



**GUIDELINES FOR PREPARATION OF
A PUBLIC ENVIRONMENTAL REPORT**

**Burnside Operations Pty Ltd
North Point and Princess Louise Deposits**

GBS Australia Pty Ltd

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1 INTRODUCTION TO THE GUIDELINES

These guidelines have been developed to assist Burnside Operations Pty Ltd (BOPL) in preparing a Public Environmental Report (PER) for the proposed North Point and Princess Louise gold deposits in accordance with Clause 8 of the Administrative Procedures of the *Environmental Assessment Act* of the Northern Territory.

Administrative Procedures of the *Environmental Assessment Act* of the Northern Territory state that the Minister will specify the following in the guidelines:

- Matters relating to the environment which the proponent shall deal with;
- Number of copies of the report to be provided to Minister/other agencies; and
- Newspapers in which and on occasions when the proponent will publish a notice.

The object of these guidelines is to identify those matters that should be addressed in the PER. The guidelines are based on the initial outline of the proposal in the proponent's Notice of Intent. However, they are not necessarily exhaustive. They should not be interpreted as excluding from consideration any matters which are currently unforeseen that emerge as important or significant from scientific studies or otherwise during the preparation of the PER and the public consultation process.

The PER should contain sufficient information to enable understanding and assessment of the scope and environmental implications of the proposal. The PER should clearly identify the main environmental impacts associated with the development and should contain a management strategy that demonstrates how these impacts will be minimised.

Information should be presented in a concise format, using maps, overlays, tables and diagrams where appropriate to clarify the text.

The PER should include the following sections, but need not be limited to these sections or inferred structure.

2 EXECUTIVE SUMMARY

The Executive Summary should include a brief outline of the project and each chapter of the PER, allowing the reader to obtain a clear understanding of the proposed project, its environmental implications and management objectives. The Executive Summary should be written as a stand-alone document, able to be reproduced on request by interested parties who may not wish to read or purchase the PER as a whole.

3 DESCRIPTION OF THE PROPOSED DEVELOPMENT

This section should describe the development proposal to allow a detailed understanding of infrastructure design and engineering and all stages of construction, operation and management of the project and include relevant plans, photos and maps.

This section should emphasise that ore will not be processed at the sites covered by the PER.

Aspects to be covered include:

- An explanation of the objectives, benefits and justification for the project. The purpose of this is to place the proposal in the local and regional context;
- A description of the project's location indicating distance from Darwin and Pine Creek, and the project in relation to the Stuart and Kakadu Highways, the Adelaide to Darwin Railway and Kakadu National Park;
- A description of the proposed development should cover the history of the proposed site, including reasons for previous closure (whether this was due to market price, discrepancy of geological reserve and grade or process difficulty) and how this will be solved in the current proposal.
- An overall layout of the proposed mine site including pits, waste rock dumps, power generation, other infrastructure, waterways, access and existing features of interest;
- Comprehensive maps showing topography and all project components and land tenure;
- Comprehensive detailed topographic maps displaying watercourses in relation to mine workings and drainage lines from the workings;
- Project schedule;
- Location and design for each component of the project, including any limitations imposed by site characteristics such as environmental sensitivity, geological and geotechnical issues, and proximity to important infrastructure;
- Land requirements, land tenure, acquisition requirements (permits, rezoning and Native Title), and the tenures under which the project would be held including details of relevant legislative processes required to grant proposed tenure;
- Infrastructure requirements and specifications (permanent and temporary) and ancillary activities (e.g. storage areas, waste dump areas etc);
- Employment and business opportunities (direct and indirect), including sources of workforce, skill levels required and opportunities for Aboriginal people and businesses; and
- Methods for storage, handling, containment and emergency management of chemicals and other hazardous substances (including fuel and explosives).

For the development and operation of the mine the proposal description should consider, as a minimum, the following:

3.1 Site Preparation

- Describe the extent of proposed disturbance in terms of area, size, depth of pit etc;
- Describe the level of environmental disturbance already existing on mining lease sites;
- Outline the construction timing, methods, equipment and materials (types, sources and quantities);
- Describe water requirements, usage, source, storage, treatment and disposal. Information is to be provided on how much water is required and how this water is to be sourced; and

- Describe on-site and off-site borrow material requirements, extraction methods and uses.

