

1.1 The Proposal

Burnside Operations Pty Ltd (BOPL) proposes to commence gold mining operations at Princess Louise and North Point Mine Sites, near Pine Creek, NT. The operations will involve construction of two small open pit mines, two overburden dumps and associated infrastructure. Extracted ores will be transported to Union Reefs Gold Mine (URGM) for processing.

The Princess Louise and North Point Mine Project is one of a number of new mining projects that are proposed by BOPL, and its parent company GBS Gold Australia Pty Ltd (GBS), for the NT goldfields region. The other projects include currently operational mines such as the Zapopan Underground Project, the Rising Tide Open Pit Project and the Fountain Head Open Pit Project, and a number of proposed mining operations that are the subject of separate approvals processes. All these gold mining projects provide milling ore to URGM.

The proposed start date for mining at Princess Louise and North Point is in October 2007, pending government approvals, but BOPL may choose to defer this to a suitable time in 2008, or a later year, depending on the rate of mill feed to URGM from BOPL and GBS's other mining operations.

It is anticipated that the mine at Princess Louise will extend to approximately 35 m in depth and produce 113,000 t of ore, with resulting gold production of 5,660 oz. The North Point mine will extend to approximately 25 m in depth and produce 323,000 t of ore, with resulting gold production of 19,470 oz. Mining will intersect the water table at both sites and so pit dewatering and associated water management programs will be developed and implemented.

Both mine sites have been previously disturbed by historic mining and exploration activities, and have been heavily cleared of native vegetation. The proposed works will require very little clearing and the sites will be rehabilitated after mine closure to improve their currently degraded state.

The principal objective of this Public Environmental Report (PER) is to identify and assess the environmental and related impacts that could potentially occur as a result of the construction and operation of the proposed mining project, and to develop and describe management strategies that will be employed to manage and mitigate those impacts.

The PER includes outlines of BOPL's intended environmental management systems and programs for the mine sites to demonstrate the company's commitment to on-going planning and management of its environmental responsibilities and objectives.



1.2 Proponent Details

Burnside Operations Pty Ltd
PO Box 195
Pine Creek NT 0847, Australia
Tel: (08) 8974 7400
Fax: (08) 8976 1451

