delivered. The SIA team was careful not to raise expectations among Traditional Owners and community members to an unrealistic level.

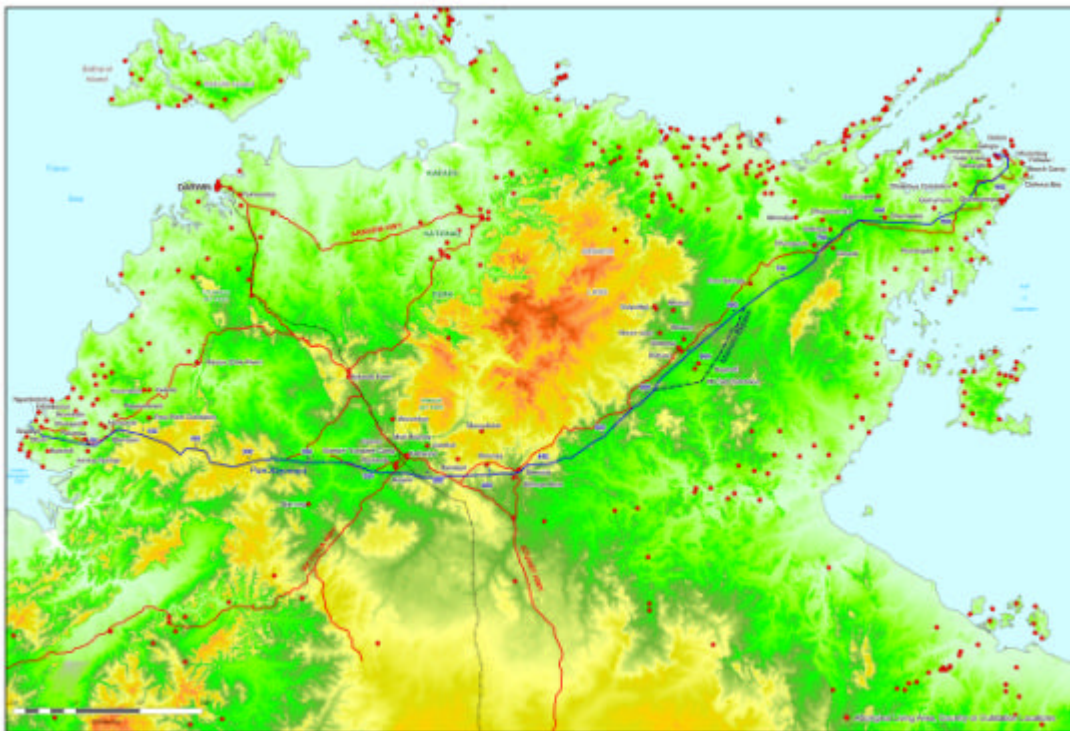
Throughout the consultations we were mindful about providing information to informants and hearing their thoughts and concerns, while being careful not to create unrealistic expectations, or to create anxiety in relation to possible risks. The Proponent provided a list of Questions and Answers about the Project, which we relied upon to inform Respondents. In retrospect, it would have been useful to have been provided with an official "Q and A" from the NLC also, dealing with issues such as compensation, the consent process and the NLC's position on matters such as employment and training and investment of possible compensation monies.

Consultations commenced for the TTP on 8 March 2004. Due to Project constraints outside the control of the SIA Team, the time frame to complete the field work was only fourteen weeks. The compressed time frame created an additional load on the SIA Team and on the NLC; however, the consultations were not compromised as the SIA Team, with the support of the NLC, undertook back to back field trips. Consultations were initially focused on the Central and Central West Regions, then shifted to the Eastern Region and finished in the Western Region. Consultations in relation to the TTP at Wadeye were undertaken in concert with consultations in relation to the Blacktip Gas Project.

In total, approximately eighty (80) Consultant days were spent in the field. A total of 360 people, primarily comprising of Traditional Owners affected by the Project, attended SIA consultations in the following locations:

- Kybrook Farm
- Kalano
- Rockhole
- Katherine
- Darwin/Palmerston
- Nauiyu (Daly River)
- Beswick
- Barunga
- Bulman
- Weemol
- Mt Catt Outstation
- Manyalluluk
- Binjarri
- Emu Point Outstation
- Peppimenarti
- Palumpa
- Wadeye
- Nhulunbuy
- Yirrakala/Beach Camp
- Gapuwiyak
- Dhalinbuy Outstation
- Mata Mata Outstation
- Bran Bran Outstation
- Ngukurr

Map Three: Aboriginal settlements in the Northern Territory and the TTP Route



Details of those Traditional Owners consulted by the SIA team have been forwarded to the NLC. Two groups in the Eastern region (Gumatj and Rirratjingu) were unable to be interviewed due to a death in the community at the time of fieldwork.

The following community and regional organisations were consulted:

West Region

- Thamarrurr Regional Council
- Thamarrurr Rangers
- Thamarrurr Regional Housing Authority
- Mi Patha Takeaway/Bakery
- Murrinpatha Nimmipa Store
- Palumpa Station/Butcher
- Murin Association (Murin Air & Murin Outstation Resource Centre)
- Northern Territory Health, Wadeye Health Clinic
- Northern Territory Police, Wadeye
- Northern Territory Correctional Services, Wadeye
- Our Lady of Sacred Heart School, Wadeye
- Kanamkek-Yile-Ngala Museum
- Wadeye Aboriginal Language Centre
- Library/Knowledge Centre
- Kardu Dari Kardu Family Centre
- Dirrmu Ngakumarl Art Gallery
- Nganmariyanga Community Inc
- Palumpa Cattle Station Pty Ltd

Central Region

- Barunga Manyallaluk Community Government
- Beswick Community Government
- Binjari Health Centre
- Wugularr Health Centre
- Mardrulk Resource Centre
- Gulin Gulin Community Government Council
- Binjari Community Government Council
- Kalano Community Association
- Sunrise Health Services
- Wurli Wurlinjang Health Service
- Katherine Town Council
- Jawoyn Association Aboriginal Corporation
- Nyirranggulung Mardrulk Ngadberre Regional Council
- Wardaman Association
- Mardrulk Resource Centre
- Nauiyu Nambiyu Community Government Council
- Fred Hollows Foundation
- Indigenous Employment Centre
- Waikan Employment and Training
- Burrig Group Training Company
- Aboriginal and Torres Strait Island Services

East Region

- Gapuwiyak Community Government Council
- Northern Territory Health: Gapuwiyak Community Health Centre
- Northern Territory Education: Gapuwiyak School
- Dhimurru Land Management Aboriginal Corporation
- Yirrkala Dhanbul Council (staff only, Council not available due to death in community)
- Mangarr Community Government Council not consulted due to death in community
- Aboriginal Resource and Development Services

Other organisations consulted included:

- Land and Sea Management Branch, Northern Land Council
- Indigenous Employment and Training Unit, Northern Land Council
- Power and Water Corporation
- Northern Territory Government Department of Community Development, Department of Industry, Planning and Environment, Department of Chief Minister, Nhulunbuy.
- Top End Women's Legal Service

A range of methodologies was used by the SIA team, depending on what was most appropriate to each Group and to each circumstance. These methodologies included:

- Visiting regional centres, major communities and outstations to conduct formal interviews and informal discussions with members of each of the Traditional Owner and Native Title Claimant Groups whose Country is directly affected by the proposed TTP Project. The SIA team, with the support of the NLC field staff, ensured that senior representatives from each of the Groups were present at each meeting. Of the total 360 affected Traditional Owners, Native Title Claimants and Aboriginal community members who attended consultations, 158 were from the TTP West Region, 65 from the Central Region and 137 from the East Region.
- Convening community meetings at Bulman, Peppimenarti and Palumpa at the request of Traditional Owners.
- Undertaking house to house visits in Wadeye to primarily disseminate information to Aboriginal community members about the proposed TTP and Blacktip Projects.
- Conducting interviews with Aboriginal and non-Aboriginal staff and senior representatives and/or employees of Indigenous local service and enterprise organisations.
- Conducting interviews with stakeholder Indigenous and non-Indigenous organisations, Government Departments and elected representatives in Katherine.

- Consultations with non-Indigenous stakeholder organisations were also conducted over a four day period by Dr Annie Holden of ImpaxSIA Consulting and Nicole Turner of Woodside, commencing 8 March 2004. Eleven organisations in Katherine were contacted for interview. Nine of these were available for consultation.

Interviews were conducted with representatives from the following regional and community organisations:

- Katherine Police Station
- Northern Territory Education & Training Authority (NTETA)
- Katherine Town Council
- Northern Territory Department of Community Development, Sport and Cultural Affairs
- Katherine Regional Economic Development Advisory Board
- Northern Territory Department of Business, Industry and Resource Development
- Northern Territory Fire and Emergency Services
- Northern Territory Department of Housing and Business Services
- Northern Territory Department of Education, Training and Youth Affairs

The construction workforce will be recruited on a fly in-fly out basis or from local communities, and the operational workforce will be negligible, therefore extensive description of schooling facilities and other related aspects of the social environment are not included in this assessment.

1.7.1 Limitations

A large linear project is always challenging in the conduct of social impact assessment, and the TTP Project was no different. The SIA process required the Consultants to complete extensive field work in remote locations over a twelve week period. Most of the fieldwork was completed during the wet season and as such was more logistically difficult. There was a need to be sensitive to the fact that the proposed Project is likely to impact different groups along the Pipeline route in different ways.

The SIA team collected a large amount of material from interviews conducted during the fieldwork. The findings are organized differently to the usual SIA format to assist the Proponent, the NLC and other interested parties to use the information practically.

The SIA consultations and feedback from respondents were limited by the following circumstances:

- In the West Region, Traditional Owners and Aboriginal community members have no previous experience of, and therefore no point of reference for, a major infrastructure project.
- In some cases consultations were postponed and on two occasions planned meetings did not proceed due to deaths of community members at Ski Beach and Wadeye.
- People who are not elected representatives of Councils and organisations or senior members of the Traditional Owner groups, with few exceptions, told us

that they had received little or no previous information about the Project. At Wadeye, some told us that they were not even aware that a project was being proposed.

- Traditional Owners of affected estate groups at Wadeye stated that they did not want to discuss possible impacts of the proposed TTP Project until one or more of the following took place:
 - They had been presented with a financial offer by the Proponent and had had time to assess their position and make a decision,
 - They had more information about what other Traditional Owners along the proposed pipeline route are thinking.
- One group of Traditional Owners in the East stated that they have not had enough time to fully understand the TTP Project, its purpose and implications for their Country, to undertake their own consultation with other custodians and then to form a position in relation to the proposed Project.
- It appeared that some Traditional Owners felt that if they were to enter into discussion about the possible impacts of the TTP Project, that this might be construed as agreement in principle to the Project. Thus some were reluctant to discuss the Project at all until Traditional Owners have made their decision.
- Some Aboriginal community members were reluctant to engage in discussions about the proposed Project unless they were members of directly affected estate groups.
- A number of people told us that the issues were too complex to discuss and needed a lot of thought and consideration before they could provide comment.
- In the West, there were a limited number of local interpreters available to support the SIA team.

1.8 Acknowledgements

The SIA Team would like to thank the Northern Land Council field officers and NLC pipeline consultants for their assistance in planning, coordinating and conducting interviews for the SIA, including Patrick Briston, Keith Taylor, John Daly, William Parmbuk, Josephine Hart, Daniel Maher, Terry Piper, Bobby Munurrung Wunumgmurra, Victor Sandy, David Ross, Lyndsay Goodwin and Dehne McLaughlin. The NLC anthropologists, Robert Graham, Anna Nolan and John Cook also provided invaluable assistance. We would also like to thank Nicole Turner, Emma White, Emily Beresford-Cane, Des Stone, Rod Johnstone and James Kernaghan from the TTP Project. We are also grateful to Lin Martin for proof reading and formatting assistance.

2 Description of affected people

This section aims to provide a brief description of those people who are likely to be affected by the proposed TTP Project. Detailed demographic analysis and predictions about demographic shifts are not provided, since the construction team will primarily be fly-in/fly-out and from the local communities. The pipeline itself, once constructed and buried, will be invisible, requiring periodic maintenance during its operation. That is, there is no large workforce that will be moving to the areas to operate the pipeline, unlike a large mining operation, for example. Hence, no changes in population numbers or demographic profiles are expected that could be linked directly to the Project.

Social indicators are provided here for the purpose of describing the social, economic and health status of affected people rather than for future monitoring, since any changes arising solely from the TTP Project are not likely to be detectable in the social indices.

As discussed in the section on Monitoring below, it is our view that monitoring and evaluation of the Project is best undertaken at the local and regional levels and in collaboration with representatives of local organisations, and that most data monitored should be qualitative and anecdotal. The data included in this section are, therefore, not presented for the purposes of providing a base line data set for future monitoring.

Those people likely to be affected by the proposed TTP Project might be divided into the following groups. Some people will belong to more than one group.

- Traditional Owners whose country is directly within the boundaries of the proposed Pipeline route or whose country is within the boundaries or immediately adjacent to ancillary infrastructure such as roads, access tracks, scraper stations etc. The identity of these people was provided to the SIA Team on a confidential basis and remains confidential. However, it should be noted that not all of these affected Traditional Owners are resident within the immediate parameters of the proposed Project. Some senior Traditional Owners with strong connections and senior responsibilities towards the affected country reside in locations such as Kybrook Farm, Darwin, Palmerston and Ngukurr.
- Members of Aboriginal communities and outstations located near the proposed pipeline route or who use the same roads that the TTP construction crew would be using. These communities and outstations include, from the West to the East, Wadeye, Palumpa, Emu Point Outstation, Peppimenarti, Nauiyu (Daly River), Binjari, Manyalluluk, Beswick, Barunga, Bullman, Weemol, Mt Catt Outstation, Gapuwiyak, Dhalinbuy Outstation, Mata Mata Outstation, Bran Bran Outstation.
- Aboriginal members of major towns which are predominately non-Indigenous, i.e. Katherine and Nhulunbuy. At Katherine, most Indigenous people reside in town camps known as Kalano and Rockhole. At Nhulunbuy, most Indigenous people reside at the communities Yirrkala and Ski Beach.
- Non-Indigenous residents of Katherine and Nhulunbuy.
- Non-Indigenous owners and/or lessees of properties through which the proposed

Project will pass or who also use the roads that the construction team will be using if the Project proceeds.

The table below sets out population numbers of communities near to the TTP Route. The data should be viewed with caution. They are drawn from the 2001 Census and are likely under-numerated.

Table One: Population Numbers of Affected Communities

Community	Population
Wadeye	2,225
Emu Point	50
Palumpa	346
Peppimenarti	189
Daly River	309
Katherine Town Camps	415
Katherine excluding Town Camps	1,483
Katherine total	10,032
Binjari	300
Beswick	321
Barunga/ Manyalluluk	410
Bullman and outstations	313
Nhulunbuy/Laynha Homelands	1,279
Gapuwiyak (Lake Evella)	771
Marngarr (Ski Beach)	200
Yirrkala	493

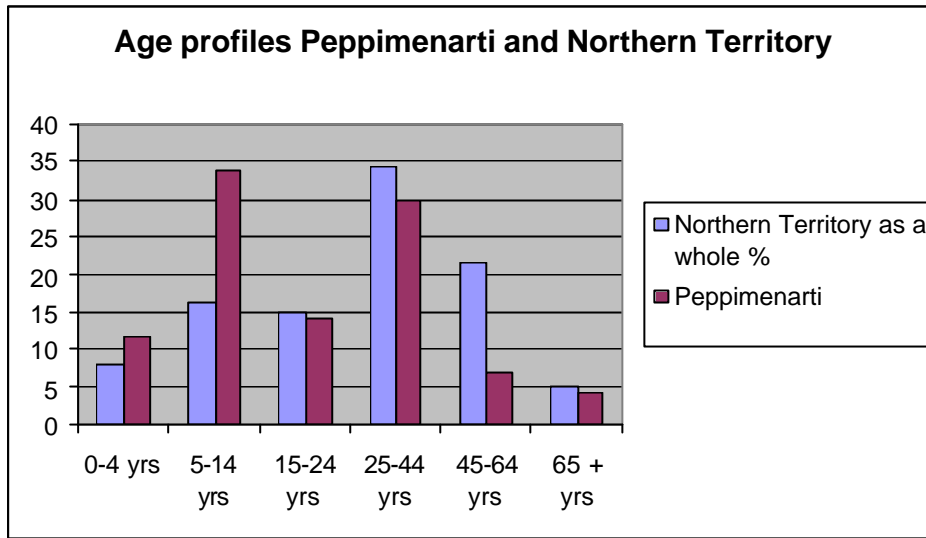
Source: ABS 2001 Census

Rather than produce copious tables of demographic information and social indices for each community (which would fill a separate volume), typical communities are profiled here to provide an overview of the demographic characteristics and social, economic and health status which all affected Indigenous communities share. Where an individual community's profile is atypical, this is noted.

