12.1 Existing Conditions

The Princess Louise and North Point operations are located approximately 170 km southeast of Darwin on the Stuart Highway. The operations are within the unincorporated areas of the NT, i.e. areas that are not covered by the local government system. Currently less than five per cent of the land area of the NT is covered by Local Government; however this is set to change with the announcement of a new framework for Municipal and Shire Councils for the NT. As part of this reform, it is anticipated that the Princess Louise and North Point operations will be located within the expanded Pine Creek Community Government Council (CGC) area.

The underlying tenure of the proposed operations is pastoral lease, and is held by Douglas Station (PL 903). The North Australia Railway easement, Amadeus Gas Pipeline easement and the Darwin to Katherine Transmission Line pass directly to the north of the Princess Louise and North Point area.

The Princess Louise and North Point project area is part of the NT goldfields, a region that has been mined historically since 1870. The leases were worked intermittently from 1872 to 1912 by various mining companies including Yam Creek Gold Mining Company and the Priscilla Reef Gold Mining Company (Begnaze, 2006).

Alluvial (surface) gold was assumed to indicate the presence of gold at depth so many mining operations sunk shafts to pursue underground reefs, with mixed success (Begnaze, 2006). Both Princess Louise and North Point have not been extensively mined since the early 1900’s. Further information on historical activities in the area is contained in Section 10 of this PER.

12.1.1 Data analysis

Where available, data from the towns of Katherine, Pine Creek and Adelaide River was used based on their proximity to the project areas and their relative importance in providing support to the proposed operations. Data for Darwin has been used for comparison purposes where appropriate.

It is noted that obtaining meaningful data for the individual towns (especially Pine Creek and Adelaide River) and region was difficult due to the absence of current rigorous data sets and large scale regional data sets. For example, the most recent comprehensive data sets for these towns were recorded in the 2001 Australian Bureau of Statistics (ABS) Census of Population and Housing. The smallest scale regional data set available is the Department of Business, Economic and Regional Development (DBERD) Darwin Region Balance (hereafter termed ‘the region’) Socio-economic Snapshot (refer to Figure 12.1).

However, by liaising directly with local stakeholders and relevant government departments, the necessary data and information was collected to effectively assess the potential socio-economic impacts of the proposed Princess Louise and North Point operations, and identify the management strategies required to address these impacts.
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[Map of Darwin and surrounding regions, including Jabiru, Katherine, Alice Springs, and other locations.]

Client: Burnside Operations Pty Ltd
Project: PRINCESS LOUISE & NORTH POINT PROJECT AREA
Title: DARWIN REGIONAL BALANCE - SOCIO ECONOMIC SNAPSHOT

This drawing is subject to COPPA/WHOP - It remains the property of URS Australia Pty Ltd.
12.1.2 Populations

Table 12.1 presents the population of towns relevant to the proposed operations, compared with Darwin and the Northern Territory as a whole. The two towns closest to the proposed operations are Adelaide River and Pine Creek, both of which are small towns with populations of 228 and 472 respectively. Katherine is the fourth largest town in the Northern Territory (Katherine Town Council 2006) with a population of 6,719 in 2001. Although Katherine is some distance from the proposed operations (approximately 160 km) it is likely that a number of services may be sourced from this regional centre. Currently a small number of GBS staff live in Katherine and commute to Pine Creek on a daily basis.

According to the 2001 Census of Population and housing, Pine Creek had a substantially lower proportion of Indigenous persons (10%) compared with Adelaide River (26%), Katherine (23%) or the Northern Territory as a whole (24%). However the most recent data obtained from the Pine Creek CGC found the Indigenous population to make up 16% of Pine Creek. Kybrook Farm is included in both the ABS and Pine Creek CGC estimates. Given the transient nature of Indigenous populations, and challenges in collecting statistical data, it is difficult to accurately collect Indigenous statistics.