Contact: Mr Tom Heaton, Operations Manager
Email: theaton@gbsgold.com

1.3 Project Name, Location and Ownership

1.3.1 Name and location

Project Name: *Princess Louise and North Point Mine Project*

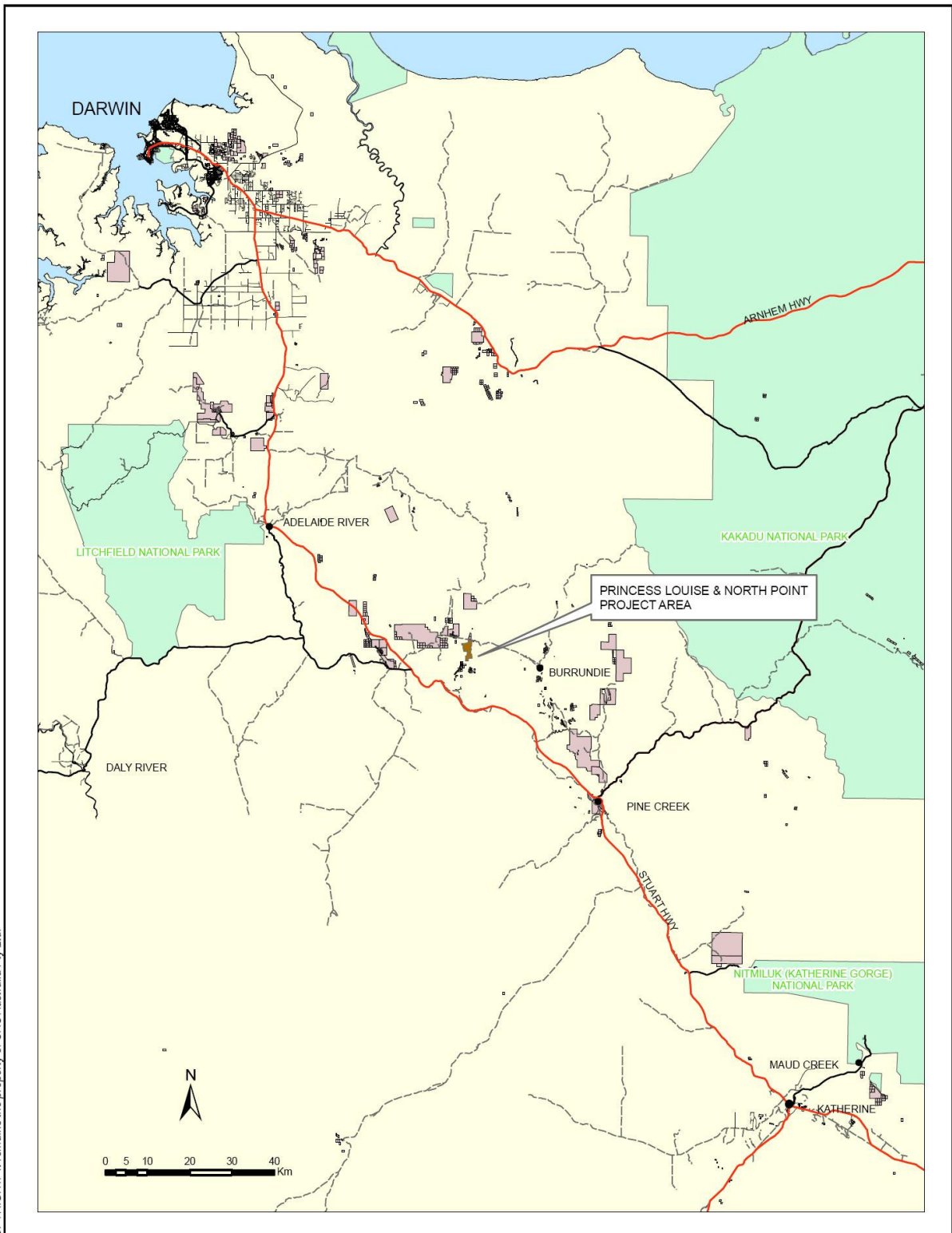
Project Location: *Princess Louise and North Point Project Area, Brocks Creek, Northern Territory*

The Princess Louise and North Point Project Area encompasses the mineral tenements and two mine sites proposed in this PER, and is located 170 km southeast of Darwin and 12 km northeast of Hayes Creek (Figure 1.1). This area occurs within the Burnside Project Area (BPA), a collection of mine sites all owned and operated by BOPL, and comprises an area of approximately 30 km² centred on the Brocks Creek Mine Site (Figure 1.2).


1.3.2 Project ownership

In September 2005, GBS International announced that it intended to make an off-market takeover of the Burnside operations from Northern Gold NL (Northern Gold). At the same time Northern Gold announced that it would purchase Harmony Gold Mining Company Ltd's (Harmony Gold) 50% ownership of the Burnside Joint Venture. Northern Gold and Harmony, through their respective wholly-owned subsidiaries, were 50% joint venture partners in BOPL. These two acquisitions have now resulted in 100% ownership of the Burnside Project by BOPL.