Below is an age profile of two typical communities, one in the East (Beswick), and one in the West (Peppimenarti). As is typical of Aboriginal communities nationally, the age profile is overall very young compared with non-Indigenous Australians, reflecting high birth rates and low life expectancy.

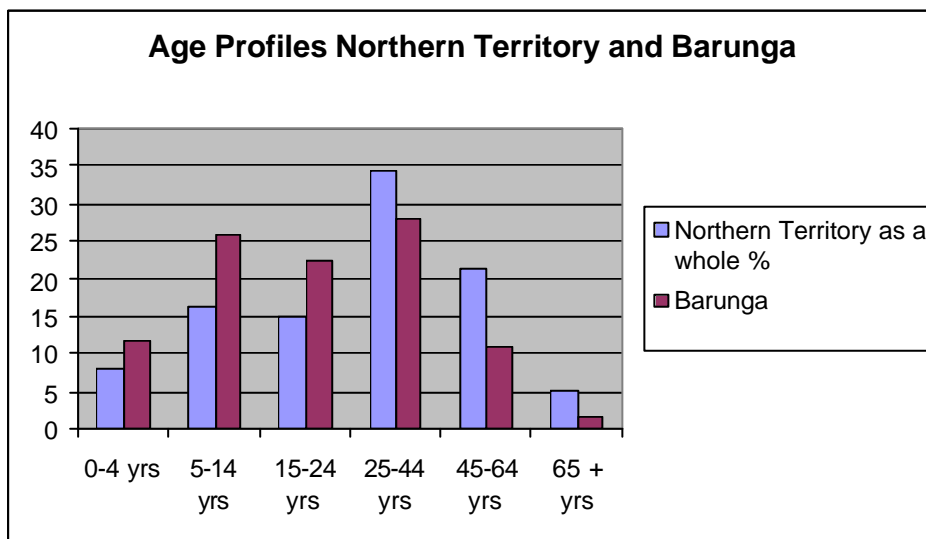
Median age for Indigenous residents of Yirrkala is 21 and at Nhulunbuy 23. The median age of non-Indigenous residents at Yirrkala and Nhulunbuy is 34. The median age at Katherine is 31.

Chart One: Age Profiles Peppimenarti and Northern Territory



Source: ABS 2001 Census

Chart Two: Age Profiles Northern Territory and Barunga



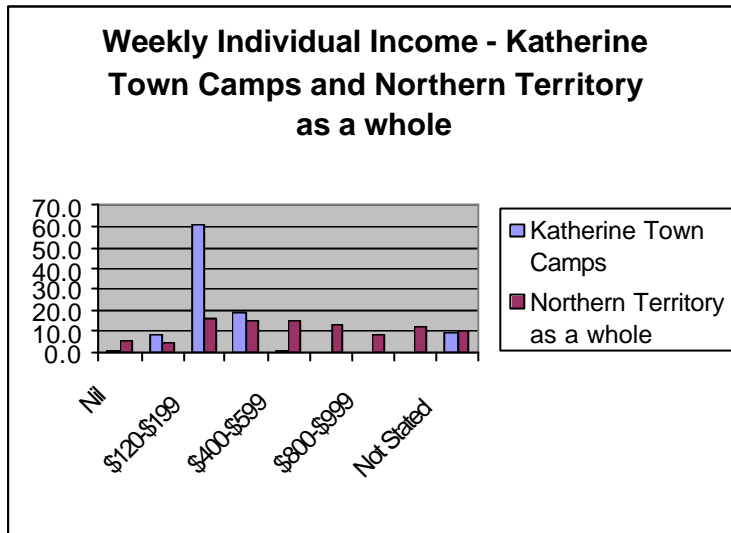
Source: ABS 2001 Census

The following Chart provides data on weekly individual income in Katherine Town Camps compared with the Northern Territory as a whole. As can be seen, individual weekly incomes balloon at the \$199 point for Indigenous people, reflecting their heavy reliance on CDEP income and state transfers.

At Yirrkala, the median individual income is the \$160-\$199 range, which is the same as for all other Indigenous communities adjacent to the proposed pipeline route, suggesting

that benefits from the Alcan refinery project have not resulted in discernible changes to income.

Chart Three: Weekly individual income – Katherine Town Camps and Northern Territory as a whole.



Source: ABS 2001 Census

Generally speaking, housing and infrastructure in the Indigenous communities are inadequate, with the mean household size being 4.6 amongst Indigenous people, compared to only 2.7 amongst non-Indigenous people.

3 Previous external impacts

The thrust of previous external impacts into Northern Territory land occupied by Aboriginal people, has been up the centre of the continent, rather than traversing it, as the proposed TTP Project will do. Therefore, the nature and outcomes of previous external impacts need to be understood from this view point. If we examine impacts in terms of the three regions – West, Central and East - we see that the events had some things in common, which affected all Aboriginal people affected by the TTP Project, but that there were also specific events which have impacted each region differently.

All groups have experienced the impacts of missionisation and the creation of government settlements. In the Central and East regions, missions and government settlements began to be established from as early as the 1920s. In the West, it was not until the 1930s and 1940s that these were established.

Missionisation had the effect of stemming the starvation and massacre of Aboriginal people caused as a result of, and often at the hands of, pastoralists and small miners. It also had the effect of centralising groups, increasing sedentary living, reducing reliance on hunting and gathering, disrupting social relations and disrupting Aboriginal trade routes and activities. Missions and government-run settlements persisted until the 1970s and 1980s when self-management was introduced into the communities and community elected governments were established.

Pastoralism had an enormous effect on Aboriginal people. The cattle industry in the Northern Territory was advanced by the advent of refrigeration around 1880 and was able to feed defence force personnel stationed in the Northern Territory during World War II. Cattle competed with the traditional food supplies of Aboriginal people and used waterholes that Aboriginal people used. Significantly many waterholes are sacred or significant areas (for example, in some areas it is believed that spirit children reside in water bodies waiting to be born as human children), so that the cattle industry contributed to the desecration of sites and significant areas, with the attendant cultural crisis that this has produced.

In some areas an accommodation developed between the pastoral industry and Aboriginal people which allowed the latter to maintain connection with their country and find an alternative means of survival. After the 1967 referendum and the introduction of the Pastoral Award which provided equal wages, the accommodation of most people on stations ended and most were eventually forced off stations and into settlements and to the fringes of towns. These settlements have no natural economic base in a capitalist economy and remain heavily reliant on state transfers for their survival.

The outstation movement in the 1970s was a significant turnaround for Aboriginal people, and still today, pursuing outstation development and the return to homelands is a key priority for Aboriginal people affected by the TTP in all three regions. Some homelands have only recently been established, including, for example, the Binjari community, which was created in late 1990 when a number of residents from the town camps around Katherine, left those living areas and moved out to Binjari.

The mining industry has been active in the Northern Territory with extensive exploration of large areas and large developments at some locations, the Alcan bauxite project at Gove Peninsula being the largest in the vicinity of the TTP route. In 1968 the Commonwealth Government legislated to allow mining of bauxite at Gove by Nabalco. A purpose-built town, Nhulunbuy, and a power station were constructed. Production commenced in 1973. The Yirrkala Aboriginal Reserve was reduced from 35,300 hectares to 300 hectares. The impacts of that project have been extensive and significant and have eclipsed all other external impacts.

In contrast, the West Region has never experienced a major mining or infrastructure project.

The TTP route crosses the Central Region approximately 12 kilometers south of Katherine. The first recorded non-Aboriginal settlement in the area occurred in the early 1970s when a repeater station of the Overland Telegraph Line (the first linear project) was constructed on the south side of the Katherine River. The station became a European outpost and nucleus for development of pastoral and mining activities. In 1917 the Darwin-Pine Creek Railway was extended to Katherine to transport tin from the tin mines south east of Katherine and on condition that the wealthy cattle owner William Vestey build a meatworks at Katherine. In 2001, the Alice Springs to Darwin Railway is the most recent major project to affect Aboriginal people resident in the Central Region.

TTP Project design was previously from Mataranka to Gove but followed a different route, although it did pass through some of the same country and so involved some Aboriginal people now affected by this Project.

Katherine was bombed in 1942 and the Australian Army moved in and took over Katherine during the remainder of the war. Since the War, Katherine has been a regional centre and base for both government and private enterprise organisations. The RAAF Base Tindal was constructed in the 1960s, with further additions in the 1980s and 1990s.

Most recently tourism has provided a new wave of impacts. Since the 1970s tourism has steadily increased and is expected to increase to even greater levels. While to date the focus has been on the Katherine Gorge and Gorge National Park, tourists are increasingly pursuing self-drive "adventure tourism" venturing into more remote areas eastwards and westwards. Tourism provides a new source of concern and opportunity for Aboriginal people.

One of the most insidious external impacts that Aboriginal people in the region have had to deal with is that of alcohol, and increasingly, drugs. Substance abuse, including petrol sniffing, has been profoundly damaging to Aboriginal people and almost impossible to manage. Growth in the introduction of drugs to communities, and the increasing use of needles, represents a new threat.

4 Understanding of the Project

Generally, along the route of the proposed pipeline, there is a high awareness of the Project. However, among some Traditional Owners and particularly among community members and staff of regional and community organisations understanding of the Project appears to be low. For example, most people consulted did not know where the proposed pipeline route was. There was a widespread feeling that, while senior Traditional Owners may have received a lot of information about the TTP, other Traditional Owners, community members and community and regional organisations, with some exceptions, have not received enough information about the Project.

Those individual Traditional Owners who had participated in survey work had a better understanding of the pipeline route but they did not necessarily have a better understanding of the specifics of the Project. A number of groups commented that although senior Traditional Owners involved in survey work knew where the proposed pipeline would be going, this information, and other general information about the Project, had not been passed on to them as community and family members.

Overall, people consulted:

- Did not understand the origin or the destination of the pipeline,
- Did not understand the purpose of the TTP (i.e. that it is for the mine at Nhulunbuy and not for communities),
- Were surprised at the numbers of people likely to be working on the TTP and to be living in construction camps, possibly in the vicinity of their community or homeland,
- Did not know if explosives would be used,
- Did not appear to always distinguish between the NLC and the Proponents' spokespeople.

In addition, many people asked questions such as, "when is construction of the pipeline going to start?" – suggesting they did not understand the process of gaining consent or the development of a draft Agreement. Others asked "if" there would be compensation. There was also a good deal of anxiety about safety of gas.

The Palumpa community has a film night every Friday night and the pipeline video has been shown several times. As a result people there appeared to have a better understanding of the Project than elsewhere, but it was still very poor. Although the video was shown on BRACs at Wadeye, not many people had seen it and so, in some cases members of the Wadeye community did not even know that a Project was being proposed.

Some regional and community organisations based in Katherine had not received any information about the Project. A number of training organisations in Katherine, YBE in Nhulunbuy, Thamarrurr Regional Council, Laynhapuy Homelands Association and some community organisations asked for detailed information to be provided on the kinds of jobs likely to become available. Some organisations expressed frustration that they did not know how to go about finding out about jobs or did not have enough information to start making people job ready. The NLC's Training and Employment Unit said that they

feel limited by the lack of information provided by the TTP about the employment opportunities on each of the TTP (and Blacktip) Projects (preconstruction, construction, commissioning and maintenance). To date, the Unit has relied on information generated by the Territory Construction Association and the NLC, neither of which say they have been able to check or confirm their estimates with the Proponents. However, the Proponent advises that In circa October / November 2003, the NLC were provided with a typical pipeline construction workforce model. Further information could not be provided about the specifics of the TTP Project as it was not known / had not been developed at this time. The same goes for the Blacktip project although the typical construction workforce info was not provided until very recently.

Informants had a number of questions relating to the camps but overall it was clear that people had not had much information about the camps, their possible locations, their potential size, how long they would be in the vicinity, how they would be managed and where their supplies would come from. As a result, people and organisations interviewed were being asked to consider the possible social impacts of the camps without the benefit of previous information having been supplied to them.

As a result of previous consultations held in 2003 by members of the TTP Project Team, non-Indigenous informants in Katherine were aware of the TTP project and had a basic understanding of the proposed development concept, although generally they said that they had not been aware of the number of workers likely to be employed during the construction phase. The majority were interested in receiving further information as the Project develops, particularly where impacts are likely to affect their clients.

The SIA Team spent a considerable amount of time throughout its consultations explaining the Project and providing as much detail as it could, however, there is a need for more work to be undertaken. Specifically, if the Project is approved there will be a need to provide a range of information events that target Traditional Owners, all Aboriginal community members and members of wider Traditional Owner groups who are likely to be affected by the proposed Project.

In particular, Traditional Owners in the East and West region sought information about the potential of upgrading of roads and possible improved access for outsiders to their homelands.

5 Attitudes to the Project

The Terms of Reference require the SIA Team to “Assess the attitudes of affected people to the Project”. In doing so the SIA Team has been careful to avoid asking Traditional Owners and affected community members and their leaders whether they “Agree or disagree” with the Project.

Overall, support for the TTP Project appears to be high, providing that:

- Compensation is adequate,
- Compensation is delivered to both Traditional Owners and to affected communities,
- Compensation includes a community development emphasis and set of priorities,
- The Project creates jobs for Traditional Owners and local Aboriginal people,
- The Project contributes to regional economic development, and
- The Project supports outstation development.

A larger number of Traditional Owners from each of the TTP regions expressed concern about unauthorised entry, for example by tourists, onto their land during the preconstruction and construction phases of the Project, but particularly over the operational life of the gas pipeline. Unauthorised use of the access track over the TTP corridor was consistently raised as a major concern.

In the TTP East region there was a small number of Traditional Owners and people with customary responsibilities for Country affected by the proposed pipeline who expressed strong opposition to the proposed TTP Project. Their present opposition stems from their beliefs that their land should not be disturbed and from their concerns about potential damage to sacred sites and significant areas. Memories of the fatal helicopter crash that occurred in the East region during survey work for the proposed Mataranka to Gove gas pipeline, remain strong in the minds of those who currently oppose the TTP Project and appears to have reinforced their opposition to the Project and the validity of their customary beliefs. This Group expressed the need to consult more widely with senior lawmakers before they could develop a final position on the Project.

A small number of Indigenous informants expressed the belief that it didn't matter what they thought since the Project would proceed regardless.

The consultations did not reveal much animosity towards the Proponents or their agents, with the possible exception of the small Group discussed above. Generally speaking, those Traditional Owners, wider community members and community organisation employees and representatives who expressed a view towards the Project were positive. However, many of these people also had high expectations of receiving benefits from the Project, so it is not clear whether such a sentiment would remain if benefits prove to be less than is currently being anticipated.

While many people expressed positive views towards the Project, it was also the case that many people did not express a view. Their reasons were:

- They had not consulted widely enough with other Traditional Owners or affected people to be able to speak confidently about their view;
- They did not wish to discuss the Project for fear that discussing it would be seen as tantamount to approving it.