3.2 Mine

- Characterise all mined product, with respect to ore content as well as possible contaminants in processed material and overburden. Describe any radioactive constituents;
- Describe mining methods and application of industry best practice;
- Detail current ore reserves and mine life;
- Describe the design of pits and their dimensions (including maps, plans and geological cross-sections);
- Describe mining methods, scale of operations and timetable for ore extraction and open cut operations;
- Detail drilling and blasting requirements (including frequency);
- Outline possible future extensions to the mine operation, and discuss the probability of mining satellite ore bodies;
- Include the provision for determination of design parameters, based on the geotechnical characteristics of the slope and include geotechnical constraints for pit slope, catch berm, slope monitoring and pit safety management; and
- Detail any proposed stockpiling of ore on site and associated management.

3.3 Waste Rock Management

- Identify total amount of waste rock and overburden to be produced;
- Characterise waste rock in terms of acid generation potential (AGP) and neutralising capacity from drill core samples and in-situ assessments (kinetic tests and field trials); include sample selection methodology;
- Describe the method used to recognise, characterise, segregate, strategically place and manage potentially acid forming materials;
- Characterisation needs to identify any potential problematic waste that may have an impact on the receiving environment, not only in terms of AGP (eg arsenic levels, potential metal contaminants). Describe means of interception and management of problematic mine drainage;
- Identify classes and amounts of waste rock for handling purposes;
- Outline proposed waste dump locations, dimensions, water catchments, surface treatment and final landform (discuss alternatives); and
- Describe in detail the methods for waste rock disposal and dump construction, including strategic positioning of different waste rock types.

3.4 Water Management

- Detail the site water requirements and identify sources;
- Provide a site water balance (all inputs and outputs) for the expected mine life, including rehabilitation;
- Describe the proposed management of clean, dirty and contaminated water;

- Describe the management of potential acid drainage and metal contaminated waters. Discuss management options, with the purpose of determining that the preferred option is the most effective;
- Describe the diversion of surface waters;
- Describe dewatering of the pit, including expected water quantities and qualities. Outline disposal/ use options for water gained from the dewatering process;
- Describe the management of high/extreme rainfall events;
- Identify individual aspects of the proposed development that have the potential to impact on groundwater and surface water quality; and
- Describe monitoring to be undertaken on the broader Adelaide River Catchment.

3.5 Rehabilitation and Decommissioning

The rehabilitation program should be integrated into the mine plan and considered as part of the mining operation, rather than as a separate phase at the end of the mine life.

The project description should consider, as a minimum, the following:

- Describe the current use of the land;
- An estimation of the total area of disturbance;
- Identification of a post mining land use and rehabilitation objectives;
- Rehabilitation commitments and timetables (for both temporary and permanent facilities) including waste management, pollution control and stabilisation and rehabilitation plans for mined areas; and
- Analysis of the feasibility of backfilling of pits with waste rock.
- Describe in detail the following:
 - Draft rehabilitation plans for pits, waste rock dumps, ROM pad, roads and infrastructure sites detailing proposed closure criteria;
 - Design of rehabilitated landforms, in particular rehabilitation techniques, including methods to reconstruct the landscape using the materials available;
 - Profile reconstruction and viability for the growth of native species.
 - Collection and selection strategy for native species, e.g. native grasses and other vegetation;
 - Runoff and erosion control measures of rehabilitated areas;
 - Final topographic and drainage morphology;
 - Maintenance of water quality; and
 - Revegetation procedures.
- Describe the nature and extent of any anticipated post-closure land forms that may reduce land area available for beneficial use; and
- Describe the methods employed to ensure no actual or potential mosquito breeding sites remain after mine closure.

3.6 Transport

The project description should consider, as a minimum, the following:

- Description of transport systems and methods to convey all site traffic (including materials, workers and product) to and from the site (both during construction and operation) including:
 - Type, size and number of vehicles required during all phases of the proposal;
 - The estimated volumes, tonnage, composition, origin and destination of traffic generated by the proposal;
 - Estimated times of travel;
 - Additional road infrastructure works required including site access and signage;
 - Description of any proposed haul roads, including length, location, land requirements, tenure and acquisition requirements; and
 - Description of construction methods and timeframes for any proposed private and public haul roads.
- Provision for road transport safety – oversize load management, escorts, speed signs, other safety signs, dust control, diversions, and overpass and underpass requirements if required;
- Consultation undertaken with relevant regulatory agencies; and
- Necessary approvals required.