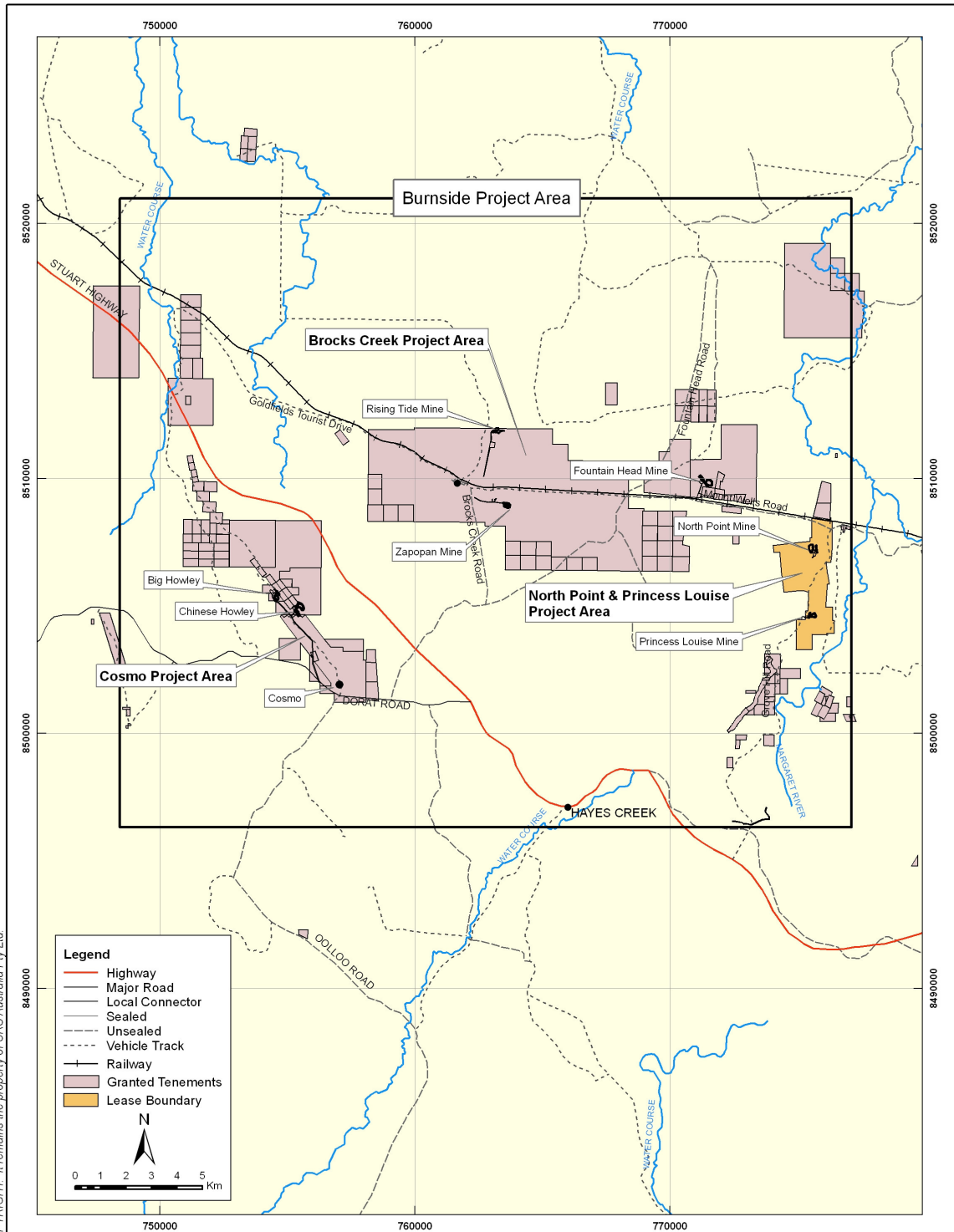





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Client Burnside Operations Pty Ltd	Project PRINCESS LOUISE & NORTH POINT PROJECT AREA	Title Location of the Princess Louise and North Point Project Area in the NT	
	Drawn: JD Job No.: 42213760	Approved: JM File No.: 42213760-001-PL-NP.mxd	Date: 12 Dec 06 Figure: 1.1 Rev. A A4





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Client Burnside Operations Pty Ltd	Project Burnside Project Area		Title Location of the Princess Louise and North Point Project Area inside the Burnside Project Area	
	Drawn: JD Job No.: 42213760	Approved: JM File No.: 42213760-002-PL-NP.mxd	Date: 5 Feb 07 Figure: 1.2	Rev. A A4



1.4 Overview of the Proposed Project

1.4.1 Scale and type of operations

The proposed gold mining operations at Princess Louise and North Point Mine Sites are relatively small scale and short term. Mining operations will be completed within one year of the commencement date, followed by rehabilitation works.

Mining will be via open-pit extraction, and will intersect the water table at both sites so pit dewatering and associated water management systems will be implemented. All ore from the mines will be transported off-site to the URGM for processing.

1.4.2 Ore reserves and production

As described in Section 1.1, the gold mine at Princess Louise will produce 113,000 t of ore, grade 1.56 g/t, and North Point mine will produce 323,000 t of ore, grade 1.87 g/t. Anticipated gold production from the ore (to be undertaken at URGM) is estimated at 5,660 oz for Princess Louise and 19,470 oz for North Point. Geological surveys and metallurgical tests are continuing, which may alter these estimates.