In Nhulunbuy and in Wadeye development organisations in particular said that they hoped that the Project would lead to increased tourism and economic development in the East Arnhem and Thamarrurr Regions once the Central Arnhem Highway and Daly River to Wadeye roads were upgraded as a result of the Project. Outstation residents in particular expressed concern over the same possible outcome.

Attitudes held by some non-business and non-Indigenous Katherine-based informants towards the development of the Project were that they expected minimal benefits. These attitudes appear to be largely informed by the Katherine community's previous experiences of the ADRail Project. Reportedly, much of the Katherine community had anticipated a significant degree of economic and employment benefits from the ADRail, especially during the construction period of the railway track, but had found that these had not been delivered. As a result there is a degree of skepticism about the likelihood of benefits arising. In contrast, other sectors of the business community of Katherine are optimistic that the construction contractors will be purchasing goods and services locally, resulting in an increase in local economic activity.

There appears to be a fair consensus amongst senior representatives of non-Indigenous organisations that the Project presents a positive development for the Northern Territory.

6 Aspirations and Concerns

6.1 Summary of aspirations

6.1.1 Community Benefits Package

Those interviewed provided a wide range of proposals for possible inclusion in a Community Benefits Package. There was a clear view that the Project would impact not only on Traditional Owners but also on Aboriginal people living in communities and at homelands that are adjacent to the proposed TTP route, in particular through additional traffic and hazards to pedestrians and motorists using the same roads as construction teams. It is understood that the Proponent intends to provide a compensatory benefits package to affected communities.

6.1.2 Homelands development

Traditional Owners, particularly in the East and West regions, and to a lesser extent in the Central region, view homeland development as one of their major priorities and hope that the Project will assist them to further develop their outstations. They have an expectation that this will occur through provision of royalty income over the 25 year period and that they could use these funds to purchase vehicles and equipment, to upgrade housing and essential services including water and power and to improve road and air access through upgrades to outstation roads and airstrips.

6.1.3 Provision of gas to communities

There is a widespread and, we understand, an unfounded belief among some Traditional Owners, particularly in the Central and East Arnhem regions, that the TTP Project is capable of, and likely to lead to, the provision of free natural gas for the generation of community and regional power needs. A number of Traditional Owners on the Gove Peninsula stated that Alcan employees had led them to believe this would be a likely consequence of the gas pipeline. An earlier version of the Mataranka to Gove Pipeline Project promotional video ("Gas to Gove") stated that gas would be available for power generation in communities. Some individuals expressed the hope that they would receive free gas to fill up their gas bottles or free LPG gas to run vehicles and outstation generators.

6.1.4 Infrastructure development

A number of communities expressed the hope that the Project will lead to infrastructure upgrades in their communities, specifically in relation to airstrips, access roads, rubbish dumps, energy generation equipment and additional bores. Some hopes were expressed that the Project would leave housing and infrastructure behind that could be used by community members.

6.1.5 Royalties

All Traditional Owners expect to receive royalty income from the Project. Most expressed the aspiration that royalty monies (their words) would provide income to their estate group to purchase vehicles, build up homelands and fund funerals, ceremony and other cultural activities. Many groups of Traditional Owners were keen to invest royalty income to provide an income stream for future generations, particularly for education purposes. A small number of Traditional Owners who were interviewed both in their capacity as Traditional Owners and as the representatives of community organisations

saw royalty income funding funeral funds, general community development projects and, through investment, providing an income stream for future generations.

6.1.6 Contracting opportunities

Those community and regional organisations interviewed consistently expressed the view that they had a range of capacities and expected to be able to take advantage of the TTP to create local business and employment opportunities for Traditional Owners and local Aboriginal people. People expressed interest in contracts to supply materials such as sand and gravel during the construction phase, to hire out equipment for building roads, to upgrade or build any access roads that may be needed for constructing the pipeline, to supply bread, meat, and catering services, to supply environmental services, including collecting grass seeds for revegetation purposes and wildlife monitoring during the pipeline construction phase, to provide cross-cultural training and supervisory training, to provide tours, language translation services and others.

There was a view that contracts to local communities was the most viable way to create employment opportunities for Traditional Owners and local Indigenous people.

Perceptions among non-Indigenous business organisations in Katherine regarding potential benefits being available to local businesses varied. Some informants expect there will be opportunities for local service contracts to provide food, ice, fuel and service parts while others said that they did not expect any benefits to come from the Project.

6.1.7 Employment and training

A key point which emerged from the consultations was that all informants had high expectations and expressed a strong desire for the Proponent to develop Indigenous employment and training opportunities, particularly with a focus on youth and males and to give priority to Traditional Owners and local Aboriginal people.

There were differing reports on the success of Indigenous employment and training outcomes with the ADRail Project. Most expressed the view that these outcomes had been very successful and hoped that the TTP Project would produce similar outcomes. A small number of informants had a very negative view of the outcomes of the ADRail Project, as discussed below.

Generally, non-Indigenous informants were realistic in their understanding that many jobs were specialist in nature and they were not expecting great numbers of employment opportunities for Traditional Owners and local people should the Project go ahead.

6.1.8 Economic development

Most informants, particularly in the Central and Western Regions, have high hopes that the TTP will contribute to the development of the regional economies. The Economic Impact Assessment undertaken by ACIL (2004) suggests that there is a reasonable expectation of economic development benefits likely to arise out of the Project. However, our reading of the ACIL Report is that such benefits will manifest only partly at the local level along the TTP route, and are possibly more likely to be generated rather at regional centres such as Katherine and Darwin. The types of economic development opportunities foreshadowed for Aboriginal communities are discussed in detail below.

6.1.9 Managing expectations

Overall, with few exceptions, expectations of benefits from the TTP are generally very high amongst Aboriginal people. Since Project details are not yet available, we are not in a position to assess how realistic these aspirations are. However, we are concerned that these expectations may be unrealistic and that there may be a need to manage expectations. Of concern is that while the Proponent is in the approval seeking phase, expectations within the community still need to be aptly managed and that, to date, the focus of the NLC's information activities appears to have been with Traditional Owner groups. On Aboriginal land it is the NLC's responsibility to manage. Consultation with traditional Aboriginal Owners and on non-Aboriginal land it is the Proponent's responsibility to manage consultation with native title groups with the assistance and the support of the NLC if required. The SIA has highlighted issues for the Proponent and the NLC to be aware of and which need to feed into community consultation strategies in order to appropriately and reasonably manage these expectations.

6.2 Summary of concerns

A wide range of concerns was raised by informants.

6.2.1 Damage to sacred sites

The possibility of damage to sacred sites was raised in most consultations, although it was in the Central and East Arnhem Regions where there appeared to be the most concern. People were particularly concerned about the possibility of unauthorised trespass by construction workers into sacred areas. Informants did however, express confidence in the NLC's process for identifying and protecting sacred sites and sites of significance.

6.2.2 Gas leaks and explosions

There was widespread concern about the possibility of gas leaks and explosions that might be caused by fire and/or youths or people under the influence of alcohol vandalising scraper stations or throwing lighters in the vicinity of gas pipes. At one interview, those present expressed their "Worry for gas. We worry for life". At another interview, one Informant said that she was worried that if there was a gas leak, people might get sick. The effects of a recent earthquake on the Mereenie pipeline around the Tennant Creek area were discussed in the context of safety and the TTP. One representative of a community organisation stated that he thought that there were likely to be some concerns amongst people about the pipeline, based on the experience of people's reactions to the installation of a "wire" to measure earthquakes, east of Tennant Creek. This Informant reported that people tended to steer clear of the line because of sorcery and magic fears. Some people thought that going near the wire would cause earthquakes.

A large number of Aboriginal people asked about whether it would be possible to continue traditional burning practices and expressed concerns relating to gas explosions in the event of a bushfire. These were the two key issues that were raised in every interview the SIA Team conducted with Aboriginal people across the three regions (East, Central and West). There is a clear need for more bi-lingual information to be made widely available in each region about these safety issues with the aim of allaying the fears of Traditional Owners and Aboriginal community members. Safety concerns were

less often expressed by representatives of community organisations, suggesting that it is important that any education program be targeted at general community members, and not rely on organisations to pass on this information.

6.2.3 Construction force

A number of Aboriginal people expressed concerns in relation to the presence of a large construction work force associated with the Project. These included concerns about potentially harmful interactions with Aboriginal communities and the impact on community social relations, including impacts for Aboriginal women in the event that sexual jealousies might arise; and construction, operational and maintenance workers wandering away from camps unaccompanied by Traditional Owners and/or using firearms. There were also concerns raised about the possibility of two-way trafficking of alcohol and drugs where construction camps were located in close proximity to communities.

There was some uncertainty around how the construction work force would remain separate from impacting on local communities with questions focusing on:

- camp site locations,
- rules pertaining to alcohol consumption, and
- workers' access to communities and the towns of Katherine and Nhulunbuy.

6.2.4 Road safety

High on the list of concerns was the possibility of increased road accidents, injuries and death resulting from:

- an increased number of company vehicles and equipment using local roads and main thoroughfares during the pre-construction and construction periods,
- increased alcohol consumption by local community members associated with cash distributions of compensation monies, and
- people walking along the roads at night and setting up camps alongside the road at night not being visible to drivers of heavy vehicles who are using the roads at night.

Those consulted at Katherine were particularly concerned about the possibility of large trucks driving through the township at night when it would be difficult to see Aboriginal people walking along and crossing roads.

6.2.5 Environmental impacts

Concerns were expressed by most groups along the length of the TTP route in relation to:

- Soil and wind erosion,
- Introduction and spread of weeds,
- Spread of feral animals via the four wheel drive access track,
- The introduction of uncontrolled fire into environmentally sensitive areas,
- Leaching of chemicals or corrosive-proof paint from the pipe into the soil and water bodies and waterways and possible effects of same on fish,
- Fuel spillages,
- That the course of rivers would be altered by the pipeline,

- Silting of rivers,
- That the ground would sink where the pipe was buried,
- The use of dynamite in rocky country.

Specific environmental concerns were raised in the West region, particularly in the vicinity of the Windgate Mountains and the escarpment country to the west of Katherine, in relation to the need to protect waterfalls, springs, billabongs and river crossings and their catchment areas, (which people specifically said should be avoided by the Project at all costs). The first four of the dot points listed above related particularly to this area.

6.2.6 Theft and vandalism

Security concerns were raised in relation to the Project, not only during construction, but also post construction. Police and other informants warned that vandalism and, near some communities, theft by Aboriginal male youths in particular were major concerns and strategies needed to be put in place to prevent and sensitively handle such matters.

Some Informants were concerned that people may vandalise, shoot or “throw matches” at the pipeline scraper stations. They pointed out that even NLC signs out on Country are vandalised with “big mob bullet holes”. They were concerned that scraper stations would be an attraction to bored youth and vandals. Some expressed concerns about people using vehicles to ram fences and scraper station installations.

Informants, particularly Northern Territory Police, Department of Business, Industry and Tourism and Northern Territory Housing and Business Services keenly expressed a desire to see the Proponent implement proper, robust security measures for the pipeline infrastructure.

6.2.7 The TTP Route facilitating access

A number of people raised concerns about what they considered to be the high likelihood that once the TTP has been constructed, that the cleared area over the buried pipe would facilitate unauthorised access to Aboriginal land by tourists, pig hunters and other outsiders.

6.2.8 Upgraded roads

There were a number of concerns also raised specifically in response to the possibility of upgraded roads. These concerns were particularly evident in the East region where people expressed concerns about improved access roads would lead to increased tourist and fisher traffic to their Homelands. In the West at Palumpa and Wadeye, there was concern that an improved road to Peppimenarti would facilitate increased access to alcohol at the Peppimenarti Club.

6.2.9 Compensation

Concerns were raised that cash distributions of compensation could lead to fighting and increased domestic violence. Concerns were also raised that compensation payments to Traditional Owners directly affected by the Project would result in “the haves and the have-nots” in the community. Others expressed concern that Traditional Owners would not be provided free reign to use their compensation benefits the way they saw fit.

6.2.10 Gaining consent

In addition, there were a number of concerns raised in relation to the process surrounding gaining consent, including:

- Not enough information being provided in advance and pressure being placed on Traditional Owners to make a quick decision,
- Not enough recognition of the complexity of Aboriginal decision-making and the obligations on custodians to consult correctly and adequately in relation to possible impacts on sacred and other significant sites, and
- Information being directed exclusively at senior Traditional Owners and not enough information being provided to wider family members, other affected community members or community service organisations.

6.2.11 Capacity of service organisations

Informants from Katherine Police were especially concerned about the capacity for local policing, health services and hospital resources to deal with a major emergency response call out. It was felt that the Proponent's Emergency Response Plan needed to be robust in view of the high number of employees anticipated for working on each pipeline construction team. Wadeye Police stated it would need to increase its capacity in order to cope with the additional policing demands during the Blacktip/TTP construction period. NT Government Health Centres at Wadeye and Gapuwiyak and Wurli Wurlinjang Health Service at Katherine also expressed concerns about their lack of capacity to provide additional health services to TTP construction trainees and workers.

6.2.12 Terrorism

A small number of people raised the possibility that the proposed gas pipeline posed an attractive target to terrorists and so was a safety threat to nearby communities.

6.2.13 Non-Indigenous concerns

Non-Indigenous informants raised concerns about environmental impacts in relation to:

- the potential impact on rivers during the pipeline construction period,
- potential impacts from pipeline corrosion, and
- impacts on the surrounding environment from a potential gas leak.

7 Potential socio-economic impacts of the TTP Project

7.1 Construction workforce

7.1.1 Workcamps

Generally, people did not appear to have any problem with the work camps, providing that:

- The work camps are located on plains,
- The work camps are located away from communities, homelands, outstations and Katherine,
- The work camp areas are thoroughly cleaned up after they are dismantled,
- Traditional Owners are employed to welcome workers on to their Country and to provide cross-cultural training,
- Workers respect that the country they are working on is Aboriginal Country,
- Workers do not leave camps unless in the company of Traditional Owners,
- The Company takes full responsibility for the behavior of workers when off-duty, including if they are travelling into towns,
- Strict controls are in place to ensure that alcohol and drugs are not brought into the camps,
- Interactions with local communities are strictly managed and monitored in collaboration with local authorities to ensure drug and alcohol trafficking does not occur,
- Workers are taught to respect Aboriginal people. “We don’t need workers having a negative perception of Aboriginal people and then our people seeing themselves reflected in those fellas’ eyes”,
- Security at the camps is well thought out and planned, to ensure that petrol sniffers do not seek to steal money, food, fuel or firearms,
- Security guards at the camps receive cross-cultural training and are briefed and supported by local Police,
- Mechanisms and processes are put in place that the security guards can tap into to appropriately manage petty thefts should they occur, and
- There is liaison between Traditional Owners, senior community members, Northern Territory Police and the camp supervisors.

The view of Dhimurru Land Management Aboriginal Corporation is that construction workers should be accommodated at Nhulunbuy to the extent possible.

7.1.2 Workers accessing Country

There were widespread concerns that workers would travel away from the construction camps and on to Aboriginal land without the proper authorisation. Most Informants expressed concern about workers leaving the immediate construction camp areas unaccompanied by Traditional Owners. Some Informants said specifically that they do not want male workers swimming in parts of the rivers that are women’s sites or special areas.

Some Informants also said that they would feel somehow responsible if workers were hurt or injured on their Country. They gave the example of somebody being injured by a

crocodile. They would like to alleviate this feeling of responsibility by welcoming workers onto Country.

One group also expressed concern about Aboriginal people being blamed for theft or vandalism caused by workers.

Local Police at Wadeye took the view that there was a need to reduce issues of access and movement of construction workers on Aboriginal land and it was suggested that construction workers should not be able to gain verbal permission from Traditional Owners to access areas for fishing, hunting and sightseeing. Police proposed that designated areas should be identified by Traditional Owners and permits issued through the NLC and that a general access policy and protocol would need to be negotiated with the NLC and be part of any induction program provided to non-Indigenous workers.