4 ALTERNATIVES

Alternative proposals, which may still allow the objectives of the project to be met, should be discussed, detailing reasons for the selection and rejection of particular options. The selection criteria should be discussed, and the advantages and disadvantages of preferred options and alternatives detailed. The potential impacts of the alternatives should be described.

Alternatives to be discussed should include:

- Not proceeding with the project;
- Alternative locations, including process plant;
- Alternative sources of raw materials for the project, including water supply;
- Alternative transport corridors and options;
- Alternative extraction and processing technologies considered;
- Alternative environmental management technologies considered, such as treatment and disposal of by-products and waste products; and
- Alternative workforce accommodation.

5 EXISTING ENVIRONMENT, POTENTIAL IMPACTS OF THE PROJECT AND MANAGEMENT

Studies to describe the existing environment should be of a scope and standard sufficient to serve as a benchmark against which the impacts of the project may be assessed over an extended period. Control areas not impacted by the project should be included in studies and long term monitoring locations established.

This section should also include an assessment of the level of significance of the impact, be it global, regional or local (e.g. global and national implications of greenhouse gases and the localised impact of service roads or artificial water bodies).

Cumulative impacts should also be discussed, also incorporating impacts from previous mining operations at the sites. The reliability and validity of forecasts and predictions, confidence limits and margins of error should be indicated as appropriate.

Description of those areas potentially impacted by the project should, as a minimum, include:

5.1 Landform and Soils

Baseline

- Provide maps and an interpretation of the regional geology and geomorphology of the site and peripheral areas;
- Discuss the soil types and land units of the site and peripheral areas;
- Provide seismic information for the site and peripheral areas; and
- Detail the existing level of soil erosion and other disturbances.

Impacts

- Discuss limiting properties of landform considering erosion, rehabilitation etc. This information may be provided through the development of a landform evolution model for the life of the project and beyond (this would also have benefit in assisting in progressive rehabilitation over the life of the project); and
- Detail impacts of mining to the landform.

Management

Detail the safeguards, management and monitoring strategies that will be used to minimise impacts of construction and operation phases, including:

- Measures to avoid or minimise impacts;
- Management of topsoil; and
- Erosion and sediment control procedures and associated erosion and sediment control management plan.

5.2 Hydrology/Hydrogeology

Baseline

- Describe the site and regional surface water systems including:
 - rivers;
 - creeks; and
 - streamlines.
- Describe the site and regional ground water systems including:
 - confined aquifers;

- unconfined aquifers; and
- ground soaks, expressions etc.
- For both ground water and surface water systems, discuss:
 - their significance;
 - current uses;
 - beneficial uses;
 - flows (including flood contours) and discharge rates;
 - water quality;
 - release or seepage of heavy metals; and
 - Characterisation of all water sources (both surface and groundwater).

Impacts

Describe how the project will impact or has the potential to impact on each of the above elements. In particular, consider:

- Impacts on surface and groundwater from mining, ancillary activities and associated infrastructure requirements, including impacts on:
 - water quality;
 - changes to/ diversion of surface waters; and
 - aquatic flora and fauna.
- Impacts associated with dewatering of the pits (including water disposal);
- Possible acidification of groundwater due to aerial exposure in the pit void;
- Possible chemical constituents in drainage, specifying test methods (provide all test information);
- Current downstream users and their requirements; and
- Anticipate post-closure pit water quality.

Management

Detail the safeguards, management and monitoring strategies that will be used to minimise impacts of construction and operation phases, including:

- Treatment, storage and disposal of waste water, including stormwater run off;
- Management of clean, dirty and contaminated water;
- Management of high/ extreme rainfall events;
- Protection of beds and banks of watercourses;
- Means of interception and management of potential acid mine drainage;
- Management of pit water;
- Need for a waste discharge licence;
- Protection of surface water from potential contamination;
- Protection of groundwater from potential pollution sources;
- Proposed monitoring of surface and ground waters;
- Continued water monitoring and discharge requirements following decommissioning;
- Ongoing water requirements for the maintenance of wetlands or other water management structures; and
- Potential downstream impacts on the values/attributes of Kakadu World Heritage Area.