1.4.3 Project construction

Minimal infrastructure will be required for these mine sites as the scale of the project is relatively small, and no on-site processing will take place. Construction works required for the Princess Louise and North Point mine sites include:

- Open pits at both sites;
- Run-of-Mine (ROM) pads at both sites;
- Waste rock dumps and associated sediment dams at both sites;
- Dewatering systems and water storage tanks at both sites, and water pipes from the North Point pit to the old Yam Creek mine pit;
- Access and haul roads;
- Construction of amenities, including a mobile site office, temporary waste storage area and mobile ablution facilities; and
- Construction of a temporary refuelling area, power generator area for the site office and lighting, and contractors' laydown areas.



1.4.4 Existing infrastructure

At present no infrastructure exists in the Princess Louise and North Point project area, with the exception of access roads that have been used for exploration purposes. The site has been used historically for mining and exploration, but the only remnants of these activities are some old mine shafts, adits and shallow trenches.

The North Australia Railway runs north of the project area approximately 2 km from North Point, and the Stuart Highway lies approximately 10 km to the south of Princess Louise, accessible by Grove Hill Road, which is unsealed. This road comes off Goldfields Tourist Drive, and is itself used as a tourist road (Figure 1.2).

Located south of the North Point mine site is the decommissioned Yam Creek Mine and Smelter site, which is listed on the Register of National Estate and is representative of Northern Territory mining activity of the 1880's (DEH, 2006b). Remnants of the hilltop battery complex and smelter ruins still exist today, but these will not be impacted by the proposed mining operations at North Point or Princess Louise. The decommissioned mine pit at Yam Creek, which is not included in the Register of National Estate, will be utilised for storage of excess pit dewater during operations at North Point.

1.5 Extent of Previous Mining Activities

The Princess Louise and North Point Project Area is part of the NT goldfields, a region that has been mined historically since as early as 1870. Gold was first discovered at Yam Creek, which, as mentioned above, is located within the exploration tenements for the Princess Louise and North Point Project Area.

The Princess Louise and North Point 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.

1.6 Project Benefits and Justification

1.6.1 Benefits

The Princess Louise and North Point Mine Project is part of a number of new mining projects that are proposed by BOPL for the region. These other projects include the Zapopan Underground Project, the Rising Tide Open Pit Project and the Fountain Head Open Pit Project, all of which are currently operational.



It is proposed that these mine sites, and several others that will be the subject of separate notification documents, will form part of a regional gold mining program employing at least 250 people, 40 of which will be dedicated to the Princess Louise and North Point Project. Given the current high world price for gold, the project will contribute approximately \$20 million to the NT economy.

Environmentally, the inclusion of comprehensive rehabilitation plans into the Princess Louise and North Point Mine Project will also deliver a significant environmental benefit to the local area, as the currently disturbed state of the mine leases will be improved with post-mining rehabilitation.

The project has the potential to offer employment and training opportunities for local people who work on the project or indirectly through the provision of goods and services. BOPL has a local participation policy in place, and has developed a specific local participation plan for this project site. This is discussed further in Section 12.

1.6.2 Justification

In addition to the recognised benefits to the local community, as described in 2.6.1, the proposal will also provide benefits to the community as a whole, beyond the immediate local area. As a result of spin-off effects, the project will provide the NT economy with employment opportunities and business opportunities for suppliers and contractors. The project will also provide royalties to the NT Government.

The temporal and spatial scale of the project is small and therefore impact will be limited to the local area, which simplifies the identification and management of issues.

The project is making a contribution to the environmental knowledge database of the region. Through BOPL's commitment to continual monitoring, further information will be gained to add to this knowledge database.

1.7 Land Tenure and Land Use

The underlying tenure to the mineral tenements at Princess Louise and North Point is pastoral lease, to Douglas Station (PL903).

The North Australia Railway easement runs along the northern edge of the North Point mineral tenement area (Figure 1.2).

1.8 Schedule

As described in Section 1.1, the Princess Louise and North Point Mine Project is one of a number of gold mining projects being undertaken by BOPL and GBS in the NT goldfields region, all of which will feed ore into the URGM Processing Plant. Princess Louise and North Point are relatively small gold deposits, and their mining schedule is therefore dependent on the rate of ore delivered to URGM from other mining



projects such as Zapopan, Fountain Head, Brocks Creek and any new prospects that may be available for mining in the future.