7.1.3 Workers accessing communities and community services

Outside of Katherine, those Traditional Owners interviewed did not generally express great concern about the presence of large numbers of construction workers on Country in terms of their engaging with local community members or using community services. However, it is also the case that these communities have limited experience of the presence of a large workforce located in or near their communities. In those communities where the stores are operated as community-owned enterprises, the wish was expressed that workers from the construction camp would be making purchases from local stores.

The Peppimenarti Council, community members, and the licensee, invited TTP construction workers to the Peppimenarti Club. They said that they expected the Proponents to ensure that workers did not misbehave and that workers who did not behave would be banned.

A small group of women interviewed at Beswick, (none of whom are Traditional Owners), said that the Board of Management would decide if workers could use the Club and the shop. As with Peppimenarti, the view was that it would be the Proponents' responsibility to control workers and to transport them in and out of Beswick by bus. The women said they did not believe there would be any problems with single women, who drink at the club, socialising with the workers. "We want them to be friendly but we don't want them to take women away".

The women told the interviewer that unwanted pregnancies were not a problem as women in the community had all had their "needle". This "needle" provides contraception but does not provide protection from Sexually Transmitted Infections (STIs). Thus the women had identified unwanted pregnancies as an issue, but did not demonstrate an awareness of STIs as an issue.

A number of Katherine-based health services and organisations said that they would not like to see a work camp close to Katherine, in particular because of the possibility of drug trafficking and increased incidence of STIs. The Health Service at Gapuwiyak echoed these concerns, citing the following as their primary concerns:

- Unwanted pregnancies "workers are here for a short time and a good time"
- Prostitution
- STIs, and

- HIV / AIDS.

Currently there are no known incidences of HIV / AIDS in East Arnhem Land, and HIV/AIDS was not specifically noted as a concern by any other health centres in other regions. Health staff in all regions are proactive at preventing its introduction, in the knowledge that once HIV is introduced, it is likely to spread very quickly.

In the East Arnhem region on the Gove Peninsula, the view was generally expressed, that in comparison to the impact of the Alcan mine, the short-term presence of a construction workforce would not be significant and that people are accustomed to having non-Indigenous workers in their region. Concerns regarding work camps in this region related principally to workers travelling away from the construction camp and using tracks to make unauthorised entry onto Aboriginal lands

In contrast, at Gapuwiyak (where people who have interests from the Goyder through to Dhalinbuy Outstation/Juwurr area live) concerns were expressed about workers camps being located near Gapuwiyak or homelands, in particular in relation to environmental impacts, unauthorised access to Aboriginal lands, increased attention and awareness of the area by outsiders generally, and damage to roads and infrastructure.

One Katherine-based health clinic said that there should be an MOU for provision of health services to Project workers in the event that local community clinics, pharmaceuticals or medical evacuation services were used by the camps. Another informant expressed concern that, given the size of the TTP workforce, a major emergency at the work-site would overwhelm Katherine health and hospital services. It is assumed that the Proponent is preparing an Emergency Response Plan which will address this Informant's concerns. The Gapuwiyak Health Service advised that it is not resourced to respond to injuries and illnesses of TTP construction workers who might be working in the vicinity of the community. Health workers there said that the clinic's limited resources are already stretched coping with the acute conditions of community members and maintaining community health programs. They expressed concern that if they were required to provide any services to workers associated with the Project, it was likely that their community health programs (e.g. school screenings) would be compromised.

7.1.4 Firearms

Some Informants also had concerns about workers and their use of firearms and specifically expressed concerns about workers harming animals.

7.1.5 Female employment

Gender balance within the construction workforce will likely improve the ability to monitor and manage interactions with local Indigenous communities and the presence female workers will provide a more normal social situation within the work camp.

7.1.6 Alcohol and illicit drugs

Those interviewed were asked their views on whether workers should be allowed to consume alcohol at the construction camp. On this question, opinion was mixed. Some felt that there should be no alcohol in work camps at all, while others felt that alcohol was alright provided it was approved by Traditional Owners. Some Aboriginal people at Peppimenarti and Beswick, as discussed below, stated that they looked forward to having a drink with the workers. A common view was that, providing they had a permit,

construction workers should be allowed to consume alcohol. Although many also took the view that while it was alright for non-local workers to be provided with alcohol, local Aboriginal co-workers should not be allowed to have alcohol. There is a need to explore with senior community members the difficulties and inconsistencies associated with the issue of alcohol being provided to non-local workers and not to local Aboriginal co-workers, in more depth.

Providing limited access to alcohol for workers may have some effect in lessening the likelihood of workers seeking to procure illicit alcohol, or bringing unauthorised alcohol into the camp

There was concern voiced by a number of Traditional Owners and community organisations, that the presence of transient workers may result in increased drug trafficking and grog running. The local Police at Wadeye expressed concerns in relation to construction workers and alcohol and advised that there had been incidences of alcohol and drugs being brought in to the community by builders who were building houses at the new subdivision over the last two years.

At Peppimenarti, interviews with the licensee and Council indicated that there was hope that the construction camp would provide business for the Club at Peppimenarti, and so additional revenue, and that they expected the company to take responsibility for the behaviour of workers at the Club and outside the Club after closing hours.

In our view, the risks associated with the construction force mixing with local communities in an environment where alcohol is served are best avoided. However, the Proponent could seek to procure alcohol from local community-owned outlets to ensure that these organisations receive the economic development benefits of trade.

7.1.7 Petrol Sniffing

There was widespread concern that the presence of petrol-operated vehicles and equipment would attract petrol sniffers to the camp and construction site. The possibility of theft and unlawful entry in particular by Aboriginal youths associated with the search for petrol was raised as a real concern. Wherever possible it will be necessary for the Proponent to aim to reduce the presence of vehicles and equipment which use petrol, and any petrol which must be kept on site will need to be securely stored.

7.1.8 Granting of favours

It is advised that the managers of TTP construction camps be directed not to grant any small "favours" to local families or individuals. An exploration camp located near an Aboriginal community further south initially offered assistance to stranded families in vehicles by providing them with fuel when they had run out and spare tyres when they had flats. This, however, set up an expectation that the company would continue to provide such favours. When the demands for such favours increased to an unsustainable level, the company refused. From the company's point of view its generosity was being abused. From the Aboriginal perspective, the company was now refusing to pay its rent. While the company had initially provided these favours in order to strengthen positive feelings with the community, it instead set itself up to create bad feelings down the line.

Granting of favours to the families of Traditional Owners is also not advisable, as it not only sets up expectations but, because the nature and identity of Traditional Ownership

is often more complex than it appears, companies have frequently granted favours to families they believe to be members of a traditional owner group to the annoyance of other Traditional Owner groups who are not as well recognised by the proponents. Benefits should be delivered at the community level or via representative organisations which can protect the Proponent from accusations of favouritism or bribery.

7.1.9 Social impacts Nhulunbuy

The social impacts of the TTP construction workforce will be significant, but will not be as significant as those likely with the impacts of the refinery expansion workforce. This is because the proposed TTP construction workforce is smaller, (less than one quarter of the proposed refinery expansion construction workforce), and likely to be present in Nhulunbuy for a much shorter period of time (weeks rather than years).

The sorts of social impacts that might arise as a result of a construction work force being located in or near Nhulunbuy still need to be adequately identified, and a suitable range of safeguard policies and strategies will need to be developed.

The sorts of impacts that might be expected, given what we know about impacts on Indigenous communities in comparable situations in the Pilbara and at Weipa in North Queensland, include incidences of:

- Prostitution
- Drug and alcohol trafficking (drug trafficking both ways, from the Aboriginal community to construction workers, as well as from workers to the community)
- Unwanted pregnancies and STIs including HIV and Hep C where needles are used
- Impact of social relations within the Aboriginal community as a result of males punishing females for going with white men
- Disruption to usual patterns of social sexual relation within the Aboriginal community, with young Aboriginal men forming sexual liaisons with younger Aboriginal women
- Aboriginal women forming permanent relationships with members of the white construction force and leaving the community with them after construction is completed, with the attendant grief and anger in the Aboriginal community
- Resentment towards the company and the white workers
- Vandalism
- Increased substance abuse due to increased social and economic marginalisation.

These sorts of impacts are not usually visible and are usually practiced covertly. Since the impacts of the refinery to date on local Aboriginal communities has not been documented, nor was it in the expansion SIA prepared by URS, there is only anecdotal evidence that such impacts are already being experienced at Nhulunbuy.

7.2 Business development opportunities

According to ACIL,

“the greatest opportunity for Indigenous employment and business development could lie in the flow-on opportunities that arise as a result of the Project. Improved access to remote areas as a result of road upgrades could result in greater visitor numbers and therefore the opportunity to capture the benefits of these flows. Examples of business opportunities could include tours of the area, the establishment of art centres along major tourist routes, fuel stations, and other tourist-targeted businesses”. (ACIL 2004)

However, Indigenous people expressed less interest in the sorts of business opportunities associated with tourism, (which many are not keen to encourage), and expressed more interested in those opportunities associated directly with the TTP Project.

Indigenous organisations expressed interest in providing:

- catering services to the construction camps,
- cultural sensitivity and awareness training to workers and supervisors,
- cultural tourism services to workers,
- hunting, fishing, camping and tours for workers
- sale of take away foods and sale of art and artifacts to workers,
- translation and liaison services,
- sale of alcohol,
- sale of sand and gravel,
- security services,
- monitoring services, including environmental monitoring,
- surveillance services
- transport services, including air flights and charters.
- supply of bread and meat to the construction camps, (Wadeye and Palumpa)
- logistics support,
- civil works on roads, campsites and along the pipeline route,
- quarry operations
- maintenance of the pipeline route, roads and access tracks,
- revegetation of construction sites, including the collection of seeds,
- advice on suitable plants for revegetation,
- monitoring of revegetation efforts.

A number of organisations (e.g. YBE, Kybrook Farm) said that they had nurseries and could provide gardening services, as well as maintain access tracks and participate in revegetation works.

ACIL notes that

“Indigenous businesses often struggle to be viable and to participate substantially in opportunities such as these, due to a chronic lack of capital, skills and mentoring. Early planning and communication is necessary to ensure that businesses prepare themselves. Targeted support activities sponsored by government will help businesses to develop sufficient skills and, as required, certification to enable them to win and complete contracts. Experience has shown that initiatives for local and Indigenous businesses need to be included in policies, procurement procedures and contracts for major

contractors and suppliers to help provide drivers for maximising Indigenous involvement in projects.”

We would endorse ACIL's position on the need for early planning and communication. However, while the Proponent says that it has provided information to Indigenous organisations in the form of presentations and project briefing sessions, almost every organisation we spoke with complained that they either had had no contact with the Proponent or that the information which they had received lacked detail and was of little value to them in their own planning processes.

It is understood that the Proponent is developing a Communications Stakeholder Strategy that is to be implemented at an appropriate stage in the Project's development phase. Substantial resources will need to be injected into such an exercise as there are a large number of organisations with high expectations in relation to taking up business opportunities associated with the Project.

There is also concern that the lead times may not be adequate if the current timetable of commencement of construction in the dry of 2005 is to be met. In particular, where the taking up of business opportunities relies on government support and capacity-building, lead time is even more critical. While Federal and Territory Government funding programs are available which the Proponent could support Indigenous organisations to tap into, their funding application cycles are such that engagement with these funding bodies needs to be commenced well in advance of when the funding is actually required. Given how important these opportunities are to Indigenous organisations, and that it is clear that much of the current positive approval towards the Project stems from the assumption that such business opportunities will be forthcoming, it would seem that immediate engagement with government agencies and Indigenous organisations is imperative.

Traditional Owners and community organisations in every community expressed keen interest in winning contracts for seed collection, nursery services, rehabilitation and ongoing weed control and maintenance of the pipeline route if it proceeds. Others indicated that they hoped to be awarded civil works contracts, for example, clearing the pipeline route and upgrading roads. It was very clear to the SIA Team that there are high hopes for contracts to come out of the TTP Project.

It was also the case that there is a clear expectation that any contracts should be awarded to community organisations where Traditional Owners are resident and that it would be inappropriate for contracts to be awarded to one group for work on the TTP route in another group's Country. One Informant commented that awarding maintenance contracts to Traditional Owners was a “terrific way to help maintain connection with Country”.

Community organisations are stating that they have the capacity for contracts, with the exception of Gulin Gulin Aboriginal Council, at Bulman, which indicated that they no longer have equipment to take up contracts. Some community organisations will require some capacity-building in order to be geared to take advantage of contracts that might become available and will need lead time to build this capacity. Most organisations have asked for detailed information to be made available as soon as possible so that they can begin to assess their capacities and interests.

7.3 Employment, training and recruitment

7.3.1 Opportunities

According to the Economic Impact Assessment Report for the TTP, prepared by ACIL Economics (2004), the TTP Project may lead to a “long-term but modest” increase in direct employment. The Project is expected to directly create around 346 (full time equivalent) jobs in the Northern Territory during the peak construction period in 2006. The anticipated total employment impact, including both direct and indirect employment, will also peak in 2006 and is expected to be an average of around 576 jobs for each year of construction (2004 – 2006). During operation of the TTP, up to 28 direct jobs will be created permanently. These jobs will be located principally in the Northern Territory (ACIL 33:2004).

ACIL also writes:

“While short-term employment will peak dramatically in 2006, many of these workers will necessarily be drawn from interstate, because:

- the Territory does not have a sufficiently large workforce to fill the positions, particularly in the light of the parallel construction of the Wickham Point LNG plant [and the Alcan expansion]
- a number of the specialist skills required (e.g. pipeline welding) are not generally available in the Territory.”

That said, there are substantial opportunities for employment of local people on Project construction. A much smaller workforce is required for TTP operation. However, this workforce will be Territory-based, with some workers possibly being required to be based in Katherine, Nhulunbuy or even communities along the pipeline route. These employment opportunities will depend on final operation parameters for the Projects.

The management and control of the TTP operations is expected to be Northern Territory based. This will require the permanent employment of management and engineering staff in occupations and numbers to be decided. These positions could result in a modest increase in the number of private sector professionals in Darwin” (33:2204).

The Northern Land Council Training and Employment Unit (NLCTEU) takes the view that the TTP (and Blacktip and Alcan expansion Projects) will provide significant opportunities for employment of Indigenous people and utilisation of Indigenous businesses. Both Woodside and Alcan have in place programs throughout their Australian operations to involve Indigenous people and businesses, and it is expected that these programs will extend to construction and operation of the new Projects. Opportunities for Indigenous employment relate particularly to the construction of the TTP.

The NLCTEU expects to assist people to secure employment in:

- Pipeline construction;
- Logistics support away from pipeline corridor – transport, camp support,

- Construction maintenance, road construction and maintenance; and
- Environmental and heritage surveys and rehabilitation following construction.

The Alice Springs to Darwin Railway (ADRail) construction is the most recent experience of a major project which was able to provide successful outcomes for Indigenous people in both employment and training. According to the NLCTEU employment outcomes achieved amongst Indigenous people far outweighed initial targets for the ADRail Project and almost all participants in the pre-employment training programs secured employment.

The employment target set of 50 placements over three years of the Railway Project construction was exceeded, with over 150 placements having been made by end of 2002 (the second year of the Project). Employment was directly with ADRail and with its major contractors. In addition, four pre-employment training (Access) courses were conducted in culvert construction, and two courses in small plant operation and hospitality operations were also conducted. Of the 66 Indigenous people who commenced training courses, 62 (94%) graduated and 50 (81%) gained employment. Training was also provided in skills upgrading and formal training (Lange 2003).

Informants from recruitment agencies in Katherine, maintain, however, that these figures are inflated. They say that their observations were that many of the Aboriginal people trained and employed on the ADRail Project were recruited from outside of the Northern Territory and that the count of 150 placements is high because many people were employed for only a short time and then either left or were dismissed. Thus while there may have been 150 placements, there were actually considerably fewer positions held by Aboriginal people.