<table>
<thead>
<tr>
<th>Town or City</th>
<th>Indigenous</th>
<th>Percentage Indigenous</th>
<th>Non-Indigenous</th>
<th>Total</th>
<th>Aged 15 years and over</th>
<th>Aged 75 years and over</th>
<th>NT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adelaide River</td>
<td>59</td>
<td>25.9%</td>
<td>169</td>
<td>228</td>
<td>180</td>
<td>23</td>
<td>50,785</td>
</tr>
<tr>
<td>Katherine</td>
<td>1,568</td>
<td>23.3%</td>
<td>5,151</td>
<td>6,719</td>
<td>4,932</td>
<td>427</td>
<td>210,664</td>
</tr>
<tr>
<td>Pine Creek</td>
<td>45</td>
<td>9.5%</td>
<td>427</td>
<td>472</td>
<td>387</td>
<td>35</td>
<td>11,067</td>
</tr>
<tr>
<td>Darwin</td>
<td>9,497</td>
<td>8.7%</td>
<td>99,922</td>
<td>109,419</td>
<td>85,102</td>
<td>5,864</td>
<td>160,962</td>
</tr>
<tr>
<td>NT</td>
<td>50,785</td>
<td>24.1%</td>
<td>159,879</td>
<td>210,664</td>
<td>160,962</td>
<td>11,067</td>
<td></td>
</tr>
</tbody>
</table>

Source: ABS 2001

Recent population trends for individual towns are not available through the ABS, who only collect census data every five years (i.e. 1991, 1996, 2001 etc), or CGCs, however the populations of the towns of Adelaide River and especially Pine Creek are strongly linked to the performance of the mining industry. Over the past 100 years, Pine Creek has had several mining booms and busts. In 1985 the town’s population tripled with the commencement of Pine Creek Goldfields (Pine Creek CGC 2003). When Pine Creek Goldfields ceased mining in 1995, URGM commenced operations, providing a smooth transition for mining personnel. Mining at Union Reefs ceased in December 2003 (Pine Creek CGC 2003) and following this the population decreased significantly.

The age distribution for selected towns in the region is illustrated in Figure 12.2. The proportion of people in the 20 to 59 age category is higher in Pine Creek (64%) than for Adelaide River (56%) or Katherine (57%). Adelaide River has the highest proportion of people in the 60+ category (15%) compared with the other localities surveyed (9% to 13%). This suggests that, as a proportion of the overall town population, the potential labour pool is larger in Pine Creek than for Adelaide River or
Katherine. Another notable observation is the low proportion of people in the 10 to 19 age category in Pine Creek (8% compared with 13-15% for other localities), however this is unlikely to impact upon GBS’s community engagement strategy.

![Age distribution for selected towns in the region](Source: ABS 2001)

### 12.1.3 Employment

**Employment levels**

Unemployment statistics for selected localities in the region are presented in Table 12.2. Unemployment data for Pine Creek and Adelaide River are not available through the Commonwealth Department of Employment and Workplace Relations (DEWR); however data for the Coomalie CGC is available. The Coomalie CGC includes the townships of Adelaide River and Batchelor. The unemployment rates for Coomalie CGC and Katherine are slightly higher than for the NT as a whole.

The North Point and Princess Louise operations will require approximately 40 personnel, who are all currently employed with BOPL. Following closure of the proposed operations, GBS is confident there will be continual work in the region on other GBS sites, subject to the necessary government approvals, and thus is expected that the personnel engaged will remain as long-term employees of GBS.
Table 12-2 Unemployment statistics for selected localities, June 2005 to June 2006 Quarters

<table>
<thead>
<tr>
<th>Locality</th>
<th>Jun 05</th>
<th>Sep 05</th>
<th>Dec 05</th>
<th>Mar 06</th>
<th>Jun 06</th>
<th>Total Labour Force (June 06)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coomalie CGC</td>
<td>6.9</td>
<td>5.9</td>
<td>5.7</td>
<td>6.0</td>
<td>6.5</td>
<td>541</td>
</tr>
<tr>
<td>Katherine</td>
<td>6.0</td>
<td>5.4</td>
<td>5.4</td>
<td>5.7</td>
<td>6.0</td>
<td>5,008</td>
</tr>
<tr>
<td>NT</td>
<td>6.3</td>
<td>5.6</td>
<td>5.4</td>
<td>5.6</td>
<td>5.7</td>
<td>103,900</td>
</tr>
<tr>
<td>Australia</td>
<td>5.3</td>
<td>5.1</td>
<td>5.1</td>
<td>5.1</td>
<td>5.1</td>
<td>10,605,300</td>
</tr>
</tbody>
</table>