At this stage, the proposed start date for mining at Princess Louise and North Point is in October 2007, pending government approvals. BOPL may choose to defer this to 2008, or a later year, depending on the rate of mill feed to URGM.

Mining at Princess Louise and North Point will be complete within one year of commencement, and will only be undertaken while road conditions are suitable for mine haulage. Rehabilitation of the mine sites will be complete by the second wet season after mining ceases.

1.9 Alternatives

1.9.1 Consequences of not proceeding

The consequences of not proceeding with gold mining at Princess Louise and North Point would include the loss of the following benefits:

- Generation of income for the local community of Pine Creek, with secondary benefits in Katherine, where mine personnel and the company offices will be located;
- Provision of long-term infrastructure, including upgraded roads and bores in remote areas;
- Provision of royalties to the NT Government; and
- Addition to the existing environmental knowledge database of the NT goldfields.

1.9.2 Alternative mining methodologies and locations

The chosen method for ore extraction is conventional open pit excavation, which is considered the most practical for the mines at Princess Louise and North Point. Underground mining is not appropriate at either site due to the shape and concentration of the ore bodies, and thus it is not considered that an alternative mining method is available.

Ore processing off site at URGM is the most cost-effective system for the small, short-term mining operations at Princess Louise and North Point, and the financial expense and considerable environmental impact of on-site processing is not a preferred alternative in this case.

1.9.3 Alternative operation and management

BOPL has analysed a number of different operational scenarios for management of various aspects of the mines. These include the following considerations:



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- Management of threatened fauna (the northern quoll) in the project area through a relocation program;
 - Use of existing access roads and haulage routes;
 - Limiting infrastructure on site so as to limit ground disturbance; and
 - Removal of all domestic wastes from site for transportation to the existing landfill at Brocks Creek.

1.10 Environmental Assessment Process

1.10.1 Northern Territory

This PER has been prepared in accordance with the requirements of the *Environmental Assessment Act* 1982 (NT) and the Environmental Assessment Administrative Procedures under which the Act is implemented.

As indicated by the Northern Territory Environmental Protection Authority (EPA) Program, there are seven key phases in the environmental approval process:

- 1. Notification.** A revised Burnside Operations Mine Management Plan (MMP) 2006-07 was submitted to the EPA on 19 April 2006, by way of notification of BOPL's intent to commence mining at Princess Louise and North Point Mine Sites. The MMP outlined the scope of the proposed gold mining operations and enabled the Minister to determine the level of assessment required. The information contained in the MMP and consultation with relevant agencies assisted in the preparation of PER Guidelines by the NT Government concerning matters to be addressed during the environmental assessment process. It is noted that this revised MMP was also used to notify the EPA of the proposal to commence mining at Zapopan Underground, Rising Tide Open Pit and Fountain Head Open Pit. In consultation with the EPA it was agreed that each of these projects would be considered separate proposals and the Zapopan, Rising Tide and Fountain Head Projects were deemed not to require formal assessment under the *Environmental Assessment Act* 1982 (NT) and subsequently approval was granted under the *Mining Management Act* 2001 (NT).
- 2. Determination of Level of Assessment.** There are two levels of formal assessment defined under the NT assessment process. A PER may be required to assist in assessing environmental impacts that are considered significant but limited in extent. An Environmental Impact Statement (EIS) may be required to assist in assessing environmental impacts that are considered significant, either in terms of site specific issues, off-site issues and conservation values, and/or the nature of the proposal. On 29 June 2006 it was determined by the NT Minister for Natural Resources, the Environment and Heritage that the level of assessment for the proposed gold mining project would be a PER.
- 3. Public Review of Guidelines.** Draft guidelines covering issues to be addressed in the PER were released for public comment in June 2006 for a 14 day public comment period. In August 2006 final



guidelines were issued taking into account comments received from the community and Government agencies. The PER Guidelines are contained in Appendix A.