ACIL points out that ADRail Project also resulted in a sleeper factory being built at Katherine to service the railway. The Mayor of Katherine advised that the sleeper factory was particularly successful in creating employment for Aboriginal people.

According to ACIL, training and experience provided by the ADRail Project has resulted in a workforce in Katherine and Darwin with skills that are applicable to the TTP Project and that with some retraining, these people can provide a local construction labour pool. Indigenous employment agencies based in Katherine advised that many of their clients already possessed the relevant skills, and that with some upgrading, could be made job ready for work on the TTP Project. The NLCTEU also advises that a number of people it put through training are believed to reside in Katherine and would be expected to be available for employment on the TTP project.

7.3.2 Employment and training aspirations

There are high expectations among Traditional Owners that the TTP Project will provide employment and training to Aboriginal people in the following priority order:

- Traditional Owners,
- local Aboriginal community members, and
- Indigenous people living in the Northern Territory.

Those people who did not express interest in employment and training were those primarily who live at homelands that are not located within the vicinity of the TTP or who are already engaged in other economic and social activities.

While many people, particularly around Katherine, Wadeye and Nhulunbuy expressed a hope that direct employment opportunities would arise, many along the full length of the TTP Route expected that employment outcomes would be achieved largely through community organisations that operate CDEPs, or through Indigenous-owned enterprises and other organisations, such as YBE, gaining ancillary contracts, which would indirectly create some employment opportunities for Aboriginal people.

The ADRail experience was used as a point of reference when consulting people, particularly in the Central Region, about training and employment issues (i.e. asking people if they thought the Aboriginal employment and training experience with the Railway employment program had been a success or otherwise and why). Some people felt that the railway experience had been a good one and equipped them to work on the railway line. Others felt that it had not been.

To date, some casual employment has been achieved by senior Traditional Owners undertaking survey work associated with route selection for the TTP. A small number of people advised us that they thought younger people should also have been paid to accompany senior people, so that they would also learn through that process, however, younger people have been employed as field hands throughout all of the surveys so far conducted on the TTP. Their job descriptions included cultural instruction from Senior Traditional Owners.

There is a strong expectation that Traditional Owners will be employed as guides and monitors during the construction of the pipeline, as well as in post construction maintenance of the pipeline route. They expect to accompany any company pipeline route inspectors. In all areas there is a widespread expectation that Traditional Owners will be employed to supervise work during construction to ensure that the correct route is followed and that sites will be protected. In the Bulman/Weemol area, it was impressed upon us that both mingirringgi (Owners) and djunggayi (custodians) should be employed to work on site as cultural guides, "checking in front and behind" that the right thing is being done (i.e. sacred sites, dreaming tracks and ceremony grounds not disturbed and that revegetation occurs). People expressed concern that the Proponents might stray away from the agreed route without guides.

7.3.3 Organisations

There are a number of Indigenous training and employment organisations who are interested in participating in the task of maximising Indigenous employment and training on the TTP Project. These include:

- NLC Training and Employment Unit (NLCTEU), based in Darwin
- Yirrkala Business Enterprises (YBE), Nhulunbuy
- Lhanapuy Homelands, Nhulunbuy
- Kalano Aboriginal Association, Katherine
- Indigenous Employment Centre, Katherine
- Waikan Employment and Training, Katherine
- Burridj Group Training Company, Katherine

- Wadeye Training and Employment Centre, Wadeye

In addition there are numerous CDEP programs operating in communities along the length of the proposed pipeline route.

Yirrkala Business Enterprises (YBE) started in 1968 as the Yirrkala Brickworks, where Aboriginal people were employed to make bricks for the construction of the town of Nhulunbuy. When the need for bricks had lessened, the employees gained other employment from the then-named company, Nabalco (now Alcan). In 2000, YBE expanded its Ownership. The organisation now represents 25 clan groups from across all of Arnhem Land instead of the previous 13 groups from North East Arnhem Land. The Board of Directors is comprised of one representative from each clan, with an Executive of three male elders. YBE is described by its CEO as “a business whose purpose it was to make money for the shareholders (the 25 clan groups)”.

YBE is not an association and is not Government funded, nor is it part of CDEP. It is a registered business that pays company tax. At present the organisation employs 90 people, 38 of whom are Yolngu. YBE currently has an annual turnover of \$10 million. Last financial year half a million dollars was paid in dividends to shareholders. The dividends are distributed amongst 25 clan groups. YBE’s equity stands at over \$4 million.

YBE currently has contracts under its “Alcan Gove Alliance” worth seven to eight million dollars per annum. These contracts include ore haulage at Rocky Bay, maintenance of the residue disposal area at the alumina refinery and a miscellaneous works contract.

YBE also has periodical contracts with the NT Department of Infrastructure, Planning and Environment. For the past ten years it has had the contract for the upkeep of the Central Arnhem Highway but lost the contract in the tender process this year. YBE has also recently gained a contract from the Northern Territory Department of Infrastructure and Planning for 2004, for the maintenance of building assets, particularly at Groote Eylandt and Galiwinku.

YBE also provides work in road maintenance, nursery and gardening, building, fencing, grounds maintenance and a workshop. The CEO of YBE advised that employees are capable of building roads and airfields. The grounds maintenance employees would be suitable for any pipe access track maintenance.

Equipment owned by YBE includes haulage trucks, loaders, bulldozers, steamrollers, excavators, graders and vehicle fleets. In the CEO’s words, YBE has “the staff, the equipment, the motivation... [and] we want the opportunity [to get work on the pipeline project.” He viewed the proposed TTP as an opportunity to create more jobs than currently exist through YBE.

Lhanapuy Homelands is a Homelands Resource Organisation which supports all outlying Homelands in north east Arnhem Land. The organisation advised us that they are very keen to gain contracts associated with the TTP Project and wish to be directly involved in the planning and implementation of any training and employment strategy “we want to sit at the table”. They advised that they do not see YBE representing their interests in this matter and wish to be engaged with directly in relation to discussions regarding employment and training and contracts that might arise.

The NLC's Indigenous Training and Employment Unit has demonstrated ability to coordinate and facilitate significant Indigenous training and employment outcomes for a range of major infrastructure projects, including the ADRail Project, in the Top End of the Northern Territory (English 2002). The Unit has taken some initial actions and worked closely with the Territory Construction Association (TCA) as part of taking a proactive role in coordinating the planning for the training and employment of Indigenous people in the TTP (and Blacktip and Alcan expansion) Projects. The Unit advises that it has already facilitated the involvement of some Indigenous people in relevant training programs such as plant operation, hospitality services, welding and general construction in Darwin; however, due to staff constraints, the Unit has not engaged with organisations or individuals at other locations at all.

The NT Education and Employment Authority expressed a view that the Proponent could support YCAN training programs. These programs train students 15 years and over in engineering, manual arts and metal fabrication and are currently being run at Beswick and Jilkminggan.

The YNOTS (YBE Nabalco Operator Training School) program was set up with funding assistance from the Commonwealth Department of Employment and Workplace Relations. YNOTS is jointly owned by YBE and Alcan Gove. It runs a 30 week training course. YBE currently employs ten YNOTS graduates.

An Employment and Training Centre has recently been constructed at Wadeye. The Thamarrurr Regional Council is very keen on creating training and employment opportunities for its members both through the TTP Project and the Blacktip Project.

Training and recruitment agencies based in Katherine expressed an eagerness to commence working with the Proponents as soon as possible to provide maximum lead time to the Project. They asked that detailed information to be provided to them on the kinds of jobs likely to become available. Some organisations expressed frustration that they did not know how to go about finding out about jobs or did not have enough information to start making people job ready. One organisation expressed the view that the Railway recruitment process had been a bit of a "con" because all the recruitment work went to one agency before the other agencies were even aware that a tender had been put out.

Barriers

The main barriers to optimum Indigenous employment and training outcomes on the TTP Project are likely to be:

- Insufficient information being provided to stakeholder organisations,
- Insufficient lead-time being allowed for organisations to make Indigenous clients job ready,
- Poor co-ordination of stakeholder agencies and their lack of involvement in planning,
- While in the Central Region there are a number of Indigenous Training and Employment agencies based in Katherine, there are no equivalents in Nhulunbuy or Wadeye. There is a high risk of missing Traditional Owners who live at Ngukurr in South-East Arnhem Land and at Homelands within each region,
- Marginalisation or complete sidelining of key stakeholder organisations,

- Alcohol and drug testing of employees,
- Failure to adequately and appropriately train supervisors of Indigenous employees,
- Lack of training programs being offered locally (e.g. Katherine, Wadeye and Nhulunbuy)
- High demands on employees associated with a rostering system with long hours and extended working weeks, and
- High skill levels required for most positions.

According to ACIL:

“The lesson from the construction of the railway and other major project developments is that with the right lead time and skill development, the Northern Territory can provide many of the relevant skills and business services for major projects. (55:2004)

The view of the NLCTEU is that ADRail’s success was due to the use of a “detailed and robust recruitment, training and employment plan and methodology”. Experience on other projects has demonstrated the value of early planning and training programs to maximise Indigenous employment.

7.3.4 Process

Under an Indigenous Land Use Agreement, a Local Industry and Aboriginal Participation Plan was developed for ADRail, which committed the railway consortium to providing 100 jobs for Indigenous people on construction of the railway project and to train 200 Indigenous people. To assist with this program the following steps were taken:

- The Territory Construction Association was hired to prepare and co-ordinate a Project Training Plan in consultation with Northern Land Council representatives,
- A policy of “One Point of Contact” for all Indigenous Employment and Training was implemented,
- All Employment, Training and Mentoring Plans were designed with an emphasis on the provision of comprehensive information via group information sessions and individual interviews before Indigenous people were referred directly to a job or to a Pre-Employment Training Course, and
- A database of over 600 Indigenous people was built.

The NLCTEU advised that it is acutely aware of the compressed timeframes associated with the planning for, and construction of the TTP Project, particularly in terms of the lead-time required to identify, train and mentor Aboriginal people. The Unit’s project planning and training processes continue to be limited by the lack of information provided by Woodside and the other Proponents, about the employment opportunities on each of these projects (preconstruction, construction, commissioning and maintenance). To date, the Unit has relied on information generated by the Territory Construction Association and the NLC, neither of which say they have been able to check or confirm their estimates with the Proponents. However, the Proponent advises that the NLC was provided with typical pipeline construction workforce estimates. It should also be noted that the extent of information is always limited at this stage of projects.

Other organisations also made the same complaint. None of the organisations listed above, including YBE, says that it has received any information to date on employment and training opportunities or requirements associated with the TTP, and none has been invited to discuss how it might assist the Proponent to plan and fulfill any targets it might set. No consultations involving any of the Indigenous organisations has taken place with government departments which might provide collaborative funding support for Indigenous training and employment programs associated with the TTP.

A number of organisations noted the importance of cross-cultural training for supervisors. There seems to be a belief that employment programs, such as that implemented by the Railway, have not been as successful as they might otherwise have been because supervisors of Aboriginal employees had not received adequate training in appropriately and effectively supervising Aboriginal employees. When pressed for specifics, the Informants explained that supervisors needed to understand that Aboriginal people do not need or wish to make eye to eye contact, that supervisors should go to older people when there is a problem and discipline younger people through older people, and that singling out people and so shaming them would result in Aboriginal people leaving the job. Informants also advised that there is a need to supervise and manage Aboriginal workers in a culturally appropriate way and provide ongoing mentoring: “you have to make people feel good and wanted...daily support, encouragement, acknowledgement and properly mentored to keep them interested”.

One training organisation complained that training programs were currently based in Darwin and that they felt “outraged” that Katherine people were disadvantaged because of the lack of availability of training opportunities in Katherine. There was a good deal of Katherine-based training for the railway project.

Concerns were also raised about the ability of some Aboriginal workers to commit to the roster that the Proponents are currently considering (i.e. shifts of up to 28 days straight followed by seven day breaks). It was felt that this would be too demanding on workers, in particular because they would be away from their families. Concerns were also raised about the impact that this would have on the families of workers. It was felt that if this regime was in fact used, that provision would need to be made for families to visit workers, although it was acknowledged that workers might be based too far away from the family for it to travel. On the other hand, some Informants said that such extended work periods would not be a problem, since they were not unlike when workers went away on stock camps when men had been away from families for extended periods.

The SIA Team explained to those who expressed interest in direct employment and training with the Project, that the Project would provide short term employment only, since construction would take place for only two dry seasons. It was also explained that there would be drug and alcohol testing of prospective employees. Some Informants felt that this would be a barrier to employment as many young people are using marijuana.

7.3.5 Resources needed

The NLC Training and Employment Unit (NLCT&EU), in partnership with the TCA, have the experience, knowledge, networks and methodologies to effectively engage Traditional Owners and other local Aboriginal people, in training and employment. However, to successfully facilitate the training and employment of Traditional Owners and local Aboriginal people in the current time-frame (i.e. Oct 2004, preconstruction dry season 2005 & construction during dry season in 2006) the Unit will require additional

human and capital resources. The Unit estimates that this would include a Coordinator and two Indigenous Training and Employment Project Officers. The proposed Coordinator would be responsible for:

- Liaising and coordinating with Job Network providers, Group Training organisations, Centrelink and CDEPs,
- Liaising with the Proponents, subcontractors, supervisors and managers as part of ongoing planning, monitoring, evaluation, problem solving/prevention and mitigation,
- Managing and supporting Project staff, and
- Reporting to the NLC and Proponents.

The NLCTEU proposes that the Project Officers would:

- Visit communities and outstations to provide information about the training and employment opportunities for each of the projects to community members living at Wadeye, outstations and other communities in the west TTP region,
- Register interested people on the NLC database,
- Assist people with their applications for training and employment,
- Ascertain individual training needs,
- Support people to participate in the appropriate training in accordance with the Unit's culturally appropriate 5 Step Assessment and Referral Process,
- Assist people with job applications and their preparations for interviews, and
- Provide ongoing support and mentoring to people employed.

The Unit would also require one to two vehicles over the two to three year period that includes planning, preconstruction and construction phases of the TTP (and Blacktip) Projects.

One health service organisation interviewed advised that the railway project had created additional work for their organisation, since Aboriginal people required checkups and that on the days the railway sent people for their medicals this had created an extra workload for staff. They felt that the proponents of such projects should provide funding to the health services to assist them with the additional workload.

7.4 Community Benefits Package

As discussed above, the SIA Team was requested by the Proponent to ask people what sort of benefits they thought could suitably be included in a Community Benefits Package. Since we were unaware of what the budget for such a package would be, and since such a Package is clearly a point for negotiation between stakeholders, our consultations in relation to this issue were relatively superficial. We also did not wish to enter into lengthy discussion with informants about such benefits, how they might be delivered and so forth, in case informants took this to mean that the SIA Team had some sort of authority to speak on the matter, which clearly it did not.

For these reasons, the best that we are able to provide at this point is tantamount to a "wish list". However it does give some idea of the sorts of benefits that informants discussed in relation to their community needs. Clearly, more additional consultations

need to be conducted with Aboriginal community leaders and their representative organisations to identify local priorities and needs. What it is fair to say is that in such economically poor and socially disadvantaged communities as those Aboriginal communities affected by the TTP, it will not be difficult for the Proponent to find many opportunities to provide benefits to the communities.