Source: DEWR 2006

There are no data available in the public domain on Indigenous employment for individual towns, however anecdotal evidence suggests that Indigenous unemployment in Pine Creek is at a high level.

Employment type

According to ABS 2001 census data the majority of people employed in Pine Creek work in the mining industry (42.4%), accommodation, cafes and restaurants (13.9%) or the construction industry (7.6%). Figure 12.3 shows the percentage of persons employed, by industry, in Pine Creek.

Figure 12-2 Employment by industry in Pine Creek, 2001 (Source: ABS 2001)
12.1.4 Regional economy

Over the past century, Pine Creek has been a significant player in the economic life of the Top End, with housing and community service infrastructure in the town expanding in step with mining activity (NTACC 2002). Pine Creek’s location, at the intersection of the Kakadu and Stuart Highways, makes tourism a key component of the local economy. Business activity in the town falls into three broad categories:

- Mining support services
- Tourism and hospitality
- Community and other services.

Currently, local business is doing well under the influence of the existing mining activity in the region, predominately from BOPL.

12.2 Potential Issues and Impacts

The proposed Princess Louise and North Point operations are located in an isolated part of the Northern Territory, with the closest community being Pine Creek (60 km south). Although the Project is in an isolated location and is small in size, there are a number of potential issues and impacts, and these will need to be managed to ensure positive outcomes. The creation of employment opportunities for local businesses or personnel living in the region, safety on the Stuart Highway and maintenance of shared roads have been cited during consultations as areas of priority concern to stakeholders.

12.2.1 Workforce and resource requirements

The on-site operations will be staffed by approximately 40 employees, who are all currently employed by BOPL and some of which have been sourced from within the region. Although the operations will not create immediate employment opportunities, it is expected that inevitable staff turnover will see additional jobs becoming available.

The workforce requirements for the Princess Louise and North Point operations will be made up of various occupations, including haul truck drivers, loader drivers, geologists, engineers and surveyors. In addition, there will be secondary staff requirements for servicing of the Cosmo Village, such as cleaners, cooks and maintenance crews.

BOPL will also require the services of contractors to carry out works on site and for the rehabilitation/maintenance and post closure phases. There will also be a need to source goods and infrastructure to support the mining operations. Expected requirements include:

- Contract fencing;
- Contract earthworks;
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- Mine site rehabilitation services;
- Mining supplies (e.g. fuel, mechanical, explosives, pumps, drilling, parts and equipment consumables); and
- Food and beverage catering.

12.2.2 Direct economic value

Table 12.3 presents the estimated value of the gold to be recovered from the Princess Louise and North Point mines. Income from the proposed mining operation will also contribute to the NT and Federal government economies as a result of royalties and payroll taxes.

Table 12-3 Expected value of mined gold, and investment in construction and services

<table>
<thead>
<tr>
<th>Estimates</th>
<th>Princess Louise</th>
<th>North Point</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mined ore (tonnes)</td>
<td>113,000</td>
<td>323,000</td>
<td>436,000</td>
</tr>
<tr>
<td>Contained gold (oz)</td>
<td>5,660</td>
<td>19,470</td>
<td>25,130</td>
</tr>
<tr>
<td>Value of gold (A$800/oz)</td>
<td>$4.5M</td>
<td>$15.6M</td>
<td>$20.1M</td>
</tr>
</tbody>
</table>

12.2.3 Indirect economic value

The establishment of mining operations in regional and remote NT contributes directly to the employment of over 4000 people, based on 1998 figures (DEWR 1998). This has a significant multiplier effect, indirectly creating an additional four to five jobs for each person directly involved in mining. These jobs would include people being contracted to the mines such as drillers, maintenance crews for shut down and general construction (Ratson 2002).