4. **Preparation of the PER.** Work began on the preparation of the PER in August 2006 in accordance with the PER guidelines. This PER contains data gathered by BOPL during the preparation of the MMP and subsequent data gathering to fulfil the requirements of the Guidelines issued by the Minister.
5. **Submission of the PER and Public Review.** The PER has now been released for review to enable the public and government agencies to comment on the project. Notification of the display centres, submission procedures, and purchasing details have been advertised in local newspapers. The public and government agencies have not less than 28 days from the date of submission of the PER to submit comments to the EPA. The Minister can request further information, and if this does occur the assessment clock stops until the information is received.
6. **Government Review and Decision.** Following review of the PER and relevant public comments, the EPA will prepare an Environmental Assessment Report and Recommendations on the project's acceptability for the Minister's consideration. Following this, the Minister for Natural Resources, the Environment and Heritage will make a recommendation to the NT Minister for Primary Industries, Fisheries and Mines regarding the project's environmental acceptability and its compliance with the requirements of the *Environmental Assessment Act 1982* (NT).
7. **Mining Approval.** As the project is a mining activity, approval will be given by the Minister for Primary Industries, Fisheries and Mines under the *Mining Management Act 2001* (NT), once an approved Mine Management Plan is developed and appropriate securities have been put in place.

A timetable for the assessment of a PER under the *Environmental Assessment Act 1982* (NT) is attached in Table 1.1.



Table 1-1 Generic activities and timetable for the assessment of a PER

Northern Territory Action	Timing
1. Proponent notifies the responsible Minister of a proposal including details (by the BOPL MMP in this case).	OPEN
2. Responsible Minister notifies Minister for Natural Resources, the Environment and Heritage (the Minister) of the proposal.	OPEN
3. Minister may require further information from proponent to assist in determining level of environmental significance.	Within 14 days
4. Minister determines the level of assessment and notifies responsible Minister and proponent that a PER is necessary.	OPEN
5. Draft Guidelines for a PER are prepared.	OPEN
6. Draft Guidelines available for public comment and referred to advisory bodies.	14 days
7. Minister finalises draft Guidelines, issues Guidelines to the proponent and directs the preparation of a PER.	Within 14 days
8. Proponent prepares PER and submits it to the Minister (Minister can determine a date for submission)	Open (unless specified by the Minister)
9. PER advertised for public comment and circulated for advisory public comment	Maximum 28 days
10. Minister can request further information. If further information is requested, the assessment clock stops until the information is received.	Within above 28 days
11. Preparation of assessment report and recommendations on the PER. The Minister forwards report and recommendations to the responsible Minister	Within 14 days of expiration of the exhibition period

1.10.2 Commonwealth

In addition to the PER procedures of the NT Government, under the Commonwealth Government’s *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act), developments require assessment if they have the potential to affect one or more of seven Matters of National Environmental Significance (MNES), namely:

- World Heritage properties;
- National heritage places;
- Ramsar wetlands of international significance;
- Threatened species and ecological communities;
- Migratory species;
- Commonwealth marine areas; and
- Nuclear actions (including uranium mining).



Actions that may have a significant impact on Commonwealth land, even if taken outside Commonwealth land, and actions taken on Commonwealth land that may have a significant impact on the environment generally, are also covered by the EPBC Act.

A referral under the EPBC Act was submitted to the Commonwealth Department of the Environment and Water Resources (DEW) in relation to BOPL's Princess Louise and North Point Gold Project on 7 December 2006. A decision was made on 8 January 2007 that the proposed development was not a controlled action, and therefore no EPBC Act approval is required.

1.11 Relevant Government Legislation and Policies

1.11.1 Legislation

Beyond the *Northern Territory Environmental Assessment Act 1982* (NT) and the Commonwealth's EPBC Act there are a number of other pieces of Northern Territory and Commonwealth legislation that may be relevant to the proposed mining project. These are listed below.

Northern Territory Legislation

- *Bushfires Act 1980*
- *Dangerous Goods Act 2003*
- *Energy Pipelines Act 1981*
- *Environmental Assessment Act 1982*
- *Heritage Conservation Act 1991*
- *Mining Act 1980*
- *Mining Management Act 2001*
- *Motor Vehicles Act 2006*
- *Northern Territory Aboriginal Sacred Sites Act 1989*
- *Northern Territory Lands Act 1992*
- *Parks And Wildlife Commission Act 2004*
- *Pastoral Land Act 1992*
- *Public Health Act 1952*
- *Rail Safety Act 2001*
- *Soil Conservation and Land Utilisation Act 1980*
- *Territory Parks and Wildlife Conservation Act 2001*