Types of benefits that were proposed by Traditional Owners, community members and organisation representatives, as sought after compensation/community benefits included:

- Support for the establishment and operation of Land Management/Ranger Groups,
- Upgraded roads,
- Upgraded airstrips,
- Scholarships and educational support,
- Educational and training facilities and programs in Katherine,
- Programs promoting cultural sustainability,
- Leadership programs,
- Support for administration costs for local organisations not eligible for funding from ATSIC,
- Support for community events such as “open days”,
- Support for archival history and cultural projects,
- Funeral fund,
- Support for professional counseling services and suicide prevention programs,
- Financial support for ceremonial activities,
- Fibre optic cable,
- Support for outstation development,
- Money for purchase of land away from Katherine as an alternative to town camps,
- Housing,
- Community facilities such as art centres, cultural heritage centres, women’s centres and old people’s homes where these do not currently exist,
- Equipment for women’s programs such as sewing machines,
- Medical equipment for local health clinics,
- Facilities for children such as play grounds, cinemas and swimming pools,
- A fund that could be accessed by parents to meet their children’s needs,
- Sport and recreation equipment, facilities, programs and staff,
- Support for programs such as health promotion programs,
- Support for health research programs,
- Primary health care projects to promote well-being,
- Accommodation for families in Darwin whose members are in hospital or to attend funerals,
- Financial advice and business education and development programs,
- Enterprise development support, including for community gardens and nurseries and cattle enterprises,
- In communities near Katherine, community buses to bring people in to Katherine for weekly shopping and sporting and cultural events,

- One Katherine-based health service said that it needed professional managerial and financial advice on its Board and proposed that one of the Proponent's senior management would be a welcome addition to their Board.

On the issue of any monetary compensation, some Informants indicated that in their view pastoralists should not receive more compensation than Aboriginal people.

7.5 Compensation and consideration for land use

There are two considerations which framed the SIA Team approach to consultations around the issue of compensation in relation to Aboriginal Traditional Owners. First, is that, post construction, the most significant impact of a Project such as this is likely to be determined less by the direct impacts of the Project, and more by the indirect impacts resulting from how compensation benefits are applied¹; And, second, that impacts associated with this Project, (during the planning, construction and operational phases), are likely to be experienced at the community level, as well as directly (or exclusively) by Traditional Owners of the specific pipeline route.

The SIA consultations in relation to this issue were hampered by a lack of information about the NLC's and the Proponents' views on what any compensation package would be likely to look like, or to whom it would be principally directed. Understandably, a number of people we interviewed told us that they could not comment on the issue of compensation in the absence of any information about how much it was likely to be, what form it was likely to take, or to whom it was likely to be directed.

In general, excluding Katherine, there is significant overlap between Traditional Owners and community-elected representatives for those communities affected by the pipeline; although there are some Traditional Owners resident in communities not located near the pipeline route, who were also consulted (Darwin, Kybrook Farm, Ngukurr). This meant that in the majority of cases, those who we interviewed in their capacity as Traditional Owners for the pipeline route, were also often community members or community leaders of affected communities.

Consultations on the question of compensation were "principle-based" rather than specific. For example, the SIA team asked questions such as "Have you had compensation before and how have you used those?" or "Do you think that compensation is best paid as cash distributions or used to build the community up?" However, in more than half of our interviews, the question of royalties and compensation was broached first by those we consulted. The word "royalties" was used in our consultations only when it was first used by those we interviewed. Where those interviewed used the word "royalties", we prefaced our discussions with the explanation that we were unsure if the Proponents would be paying royalties, but that there would be compensation.

To the East of Katherine, Traditional Owners have received royalties from a number of projects and land use arrangements and there is a clear expectation that they will be receiving royalties from the TTP. Some reported that there had been a lot of talk about royalties already in relation to the Project. There is general agreement from them that

¹ Dependent, of course, upon the effectiveness of mitigation strategies and other interventions.

royalties are a good thing – money can be used for outstation development, purchase of vehicles, clothes, food, ceremony and culture. In one community, when the interviewer asked about using compensation for building up communities, there was some limited discussion about “building up” money for education, funerals and ceremony, however, there was greater interest in how royalties would be distributed (i.e., up front and annually) and to whom. Some individuals raised the option of clan groups, who receive royalties from the pipeline, distributing a percentage of their royalties to the Community Council for broader community benefit. When asked how such an arrangement could be achieved individuals responded that they would work that out internally.

Informants also reported, however, that cash distributions caused confusion and resentment towards the NLC (particularly where it was felt that the NLC had not distributed the royalties in the right amounts to the right people and/or where the right people missed out altogether).

In a number of these communities, there was considerable discussion, particularly by those who are not Traditional Owners but regard themselves as ‘affected people’, about the need for everyone to talk together during the consultations about the Draft Agreement. Senior community members in one community asserted that they, as ‘affected people’, should also be consulted as they are the ones staying at the community and looking after ceremony for that Country. In another community, one person complained about royalties going to “the lucky few” and that this created social instability and tension in recipient communities which affected everyone.

In the West and in Katherine, Traditional Owners and community organisations were generally united in their view that benefits from the TTP Project should be delivered in such a way as to “build the community up”. People did not want to see cash distributions which they said lead to fighting, drinking, domestic violence, child neglect and “a big birthday party” with nothing to show afterwards, and which left nothing for future generations. It may be relevant that those to the West of Katherine have never received royalties from a development project.

In Katherine and Darwin, where Groups initiated discussion of royalties, in one instance this was to say that they would like to see royalties paid “up front” and every six months. Others said that the benefits of any compensation project should promote “sustainability” (cultural, social, environmental and inter-generational), rather than undermine the sustainability of communities and people, and that sustainability should be used as the measure of appropriate compensation.

Some of those consulted in these areas did say, however, that they would like to see vehicles for Traditional Owners as part of any compensation package. Others saw money spent on vehicles as wasteful, in particular if that was all that was achieved.

One Council told us that they thought that royalty monies needed to be spent more strategically and thought that there should be a business planning process associated with royalty/compensation expenditure. The SIA Team has collected community development plans and business plans from community organisations where these are available.

Local Police expressed concerns that compensation payments are likely to contribute to increased alcohol-related accidents, crimes and violence including domestic violence.

According to the local Officer in Charge, every available car at Wadeye is currently used to transport people to Peppimenarti on Thursdays and Fridays so they can access alcohol from the Club. He expressed concern that compensation in the form of royalties is likely to increase the number of vehicles purchased by community members, and subsequently increase people's access to and consumption of alcohol and other drugs as well as increase the number of car accidents and injuries. His concerns were widely echoed along the full length of the pipeline by community members, representatives of community organisations and, occasionally, by some Traditional Owners.

Other concerns were expressed by healthcare professionals that additional cash circulating in the community may lead to greater consumption of alcohol, with the attendant increases in community violence and injury as a result.

7.5.1 Compensation non-Indigenous landowners

The proposed TTP passes through approximately 70% Aboriginal Land Trust Land and 30% privately owned land. It is expected to cross thirteen parcels of privately owned land, whose tenure comprises either freehold, crown perpetual or pastoral leases. The activities undertaken on these parcels of land are generally of an agricultural nature and include:

- Pastoral activities; e.g. breeding cattle for meat, stud cattle, horses.
- Horticulture; e.g. mango farming, vegetables

The sponsors of the TTP intend to negotiate agreement with private landowners for long term leases of their land. This will be done through the establishment of Option Agreements. That is, options for a period of time in which the TTP can exercise a right to take a long term lease. Consideration for the Option Agreement and the Long Term Leases will be negotiated directly with the land owners involved. In addition, on some land parcels, short term leases will be sought for construction purposes, e.g. construction camps, lay down areas. If agreement is unlikely to be reached directly between the Project and the landowner, consideration will be given to requesting the Northern Territory Government to commence compulsory acquisition in accordance with the NT Land Acquisition Act.

Consultation with private landowners commenced in July 2003 (in some cases 2001 and 2002) in relation to gaining access to their land to undertake surveys of the pipeline route. Formal access agreements were reached with landowners for this work to commence. In May 2004, formal discussions regarding the Option Agreement and Leasing Agreements commenced.

7.6 Domestic and local commercial gas supplies

There are high expectations in the East Arnhem Region and in the Thamarrurr Region that the Project will result in an upgrading of electricity generation equipment and the provision of free gas. The possibility of cheap gas supply, including to operate generators for homelands development was consistently identified as a sought after expectation.

In the communities East of Katherine there appears also to be a high expectation of free or cheap domestic gas. At Bulman, there was an expectation that the Proponents would provide the community and outstations with free gas for their power supply and some even thought that vehicles would be able to run on the free gas. Informants here understood that the provision of free gas would be part of a compensation/community benefit package.

Our interviews with the Northern Territory Power and Water Corporation (PAWC) indicate to us that these expectations are misinformed.

In those communities and amongst those Traditional Owners consulted to date around Katherine and to the West, there does not appear to be such a high expectation.

The Mayor of Katherine saw the TTP as possibly providing cheap gas that would make viable processing and manufacturing operations in Katherine that are currently not viable.

The SIA Team discussed people's expectations in relation to this issue and explained that at the present time the Proponents' supply was fully committed to Alcan and that it was unlikely that gas for domestic purposes would be one outcome of this particular phase of the Project.

Currently 97% of the electricity generated by PAWC is sourced from natural gas. Since 1986 PAWC has purchased gas from the Amadeus Basin, via the Alice Springs to Darwin pipeline, south west of Alice Springs, to supply gas-fired power to the major Northern Territory centres, including Alice Springs, Tennant Creek, Katherine, Pine Creek (because of the mine) and Darwin. The current contract will cease in 2009 and PAWC expect that the Amadeus gas fields will be unable to deliver the gas requirements of the Northern Territory after 2009.

It is understood that PAWC is currently negotiating with the Proponent, and other gas suppliers, to purchase a supply of gas so the Corporation can continue to generate power by natural gas to the major centres, including Alice Springs, Tennant Creek, Katherine, Pine Creek and Darwin, over the next 15-20 years.

PAWC advised that it is not considering supplying gas-fired generators to communities, including those Aboriginal communities located in the vicinity of the TTP Project for the following reasons:

- The supply of gas-fired generators to smaller communities is not economically viable as their power needs fall "a long way short of the threshold load to justify such gas plants". At this point in time there are no communities, outside of the major centres, that have a sufficient power load to achieve the economy of scale required. This situation is likely to remain into the foreseeable future.
- Diesel generators are a currently an appropriate and flexible source of power for communities. Diesel generators are available in a wide range of sizes to meet the varying power needs of different sized communities. In addition, the purchase of backup diesel generators is considerably cheaper than that of backup gas fired technology.

- Local Indigenous employees of PAWC who live on remote communities are familiar with the operation and maintenance of diesel generators and would have to make a “quantum leap” to operate and maintain gas technology.

PAWC currently provides electricity to all of the major centres and 78 major communities in the Northern Territory. The Corporation does not supply power to homelands and outstations that are serviced by community organisations. A Community Standard Tariff Equalisation Policy requires the NT Government to ensure, through a Community Service Obligation arrangement, that every resident in the Northern Territory, who is supplied electricity by the PAWC, pays a standard electricity tariff irrespective of where they reside. Thus, irrespective of the cost of the generation of electricity, all consumers pay the same rates. What this means is that, even if cheaper energy were procured, this would not result in any change to the cost of electricity in communities.

Organisations servicing outstations and homelands do pay the real costs of diesel-generated power to remote locations but they would certainly not provide the economy of scale to justify the infrastructure investment to provide them with cheaper gas or electricity supplies.

Clearly there is a need to provide better information to those affected about the current situation in relation to free gas. Given how high people’s expectations are, and what a valuable benefit this would have been had it been forthcoming, the Proponent can likely expect a backlash in some areas.

7.7 The TTP route clearance

Generally, the major concern of the Project for Informants is its potential to disturb or affect sacred and other significant sites, ceremony grounds and dreaming tracks. At the same time, informants generally expressed confidence in the clearance process and in the NLC’s overseeing of measurements to protect sites of significance. The NLC is particularly sensitive to the need to protect sacred and other significant sites located on Aboriginal land and sea country and have consulted, and continue to consult extensively, with affected Traditional Owners to identify land and marine-based sites to ensure their protection.

Traditional Owners of country affected by the TTP route who were consulted were mostly of the view that the right people had been spoken to and involved in the survey work, or where they had not been to date, that this had been worked through satisfactorily with the NLC. However, some people from different groups commented that younger people should be more involved in survey work with older people, so younger people can learn about sites and site clearance. As discussed above, younger people have been employed as field hands throughout all of the surveys so far conducted on the TTP. Their job descriptions included cultural instruction from Senior Traditional Owners as relevant.

In some groups, Traditional Owners who were not involved in survey work expressed an interest in being taken out on Country and being shown where the pipeline route was proposed.

Some Traditional Owners consulted at Bulman and Weemol indicated that they were satisfied with the route that had been agreed and that any further consultation on the route would only cause more confusion and argument. Some of these Traditional Owners had been involved in consultations associated with the TTP when it was proposed to run from Mataranka to Gove. As a result, there appeared to be some confusion between the two designs and the people managing them (the project was previously managed by Epic).

A number of Informants expressed distress with the site clearance process that they had been involved in because of the way that a member of the Proponents' survey team had been driving. Complaints by older Traditional Owners in relation to the driving of Consultants and company representatives repeatedly arise in relation to projects such as these and it is of concern that still this happens. The Proponent currently conducts 4WD driving courses for employees and it would be advisable that these courses include warnings to drivers of the need to be sensitive to older people's concerns. It would be advisable for the NLC to also incorporate guidelines to Consultants instructing them to drive more carefully to ensure the comfort of older Traditional Owners.

7.8 Upgrading of roads and infrastructure

All of the equipment and personnel associated with the construction of the TTP Project will be transported to their destination by road. To support movements of personnel and equipment, works will be required to existing roads including the Daly River – Wadeye Road, the Central Arnhem Road and the roads to Dorisvale and Florina Stations. Work is required on sections of the road such as those between Beswick and Gove (Galupa), Durabudboi Creek, Tom Turners Crossing, and others. It is proposed to use existing airstrips to carry out necessary upgrading work to enable strips to service the development. At this stage, it is not envisaged that new airstrips will be required where no existing strips are available.

A rail siding and laydown/marshalling area may be constructed adjacent to where the TTP crosses the Victoria Highway, south of Katherine. Construction and logistic plans for the TTP are currently being progressed. However, it is anticipated that infrastructure works and development, apart from access tracks, will be completed by the end of the dry season in 2005. Access tracks will be upgraded and developed as and when needed (ACIL 2004).

Some community organisations and some Traditional Owners expressed concern that roads would be further damaged by trucks. Some expressed the view that they would like to see roads and creek crossings being upgraded as a result of the Project. The exception to this was a number of people at Palumpa who wish to see the road to Wadeye upgraded (since supplies come in via Wadeye during the wet), but do not want to see the road to Peppimenarti upgraded as this increases access to alcohol for community members.

To the East of Katherine, Informants indicated that they were desperate for road upgrades and had considerable hope that this Project would result in upgrades of roads so that they can get food and services into the communities during the wet. The Gulin Gulin Council (Bulman) also indicated that they saw road upgrades as an opportunity to

provide tourism services and so form an economic base. Here there is considerable hope that the pipeline construction will result in upgrade of the Central Arnhem Highway to an all-weather road, including bridges over the Mainoru, Wilton and Goyder Rivers.

While generally people wanted to see road upgrades because this increased their access to larger communities, enabled supplies of food and other essentials to reach the communities during the wet, and facilitated the delivery of health services; some expressed concern that they did not want to see increased numbers of tourists using the roads to access their own communities.

Some communities said that if it were possible, the large plant and equipment that would be used on the Project could be helpful to undertake outstanding large earthworks projects in their communities. For example, it was suggested by the Health Clinic at Beswick that assistance with digging a new rubbish dump would be helpful, as the existing rubbish dump is lower than the water table and poses a serious health threat. Similarly, Peppimenarti identified the need for a new rubbish dump.

A key point from consultations held was that informants expressed a view that the TTP Project presented an opportunity for roads upgrades located near the pipeline route to be upgraded, including those that may not necessarily be used by the Proponent for construction purposes. The informant from Department of Business, Industry and Resource Development suggested that this Project has the potential to “open up the Arnhem Land roads” which was viewed by this informant as a positive impact.

The construction of new roads, and possible rehabilitation of existing tracks and roads, should always be undertaken in consultation with Traditional Owners to ensure that construction and upgrading are consistent with people's own use patterns of the Country.