This multiplier effect results in more than employment; it also supports the establishment and/or expansion of local communities, through development of infrastructure such as the improvement of roads. The establishment and/or expansion of local communities in turn create secondary industries such as tourism and recreation.

Whilst it is difficult to accurately estimate the multiplier effect of the mining proposal for North Point and Princess Louise, it is assumed that the proposal will indirectly generate support jobs and economic activity in the Pine Creek region.

12.2.4 Access

BOPL intends to transport ore from the mine sites for treatment at the URGM processing plant, which is located 53 km southeast of the project area.

The preferred route for ore to be hauled will be by road train via the existing Grove Hill Road, Stuart Highway and Ping Que Road to URGM. Haulage from the mining sites to URGM will occur over a 24
hour period with travel time between the two mine sites and URGM being approximately 35 minutes. The haulage route will not pass through any towns.

12.2.5 Housing and services

BOPL proposes to house the majority of employees at the Cosmo Village mine camp in demountable buildings. Any contractors or visitors will be either housed at Cosmo Village or the Hayes Creek Wayside Inn. It is also expected that some personnel will choose to live in the townships of Adelaide River, Pine Creek or Katherine, and will commute to site.

It is anticipated that BOPL personnel will bring increased business to the towns of Pine Creek, Adelaide River and Katherine, in particular through the demand of goods and services.

Some increased pressure on existing medical services may be expected. In term of direct employment, this will be minimal as the large majority of personnel working on the project sites are existing BOPL employees. The general increase in economic activity in the region could however attract higher service sector activity, generating its own employment.

12.3 Management

BOPL has undertaken extensive consultations with local, regional and Territory stakeholders and these interactions have formed the foundations for a healthy working relationship, and the basis for management strategies to enhance local economic benefits, in particular local employment and procurement opportunities. BOPL will continue to consult with its stakeholders on a regular basis to ensure that any concerns or issues can be raised and addressed promptly.

BOPL publishes regular community updates and fact-sheets in both the Katherine Newspaper and the Pine Creek Newsletter, so that local residents are kept informed of mining operations and activities. An office and information centre has been established in Katherine, at the main intersection of the main road, and is open weekdays.

A Local Participation Plan is being developed by BOPL in collaboration with the DBERD, Northern Territory Industry Search and Opportunities (NTISO) and the Indigenous community to maximise local procurement opportunities. The Local Participation Plan will also specify the mechanisms that will be utilised to inform the local business community and workers of business and employment opportunities.

BOPL have commenced discussions with DBERD, Kybrook Community, Pine Creek Community Government Council and the Commonwealth Department of Employment, Education and Training (DEET) in relation to employment and training opportunities. A scholarship fund has recently been established, which will fund two students to study in the areas of engineering (civil or mining) and environmental sciences, while gaining hands-on experience working at the mine site.

A roads strategy is being developed in collaboration with the DPI to maximise safety on the Stuart Highway and at rail level crossings. A road maintenance strategy will also be developed to ensure roads are maintained in a condition which is as good, or better, than pre-mining. The basis for these strategies
is outlined in Section 11. Ongoing consultation will take place with lease holders of the Douglas Station and the Grove Hill Hotel to ensure appropriate shared use of roads.

To minimise pressure on existing medical services in surrounding towns, first aid facilities will be established on site for the duration of the project. These facilities will be manned by appropriately qualified employees.

BOPL will continue to provide support to the local community by contributing to local services and events.

12.4 Commitments

BOPL commits to open communication with relevant stakeholders to enable issues to be identified and addressed promptly.

BOPL commits to the development of a Local Participation Plan to maximise local employment and procurement opportunities.

BOPL commits to the development of a roads strategy to maximise safety on the Stuart Highway and at rail level crossings.

BOPL commits to ongoing support of the local community through direct contribution to community activities.