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- *Traffic Act 1949*
 - *Waste Management and Pollution Control Act 1998*
 - *Water Act 1991*
 - *Weeds Management Act 2001*
 - *Work Health Act 1986.*

Commonwealth Legislation

- *Aboriginal and Torres Strait Islander Heritage Protection Act 1984*
- *Aboriginal Land Rights (NT) Act 1976*
- *Environment Protection and Biodiversity Conservation Act 1999*
- *Native Title Act 1993*
- *National Environmental Protection Measures.*

1.11.2 Burnside Operations Environmental Policy

BOPL has adopted the Environmental Policy of its parent company, GBS. The purpose of the policy is to provide direction to all employees, contractors and external stakeholders associated with BOPL's operations. The Environmental Policy is shown on the next page.

1.12 PER Structure

This PER is submitted for public review in a structure that addresses the PER Guidelines issued by the EPA (Appendix A) and allows for easy interpretation of the issues and impacts that have been identified for the Princess Louise and North Point Mine Project. The PER is set out as follows:

Executive Summary

The Executive Summary provides a brief overview of the project, its potential environmental and social effects and the proposed mitigation strategies. It is designed to be read as an optional stand-alone document for interested members of the public who cannot access or do not wish to read the whole PER.

General Information

This section provides information about the proponent, background to the project, a broad overview of the proposed mining operation, alternatives that have been considered, and the associated benefits and justification. It also explains the approvals process for the NT and Commonwealth Governments, lists the relevant government legislation and details BOPL's Environmental Policy.





GBS GOLD AUSTRALIA Pty Ltd

ENVIRONMENTAL POLICY

POLICY:

The Environmental objective of GBS GOLD AUSTRALIA Pty Ltd is to develop and maintain the culture, protocols and procedures that ensure the integrity of the environment, for all external stakeholders, employees and contractors associated with the company's activities.

OBJECTIVES:

- To ensure compliance with all environmental legislation;
- To be committed to maintain and improve the environmental management of all facets of the operations, in order to reduce or eliminate any environmental impacts;
- To identify, act upon and mitigate potential environmental impacts upon their recognition;
- Ensure any impacts, however minor, are reported, recorded and investigated;
- To implement a culture where all environmental, social, cultural and economic considerations are integrated into all the planning and decision making processes;
- To encourage workforce awareness of environmental management procedures and promote a positive personal environmental attitude in the workplace;
- To be responsive and responsible with regard to establishing environmental credibility with external stakeholders, communities and regulatory bodies;
- To encourage and develop internal and external research to reduce environmental impacts and improve long term management.

Tony Simpson
Chief Operating Officer

GBS Gold International Pty Ltd.



Project Description

This section provides a detailed description of the project, including all aspects of mine and infrastructure construction, mining methods, ore reserves, waste rock management, processing, haulage and workforce.

Description of Existing Environment and Potential Impacts

A number of sections form this part of the report, each of which provide in-depth descriptions of aspects of the existing environment in the project area. Aspects described include soils, groundwater, surface water, flora, fauna, biting insects, socio-economic characteristics, heritage values, waste management, greenhouse gas emissions, and traffic conditions. These sections also identify potential environmental impacts and management measures associated with each environmental value or issue described. Finally, commitments made by BOPL are outlined at the end of each section.

Hazards and Risks to Humans and Facilities

This section describes the Risk Analysis Methodology used by BOPL to plan and account for the environmental hazards presented by mining activities. It rates the risks involved in the project according to significance and priority, a process that is incorporated into the development of Environmental Management Systems and Plans later on. This section also describes the Incident Reporting procedures BOPL intends to adopt for mine sites, for effective risk management and tracking.

Environmental Management System and Plans

These two sections present the likely environmental impacts of the mining operations, and the objectives and targets set by BOPL to mitigate environmental harm. The consultation, reporting and monitoring processes that BOPL plan to implement are detailed in this section, and a set of draft Environmental Management Plans (EMPs) are presented with details on site-based management strategies.

These EMPs will be further developed over time to include requirements that are identified during the PER process, and will reflect the results of on-going monitoring programs in the mining areas.

The EMP section also contains a summary table of commitments made by BOPL, with cross-referencing to the relevant text in the report.