There was divided opinion among informants on the benefits of upgrading the road to Daly River. Some people were “worried” that an improved road would increase access to Peppimenarti and result in an increase in alcohol consumption and associated social problems. A small number of community members interviewed stated they did not want a bridge built over the Daly River as “it will bring problems”. Others saw benefits in an upgraded road in terms of improved transport and infrastructure that would enable safer and faster movement of local traffic as well as supporting the development of an economic base in the region.

There was also widespread concern from people in the East Arnhem region who do not wish to see additional tourists and other users of the Central Arnhem Highway. Their concerns related principally to increase in accessibility of the area and loss of privacy. However, a number of health professionals also discussed their alarm at the possibility of the upgrading the Central Arnhem Highway increasing the movement of traffic to and from the communities and the increased trafficking of alcohol, drugs and petrol that this would be likely to bring.

7.9 Increased traffic

Informants anticipate that there will be some impact on roads through increased traffic during the construction period of the TTP. Degradation of roads by heavy vehicles

transporting equipment was also of concern as “roads are a main issue in the Northern Territory” (NT Department Community Development, Sport and Cultural Affairs/ Katherine Regional Economic Development Organisation), as well as increased dust.

Community organisations and some Traditional Owners expressed strong concerns about increased traffic on the roads, particularly in relation to:

- People hunting at night and using the roads at night not being seen and being run over by trucks,
- Children playing on the roads,
- People who had been drinking at Peppimenarti Club using the road to return to Palumpa, Port Keats or Daly River and so being on the roads when trucks are also using them,
- People who are gathering outside dry community access roads to drink off limits being close to the roads that trucks would be using,
- People around Katherine who were out at night not being seen because of poor street lighting,
- People not being accustomed to sharing the road with large trucks, and large trucks not being accustomed to sharing the road with Aboriginal drivers,
- Damage to roads by large trucks,
- Trucks not seeing Aboriginal people camped by the side of the road if their car breaks down or they are taking a rest from driving,
- Trucks not seeing local Aboriginal people, including those affected by alcohol, commonly sleeping and walking on the road at night time after becoming tired or their cars breaking down.

A number of Traditional Owners and Aboriginal community members expressed concerns about the increased risk of road accidents involving local people travelling to and from Wadeye, Palumpa and Peppimenarti during the TTP (and Blacktip) construction periods and consider it “to be a very serious matter”.

A number of informants suggested the following ways to reduce the risk of road accidents.

- Address sharp bends and improve sight lines during an upgrade of roads,
- Ensure that all TTP staff and contractors, drivers and workers, complete orientation courses so they understand Aboriginal road use, which can differ from road use in the broader Australian society,
- The NT Road Traffic Safety Council, in conjunction with the NLC, could develop and implement a bilingual road safety awareness campaign targeting local Aboriginal road users to warn them about the increased risks during the construction phase of the TTP and Blacktip projects. It was suggested the campaign could include a road safety video in appropriate Aboriginal languages shown through BRACS to raise awareness among local people,
- Provide funding to Aboriginal organisations to patrol areas of road where vulnerable Aboriginal people (drunks, children, tired travelers), might be at risk, to assist them to move away from the road,
- Provide funding to Police to undertake additional patrols, including enforcing a seat belt campaign of road users,

- Erect fencing at high risk areas, for example around areas where people are known to drink at the edge of dry communities,
- Education programs be conducted in communities to increase awareness of road traffic during construction,
- Improved lighting in high risk areas, in particular in Katherine,
- Speed limits for truck drivers, particularly near high risk areas,
- Transporting equipment only at certain times of the day (e.g. only in daylight hours) and not on Fridays when there is likely to be a greater number of drink drivers.

Police suggested that a Traffic Management Plan would need to be developed and it is understood that the Proponent will be preparing one. The Traffic Management Plan should address harm avoidance strategies, including those listed above, and should address the issue of funding as part of its planning activities.

7.10 Use of infrastructure (barge & airstrip) at Gapuwiyak

Health staff at Gapuwiyak advised that if the TTP intended to use the recently upgraded bitumen airstrip at Gapuwiyak to transport workers in and out of the region (rather than going back to Nhulunbuy), a number of issues of concern would need to be addressed.

Access to both the airstrip and barge landing would require traffic to use the main unsealed community access road. This would create substantial dust and environmental problems. Health staff stated that there are already a large number of community members who suffer from chronic chest conditions. They also expressed concern about the increases the risk of accidents involving children, local cars and dogs.

Health staff also expressed concern that the Regular Transport Services out of Gapuwiyak per week are limited to three flights. Given the remote and often inaccessible location of the community, staff do not want to compete with construction workers for limited seats.

The health staff stated that the Company should seal the main access road into the community from the edge of the airstrip to the town perimeter to reduce dust as well as develop a traffic management plan to improve the safety of community residents.

7.11 Fibre-optic cable

According to the ACIL report, the construction of the TTP will provide an opportunity to co-locate an optic fibre cable within the same corridor, which could dramatically enhance communications for local communities. Flow-on effects could include improved access to education and training, and to health care (2004). Consistently throughout our consultations there was a keen interest in the possibility of a fibre-optic cable being laid in association with the construction of the TTP. This is clearly something that would be highly valued by community leaders and community members.

7.12 Unauthorised access

It is expected that the pipeline corridor will be 100 metres wide. The final 30 metre construction and operations corridor will be identified within the 100 metres while construction is taking place. Post-construction the cleared corridor will be rehabilitated but there will remain a cleared but vegetated area approximately ten metres in width. This corridor needs to be wide enough to allow an inspection vehicle to traverse the length of the pipeline to undertake routine maintenance and safety checks.

Many Traditional Owners from all TTP regions consistently raised their concerns about unauthorised access by tourists, weekenders and hunters, to the Aboriginal lands and homelands, via the proposed cleared corridor/maintenance track. The issue of increased access to their land is a significant concern for many Traditional Owners. Their concerns relate principally to:

- Damage to significant sites and areas,
- Environmental damage through the spread of weeds, uncontrolled fire,
- Safety as it is believed that many illegal trespassers will also be shooters and carry guns,
- Invasion of privacy for residents on homelands and thefts from homeland outstations if these are vacant when unauthorised travelers are passing through.

A number of suggestions were made by Traditional Owners for how unauthorised use of the corridor might be prevented. Some people suggested that locked gates and signage could prevent unauthorised use; however, others felt that adventurers would not be deterred and would drive around gates or break locks. The difficulty with locked gates is also that any benefits to possible Aboriginal users of the TTP access corridor would not be possible. The use of barriers rather than locked gates was also proposed; although it is not clear how barriers could be erected that would prevent unauthorised users, yet still allow authorised users to traverse.

Rather it seems that the solution may be signage and policing of the track by Traditional Owner groups and their Rangers. Management of illegal use of the pipeline track could possibly be combined with the contracting of Aboriginal organisations to assist in the monitoring and surveillance activities associated with ensuring that the TTP installations are not vandalised and the corridor well maintained.

8 Environmental protection and management

8.1 Description of the environment

The following description of the environment of the affected area is provided by the TTP Referral Notice 2003:

The proposed pipeline alignment lies within the Northern Savanna and Wet Tropical Zones of the Northern Territory and traverses country dominated by woodlands of Eucalyptus\Corymbia, with large areas of seasonally inundated woodlands dominated by Melaleuca viridiflora in areas of poorly drained soil. Rainforest patches occur close to the pipeline corridor and these will not be directly impacted by the pipeline. Numerous riparian rainforests are traversed by the pipeline alignment and may provide suitable habitat for flora species of conservation significance.

The major topographical features intersected by the proposed pipeline are the Sturt Plateau, The Gulf Fall Uplands, Central Arnhem (including the Mitchell Ranges) and Arnhem coast and Macadam Ranges.

The key bioregions associated with the proposed project area are the Daly Basin, Sturt Plateau, Gulf Fall and Uplands, Central Arnhem and Arnhem Coast.

The Daly Basin bioregion has areas of permanent freshwater, which provide a major breeding and dry season habitat for freshwater turtles, fishes and freshwater crocodile. The main vegetation is woodland in (narrow) periform arrangements, with the surrounding areas supporting low open-woodland, low woodland, woodland and open-forest over grassland.

The Sturt Plateau is dominated by pastoralism, with a low percentage of the area reserved for conservation, It has been identified that the bioregion does provide a refuge for some mammal species, which have been in decline in their habitats in Central Australia e.g. Bilby.

The Gulf Falls and Upland bioregion is dominated by pastoralism, with substantial areas of Aboriginal freehold. The area also includes areas of mining and mining potential and the Limmen Gate Park.

The Arnhem bioregion contains a number of areas of high conservation value that have been avoided by the proposed pipeline. Water flows into the area from the Katherine River, which results in some areas of permanent inundation that provide a major dry season refuge for aquatic fauna including fish, freshwater crocodiles and turtles. The key vegetation consists of open forest over tall shrubland (pandanus) in narrow, discontinuous arrangements. The surrounding areas support low open woodland over open-hummock grassland and woodland over grassland.

Numerous rivers and creeks, most of which were flowing during the late dry season when a field survey was conducted, are intersected by the proposed pipeline alignment. Some of the crossings are characterised by a single, well defined channel with a narrow

fringe of riparian vegetation. Others consist of numerous braided channels with dense riparian vegetation.

Isolated swamp pockets, characterised by areas of open water and sedges fringed by Melaleuca trees, occur along a 60km stretch of the proposed pipeline alignment. The area in which these swamps occur is part of the Goyder River catchment that is listed on the Register of the National Estate for its Aboriginal values. The pipeline route passes 30km south of the Arafura Swamp, a site listed in the Register of the National Estate for its natural values. The Arafura Swamp is a broad area of seasonally inundated grassland and paperbark forest and is an important waterbird habitat.

The majority of the areas traversed by the pipeline alignment are relatively weed free, however weed infestations do occur and are concentrated through cattle stations, and at river and creek crossings. A number of weed species have been identified, many of which are declared weeds under the NT Weed Management Act (2001). A detailed Weed Management Plan will be prepared and will be implemented as part of the Construction Management Plan for the project

Feral animals recorded within the proposed alignment include the house mouse, black rat and water buffalo. Donkeys, cane toads, horses, cattle and water buffalo were reported along the proposed alignment during October 2001 field surveys.

The pipeline corridor runs to the north of the Flora River Nature Park, to the south of the Daly River Conservation Area, Douglas/Daly Esplanade Area, Douglas Hot Springs Nature Park, Kakadu National Park, and Nitmiluk (Katherine George) National Park.

The small area of land that the Project will occupy, and the ability to continue to use this area once construction is complete, means that it is not expected that traditional hunting, gathering and fishing activities will be significantly curtailed. In deed, it is possible that hunting and fishing will be facilitated if Traditional Owners are able to use the access track over the TTP corridor for such activities

8.2 Concerns

Protection of natural and cultural resources is paramount to Aboriginal people and a number of concerns were raised during the SIA consultations in relation to potential negative impacts on the environment resulting from the TTP. These concerns related to:

- The need to protect waterfalls, springs, billabongs and river crossings and their catchment areas, (which people specifically said should be avoided by the Project at all costs),
- Soil and wind erosion,
- Introduction and spread of weeds,
- Spread of feral animals via the four wheel drive access track,
- The introduction of uncontrolled fire into environmentally sensitive areas,
- Leaching of chemicals or corrosive-proof paint from the pipe into the soil and water bodies and waterways and possible effects of same on fish ,
- Fuel spillages,
- That the course of rivers would be altered by the pipeline,

- Silting of rivers,
- That the ground would sink where the pipe was buried,
- The use of dynamite in rocky country.

Environmental concerns were not raised around the Bullman/Weemol area. Specific environmental concerns were raised in the West region, particularly in the vicinity of the Windgate Mountains and the escarpment country in relation to waterfalls and their catchment areas.

8.2.1 Aboriginal participation in monitoring and protection of the environment

The NLC's Caring for Country Unit (CFCU) was established in 1996. Since that time the CFCU has assisted community-based organisations to form ranger/or similar groups to deal with major issues such as weeds, fire, feral animals, marine debris, wildlife monitoring (e.g. marine turtles) and marine surveillance. The approach of the CFCU is to work collaboratively with a range of Aboriginal and non-Aboriginal agencies to build local Indigenous capacity to institute effective management of land and sea resources. The CFCU brokers the delivery of appropriate advice, education and training, and resources for Aboriginal land and sea managers.

The overall vision and purpose of the CFCU is to assist Aboriginal families to effectively manage their country, and to contribute to sustaining healthy people and healthy country by increasing their participation in land and sea management programs. There are five guiding principles that underpin the Caring for Country Unit's strategic approach to land and sea management in the NLC Region. They are:

- Be proactive and responsive to the expressed land and sea management needs and aspirations of Aboriginal people, as required by the Aboriginal Lands Right (Northern Territory) Act 1976 and the Native Title Act (Cth), 1993,
- The land needs its people. Pursue the philosophy of extending Aboriginal people's capacity to look after their land and sea country (which is empowering) versus the philosophy of setting up an agency to look after the land and sea on behalf of the people (which is disempowering),
- Respect and apply both traditional Aboriginal knowledge and contemporary science-based knowledge to promote and ensure best practice land and sea management practice,
- Promote the intrinsic and economic value of ecologically and culturally intact landscapes for Aboriginal peoples customary and commercial uses of their country,
- Promote and facilitate partnerships and collaborations to achieve positive land and sea management outcomes (Northern Land Council 2003:4-5).

While the Caring for Country Program has demonstrated significant environmental benefits, it has also contributed to positive social and economic outcomes for Aboriginal people by supporting Aboriginal people to build their capacity so they can also engage in enterprise development on their country (Northern Land Council 2004:2,4-5).

A number of Traditional Owner groups, particularly in the East Arnhem region between the Mitchell Ranges and the Gurrumuru Outstation and escarpment areas in the West TTP region, expressed interest in establishing clan-based Land Management/Ranger Programs to develop their capacity to:

- manage ongoing environmental impacts (e.g. Weeds, feral animals, erosion) of the TTP track over the next 25 years,
- specifically manage issues associated with unauthorised access and use of the TTP track over the next 25 years, and
- carry out contract maintenance work associated with the TTP track over the next 25 years.

The NLC stated that the CFC Program, with relatively minimal additional resources, could facilitate, coordinate and support the establishment of new land management programs in East Arnhem Land and the West region, and other relevant areas, so as to meet the expressed needs and aspirations of Traditional Owners.

Currently the NLC has resources to service in a basic way the land and sea management needs of about fifty percent of Aboriginal Land Trust Lands in its Top End region. Currently, the NLC's CFU provides services to Traditional Owners and their 32 Land and Sea Management/Ranger Groups. While the Unit has some resources to provide services in Central Arnhem Land (i.e. around Bulman), South-East Arnhem Land (Ngukurr) and in the region west of Daly River, it has no resources to facilitate the establishment of, and provide ongoing to, new Aboriginal land management groups in the East Arnhem region.

The NLC suggested that the Proponents could provide seed funding of \$250,000 and ongoing annual funding of \$150,000, to the NLC's CFCU for salary, vehicle, and operational costs to establish a Land and Sea Management Facilitator position in the East Arnhem region. The position would be based at the NLC's Nhulunbuy Office. The NLC Land and Sea Management Facilitator would undertake extension work with those Traditional Owners affected by the TTP project and importantly link all the new groups into established indigenous land and sea management networks that exist regionally and across North Australia.

The NLC has the capacity to lever additional funds from National Heritage Trust and the Indigenous Land Corporation to support such land management groups, build their capacity to engage in enterprise development and contract work, hence further mitigating social and environmental impacts of the TTP project.

(It should be noted that rangers can conduct surveillance of unauthorized access but they do not have enforcement powers.)

In the West TTP region, the Thamarrurr Rangers have particular interest in gaining economic and employment benefits through contract work associated with the preconstruction, construction and operational phases of the TTP (and Blacktip) Projects. They are able to carry out weed control contracts, participate in fauna and marine survey work, manage and monitor fauna during periods when the TTP trench is open, as well as monitor illegal use of the TTP corridor.