Include a map of water management system showing all structures and routes. Details of surface water sampling points and groundwater investigation bores should also be included.

5.3 Waste Rock

Baseline

Characterise waste rock in terms of potential metal contaminants, net acid generation, net acid potential and arsenic content from drill core samples and in-situ assessments (kinetic tests and field trials).

Impacts

Describe in detail the methods for waste rock disposal and dump construction; including sample selection methodology and characterisation to direct different waste rock types to appropriate locations for disposal, and cross sections for the design of the waste rock dumps. Problematic waste will require strategic positioning and management.

Management

Detail the safeguards, management and monitoring strategies that will be used to minimise impacts.

5.4 Ecology

Baseline

- Specify the extent of all proposed clearing of native vegetation in relation to the development (including locations of work camps, haulage roads and ancillary infrastructure) and provide statements against each proposed area in relation to current statutory controls (*Planning Act* –Clearing of Native Vegetation development provisions 2004 and *Pastoral Land Act*) as to whether the proposed clearing of native vegetation is exempt or requires consent. Where clearing requires consent indicate appropriate timelines for seeking approvals;
- Survey flora and fauna species (including migratory species) and biological communities.
- Survey methodology should:
 - Follow best practice and advice from relevant agencies;
 - Consider seasonality, species rarity, potential for occurrence of significant species and sensitivity of species to disturbance;
 - Be included in appendices; and
 - Identify rare, threatened and endangered species against NT and Commonwealth legislation, and species with indigenous conservation values.
- Special consideration should be given to the following:
 - Ecologically outstanding areas;

- Vegetation that is the habitat of rare, threatened or endangered species or has outstanding diversity;
- Communities that are exceptional examples of their type; and
- Vegetation outside its normal distribution or of other biogeographical significance.
- A Wildlife Rescue Management Plan should be drafted to operate during land clearing operations and in conjunction with any transport operations;
- Surveys should target the following significant species:
 - Gouldian finch
 - Northern shrike-tit;
 - Northern quoll;
 - Partridge pigeon;
 - Northern brushtailed phascogale; and
 - Brush-tailed tree-rat.

Impacts

Describe how the project will impact, or has the potential to impact on each element identified above with particular consideration given to the following:

- Impacts of clearing, construction, operation and decommissioning phases;
- Impacts on all species, communities and habitat types affected by the proposal. Provide detailed analysis of impacts upon those of local, regional or national significance. Detail should also be with reference to the inputs and outputs from the mining and processing operations;
- Rate the risk and seriousness of each impact;
- Identify noxious weeds that may result from the project activity; and
- Examine potential impacts upon migratory, rare, threatened or endangered species.

Management

Detail the safeguards, management and monitoring strategies that will be used to minimise impacts of construction and operation phases, including:

- Minimisation of disturbance;
- Rehabilitation methods including revegetation strategies and flora selection;
- Weed management plan (to be included in the Environmental Management Plan and to follow best practice and advice from advisory agencies);
- Vegetation Clearing Plan (to be developed as part of the Environmental Management Plan);
- Actions to prevent the development of mosquito and other biting insect breeding habitats; and
- Detail proposed feral animal control.

5.5 Air Quality and Noise

Baseline

- Provide background dust, air quality, noise and dispersion levels.

- List all meteorological conditions including but not limited to:
 - Prevailing wind directions and strengths;
 - Maximum wind gusts;
 - Precipitation data (maximum, minimum, average, design rainfall intensities);
 - Temperature data; and
 - Evaporation data.

Impacts

- Describe how the project will or has the potential to impact on each element with particular consideration given to the following:
 - Potential air emissions;
 - Dust, including projected particle size and distribution; and
 - Noise, including levels, timing and duration and comparison to current levels (with respect to any nearby receivers).
- Provide information on ore toxicity in terms of human health and Occupational Health and Safety.
- Identify individual aspects of the proposed project that have the potential to impact on air quality.
- Identify any residents or other persons that may be impacted by degraded air quality.

Management

- Detail the safeguards, management and monitoring strategies that will be used to minimise impacts of construction and operation phases, including:
 - Dust suppression and monitoring, including during ore transportation; and
 - Noise mitigation.
- Describe mechanisms available to the community to lodge complaints about dust emissions and noise, and how the proponent will monitor and assess any complaints.