The Land and Sea Management/Ranger Groups located in each of the TTP regions (Thamarrurr Rangers, Dhimurru and Yirkala Dhanbul Landcare), the principle agency to assist Aboriginal land owners to understand any minor or major projects affecting land and sea country. Such Groups have the network and capacity to disseminate information about the TTP Project to Aboriginal land owners and their families and other interested community members, as well as provide feedback to the NLC and the TTP.

Some Ranger Groups stated, however, that they need timely and specific information about the training & employment and contract opportunities associated with all phases of the TTP (and Blacktip) Projects as soon as possible so they can increase their organisational and human resource capacity. The Rangers were particularly keen to understand the Project timeline as they are conscious of the long lead times needed, for organisations such as theirs, to gear themselves up to fully take advantage of any employment and contract opportunities associated with all phases of the Project. They stated that a lot of time is needed to facilitate an understanding by local people of the Project training, employment and contract opportunities.

The needs of the Thamarrurr Rangers have been discussed in detail in our Report of the Blacktip SIA.

9 Communication with the Proponents

Some Traditional Owners and community organisations indicated that it was important to them that the Proponents keep them informed on a regular basis about the progress of the planning for the Project and about progress of the Project if it goes ahead. While the NLC has some responsibilities in relation to community education, there was some confusion amongst Informants about whether they had been spoken to by the Proponents' spokespersons or by the NLC.

Traditional Owners indicated that they wish to be advised directly by the Proponents on a group by group basis before it commences work on any individual groups' Country.

Local organisations are well positioned to assist the Proponent to achieve its project aims and to manage impacts. Language barriers are highly likely to create misunderstandings, on both sides. Dealing through existing community organisations will reduce the possibility of the Proponent engaging with the community ineffectively, and/or its workers being accused of unfair dealings.

It is understood that the Proponent is currently preparing a Communication Strategy. Such a strategy could make use of local organisations in the dissemination of materials, needs to be bilingual and should allow for two way communication. It should be piloted before widely delivered and monitored for effectiveness.

A bi-lingual summary of findings of the SIA should be distributed to all those organisations and Traditional Owners groups interviewed.

10 Capacity to respond to change

Managing the impacts of a linear project can be difficult. Communication channels need to be clearly defined and networks for the dissemination and collection of information need to be well established.

To date the Proponent has been required to rely on the NLC to engage with affected Aboriginal communities and, in addition, has undertaken some of its own targeted information/education activities.

However, it seems that there is a lot that is currently “falling between the gaps”, as evidenced by the almost universal complaints that we received that organisations and community members did not feel that they had enough information about the proposed Project.

There are major concerns about the compressed time frames being proposed and distress in some quarters as to whether training agencies, in particular, are being provided with enough advance information and detail in order to ensure that training takes place and employment opportunities will be able to be taken up. As discussed above, the NLC Training and Employment Unit considers itself to be presently under-resourced, as does the NLC Caring for Country Unit, to meet the challenge that this Project represents.

Given that there is now less than one year until the scheduled commencement of construction, unless there is a major and immediate injection of information and funds to facilitating organisations, such as the NLC, it is difficult to see how the Project’s opportunities will be able to be realised.

In relation to the use of compensation monies, if they are forthcoming, those with experience of royalty income told us that they want things to be done differently in future so that benefits are used in such a way as to create lasting benefits. Those to the west, where they have no previous experience of such income, told us that they want assistance to help plan how such monies might best be used to support group aims. The provision of support to groups to use money for their stated aims will be critical to their capacity to use monies to that effect.

In sum, the capacity of affected Indigenous people to respond positively to the potential impacts of the proposed TTP Project would be enhanced if the following were implemented:

- More resources invested in the provision of training and employment planning and support.
- More resources invested in supporting local Traditional Owners to respond adequately to new land management demands arising from the Project.
- Timely provision of information about possible business opportunities associated with the proposed Project provided to local Indigenous organisations.
- A sound communication strategy for the dissemination of information about the Project.
- Assistance and advice in managing and investing compensation monies.

11 Government assistance

A number of Informants pointed out projects which they thought that as part of any community benefits package, the Northern Territory and/or Federal Governments could collaborate with the Proponents to fund. This included road, airstrip and infrastructure upgrades and delivery of various programs and services.

The Acting Regional Manager of AT SIS in Katherine indicated that funds were currently available under its Community Participation Program, which is targeted at communities in crisis. This program makes funds available for any project which aims to help communities to improve the quality of life for community members who are Centrelink beneficiaries. The A/Regional Manager indicated that AT SIS would be likely to be willing to consider any project which the company might propose as a jointly funded exercise as part of any compensation/community benefits package it might propose in relation to the TTP.

To take advantage of the opportunities that government support might provide in leveraging initiatives of the TTP, it is essential that discussions and negotiations commence immediately, since the funding cycles are such that applications for grants and other funding arrangements need to be submitted promptly.

12 Impacts of the SIA process itself

The methodology used by the SIA Program focused on consulting with Traditional Owners and Aboriginal community members in small clan and family based settings, either at their homes or at a preferred place. This process allowed the SIA consultants to spend considerable time providing information, where possible with the assistance of local interpreters, about the Project at an appropriate level and pace. The process allowed Aboriginal informants to ask a range of questions, particularly in relation to safety and environmental aspects (e.g. gas leaks) and for the Consultants to provide information and reassurance.

The SIA process also focused on consulting with Aboriginal and non-Aboriginal representatives of local and regional enterprises and service organizations. There was consistent feedback from these informants that the SIA team was the first group to provide information to their organisations

In our view the SIA consultations generally provided Aboriginal and organisational respondents with an opportunity to state a position about the Project and express concerns and aspirations without the pressure of being asked whether or not they agree with the Project. Overall the response to our presence was positive, although our consultations were limited by the factors cited in our discussion of methodology.

The SIA process could have been improved if the field work period had been longer and the budget greater so that second visits to all those places visited, where these might have been requested, had been able to take place. In the absence of being able to personally provide follow up we are unable to assess what the impact of our process had been in the weeks following our departure. It will be important that feedback be provided to all those visited through widespread dissemination of our report findings to those interviewed, together with the provision of an opportunity for those interviewed to add to or qualify our findings.

13 Cumulative impacts

The construction of the Blacktip Gas Processing Plant and the expansion of the Alcan Gas Refinery are intrinsically linked to the TTP Project and are both subject to separate SIA processes. (See our comments above on the Alcan gas refinery expansion Draft SIA). Other than these two major developments, the proposed TTP Project is not expected to trigger additional projects or developments in the immediate region beyond the TTP.

Although it has been speculated that the construction of the plant and attendant pipeline might make viable otherwise marginal mining or processing projects, the authors are not aware of any such proposals seriously being proposed. The position of the Proponent at the present time is that all gas is currently committed to Alcan. The SIA Consultants are not aware of any other projects or events likely to occur in the near future which would combine with the impacts of the TTP Project to aggravate impacts.

The major source of cumulative impacts will be the upgrading of roads and access routes. These are potentially significant features of the Project and it has been suggested by a number of those interviewed that the likely impacts of such upgrades warrant an impact assessment in their own right. We would agree with this view.

14 Monitoring

In relation to the oversight of implementation of any Agreement which might be forthcoming if the Project goes ahead, it was felt that people affected by the Project and the supposed beneficiaries of any compensation/community benefits package, should be those directly involved in monitoring and overseeing implementation of the Agreement.

One Informant also said that any Agreement should contain penalties for non-compliance, since “too often companies agree to things and then get their approval and it is all forgotten”. This Informant took the view that this was standard in any other commercial agreement and that with the TTP as a “one-off” project, the incentive for the Proponents to perform would be even less evident. There was a view in some quarters that the railway had “pretended” to meet its quotas.

While it is usual for a Social Impact Assessment to provide a comprehensive set of social indicators by which to monitor progressive changes resulting from a Project, it is not recommended that such an approach would be useful in the case of the TTP for the following reasons:

Indices are not sensitive enough to reflect changes arising exclusively from the Project. Therefore, the project is not expected to make an appreciable impact on any of the indices since in the overall context of events and changes occurring in these communities, the impacts on indices are expected to be negligible,

Realistically, it is not anticipated that any monitoring and evaluation of the impacts of the Project will be undertaken through an analysis of these data sets.

The exceptions to this are the following which might be usefully collected in order to evaluate the impacts of the Project:

- traffic accident data,
- anecdotal reporting on community disturbances relating to sexual jealousies,
- anecdotal reporting on drug and alcohol trafficking,
- expenditure at the local stores by the company and construction workers, and
- the value of contracts let to Council and other local organisations.

In our view, monitoring of employment and training outcomes is best undertaken by the NLCETU.

A number of those interviewed took the view that the most appropriate group to undertake monitoring of the impacts of the TTP are the various Harmony Groups which have been established in different regions and consist of representatives of key organisations in those regions. Our view, however, is that these groups are too large and that sensitive and responsive monitoring is unlikely to occur if it is organised through these groups. Rather, monitoring and evaluation of the Project is best undertaken as a consultative, qualitative exercise and is best undertaken through three locally-based groups, reflecting the fact that the impacts will be experienced locally, and may change from region to region. Thus three regional groups – central, east and west – comprised of representatives from organisations such as local Councils, women’s groups, police,

Traditional Owners and business organisations, should be formed to oversee planning and monitoring of impacts and impact management.

15 Conclusion

The TTP is a linear project. As such it is a major exercise to consult a diverse range of communities, organisations and Traditional Owner Groups and to synthesize from these consultations a series of findings which summarise diverse positions yet remain true to that diversity in opinion and concern.

Nevertheless there are some consistent themes which run the length of the TTP. These relate to safety, employment, business opportunities and compensation, environmental protection and protection of sacred and significant sites, unauthorised access along the TTP maintenance route, and management of the potential impacts of the presence of a large, itinerant construction workforce.

The nature of the Project (involving a large, itinerant construction workforce and substantial traffic movements) and the vulnerability of the potentially affected communities are such that the adoption of a Precautionary Principle is required in relation to all activities of the Proponent and its agents. By this we mean that the Proponent needs to exercise caution in relation to all its activities, rather than assume that any impacts can be “fixed” or ameliorated after the fact.

Genuine engagement of the Proponent with affected communities, and support for capacity building will greatly enhance the maximisation of opportunities which the Project could create and will be necessary to minimise the potential negative impacts identified.

Good planning and communication undertaken well in advance of construction will facilitate the prevention and management of impacts, as well as ensure that opportunities are fully realised.

We would expect that considerable resources will need to be allocated to the planning and implementation of adequate communication and consultative activities associated with the TTP Project. In view of the fact that the Proponent will presumably be seeking a renewal of the TTP route in years to come, it may be important that any benefits that the Project achieves are long-term and still evident to the next generation.

Appendices

16 Terms of reference

Trans Territory Pipeline Project
Social Impact Assessment
Terms of Reference
28 January 2004

Objectives

The purpose of the proposed Social Impact Assessment (SIA) is to:

- Identify the nature and magnitude of any potential social impacts, both positive and negative,
- Contribute to a better understanding of the Projects by those potentially affected and those with responsibilities towards potentially affected groups and individuals,
- Facilitate the expression of views, concerns and aspirations about the Projects by those potentially affected,
- Assist the Proponent and potentially affected people, communities and organisations, to plan activities associated with the Projects in such a way as to optimise the potential positive impacts and mitigate any potential adverse impacts on affected communities, and
- Provide the basis for compiling a Social Impact Management Plan for the Projects.

The preparation of the SIA will meet the requirements of the proponent in managing social impacts and in addition, will provide valuable information to the statutory regulators responsible for undertaking the Projects' approvals processes.

Tasks associated with the Impact Assessment

- Profile the affected communities
- Undertake a stakeholder analysis, identifying all relevant organisational stakeholders in the affected areas.
- Describe affected communities in terms of:
 - Governance arrangements
 - Land tenure
 - Community and social relations overview
 - Economic base
 - Enterprises
 - Infrastructure, services and facilities
 - Law and order
 - Social and health services
 - Outstation development
- Capacity of existing infrastructure, services and facilities to meet people's current needs and aspirations in relation to the future of their communities.

Prepare a base-line data set for the affected communities, Indigenous and non-Indigenous.

- Demographic profiles including age, gender and language.
- Overview of the residential arrangements, the location and nature of the communities and their socio-economic status.
- Health, education and employment status, access to a motor vehicle, housing density, economic status and traditional hunting and gathering activities. (Data to be drawn from existing studies where available).

Historical and legislative context

- Provide a brief overview of the settlement and development history of the Northern Territory to provide an historical context within which to understand this current Project.
- Document the broad history of the affected Aboriginal communities and Aboriginal associations within the Project region, including past engagement with outside economic and social forces, and in particular experiences with linear projects and onshore gas processing facilities.
- Provide an overview of relevant mining-related income and other benefits received by communities to date from development in the region, and evaluate the social and economic impact of those benefits and the effectiveness of their method of distribution.
- Outline the relevant legislative regimes affecting both Projects.

Attitudes to the Project

Assess the attitudes of affected people to the Projects, including whether they approve/disapprove or are neutral to the Projects. This is to be achieved through direct consultations with potentially affected people and communities and key community representatives in the areas associated with the Projects. In addition, a broad telephone survey of residents of Darwin and the Katherine region will be undertaken, as discussed above.

Identify impacts

- Identify potential impacts, if any, in relation to pre-construction, construction, operation and/or maintenance and decommissioning in relation to:
 - The impacts of the potential interaction of the workforces with the existing Indigenous and non-Indigenous communities in the region.
 - Demographic shifts likely to result.
 - Potential impacts on social relations.
 - Community development.
 - Diseconomies.
 - Possible dissipation of benefits through cash distributions.
 - Impacts on the use of, and access to, culturally important sites, landscapes and the traditional economic resources of the Project area.
 - Maintenance of cultural knowledge.
 - Possibilities of increased availability and consumption of alcohol and other substance abuse and means of mitigating existing and potential future substance abuse problems.
 - Potential for infrastructure enhancement (medical facilities, communications, etc).

- Potential for access to enhanced services (including to information and consumer goods) and general economic activity in the region.
- Increased employment and business opportunities.
- Changes to lifestyle.
- Employment, training and recruitment opportunities and capacities.
- Business development opportunities.
- Likely impacts of upgrades to roads and increased traffic.
- Possible health impacts.
- Impacts of compensation benefits that may be negotiated.
- Cumulative impacts.
- Likely impacts in the event of the Project not proceeding.
- Concerns about and impacts arising from emergency events.
- Impacts of the SIA process itself.

Identify any other impacts likely to result from the Projects.

Need for management strategies

After identification of the potential impacts, recommendations regarding which of these should require specific mitigation or optimisation, management strategies. These may include:

- Impacts on the environment;
- Impacts on sacred site and other places of cultural importance;
- Opportunities for training, employment and business development.
- Communication and management structures and policies to maximise information flows to and from the Projects.
- Preferred policies regarding the availability of alcohol.
- Insulation and isolation strategies to manage the presence and potential negative intrusion of large workforces in the vicinity of the Projects;
- The provision of cultural awareness programs and behavioral guidelines for Project employees; and
- The need, or otherwise, for a Social Impact Management Plan.

Capacity to respond

- Assess the capacity of affected people to respond to the impacts of the Projects.
- Recommend where capacity-building interventions are required.
- Evaluate the capacity of contemporary structures of traditional Aboriginal Owners and their communities to make the decisions necessary to manage future impacts and opportunities.
- Summarise the benefits and disadvantages from an Indigenous and non-Indigenous community perspective for proceeding with the Project.

Monitoring and Evaluation

The following should be devised following the identification of any potential social impacts:

- Suggest monitoring and evaluation strategies.
- Identify appropriate indicators for monitoring.
- Advise on issues pertaining to, and possibly suitable models, for governance of monitoring and mitigation management.

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