5.6 *Environmental Protection and Biodiversity Conservation Act 1999 (EPBC Act) Triggers*

- Should any of the deposits trigger EPBC Act they should be addressed in a separate section of the PER, along with any predicted impacts from the proposal upon any of the trigger issues, and details of protective management strategies proposed.

5.7 *Greenhouse Gas Emissions*

The Northern Territory Government's objective for managing greenhouse gas emissions from new and expanding operations is to reduce emissions to a level that is as low as practicable. An assessment of greenhouse gas emissions for the project should be undertaken.

The assessment should outline, as a minimum, the following:

- Energy requirements for the project;
- Fuel sources for the project;
- Estimated greenhouse gas emissions; and
- A comparison with Northern Territory and national levels of greenhouse gas emissions.

Details should also be provided on the projects commitment to:

- Greenhouse gas emissions inventory and benchmarking;
- Measures to minimise greenhouse gas emissions;
- Minimising emissions over the life of the project; and
- Benefits of this project to abatement of greenhouse gas emissions on a national or global scale.

Refer to the attached NT Environmental Impact Assessment Guide: Greenhouse Gas Emissions at Appendix A for further information.

5.8 Cultural & Historical Environment

Baseline

This section should describe the anthropological, archaeological and heritage values of the development area, including sites and objects of Aboriginal significance.

As a minimum, information should be provided on the following:

- Historical uses of the site (Aboriginal and non-Aboriginal);
- Current use by Aboriginal people and the local Aboriginal people's relationships to the land including cultural values;
- Descriptions of the cultural and/or historical values that could be impacted by the project. These should include:
 - Places nominated for listing or listed on the Register of the National Estate or the Interim list of the Register of the National Estate; and
 - Places nominated for listing or listed on the Commonwealth or National Heritage list;
- World Heritage listed areas, including Kakadu World Heritage Area.
- Nominated, proposed and declared heritage places and objects under the NT *Heritage Conservation Act 1991*;
- Prescribed archaeological and heritage places and objects under the NT *Heritage Conservation Act 1991*;
- Areas with special values to indigenous and non-indigenous people, e.g. traditional land use, landscape, visual environment, heritage, recreational, commercial, tourism, scientific or educational values;
- Areas of significance to the Aboriginal population and culture, including sacred sites within the meaning of the *Aboriginal Land Rights Northern Territory Act 1976* and the *Northern Territory Aboriginal Sacred Sites Act*;

- National Parks, conservation reserves or any other category of Territory Park or Reserve;
- Consultation arrangements and any agreements with Local Aboriginal Groups or the Northern Land Council (NLC) under the *Native Title Act 1993*; and
- Local society and regional centres.

For each of these cultural values, indicate: importance, conservation status, national and international treaty obligations, and clearance permits required or obtained.

The methodology by which these sites and areas were identified, and their importance assessed, should include survey details such as dates, consultants, survey area and methods.

This section of the PER should also include:

- Results of the inspection of the Register of Sacred Sites maintained by the Aboriginal Areas Protection Authority;
- Details of the application lodged with the Aboriginal Areas Protection Authority for an Authority Certificate within the meaning of Part 3, Division 1 of the Northern Territory *Aboriginal Sacred Sites Act*;
- A copy of the Certificate issued by the Authority as a result of that application containing conditions, if any, relating to the protection of sacred sites on, or in the vicinity of, the project area; and
- Status of any negotiations with native title claimants/NLC or other requirements under the *Native Title Act*.

Impacts

This section should describe the anticipated or potential impacts the project will have on each cultural or historical value indicated in the previous section. Consideration is to be given to the impact of the proposal on local Aboriginal employment levels and the influx of additional workers into local centres. Describe how these potential impacts are to be mitigated or managed.

5.9 Waste Management

- Identify and describe all sources of waste (note that waste rock issues are dealt with separately);
- Provide details of effluent disposal from the mine site; and
- Outline proposed waste dump locations and dimensions (discuss alternatives).

Management

Detail the safeguards, management and monitoring strategies that will be used to minimise impacts during development and operation of the mine, including:

- Waste management program including reuse, recycling, storage, transport and disposal;

- Details of any pollutants that are likely to be released into the environment and measures to prevent or minimise this release of pollutants;
- Management of listed waste as per the *Waste Management and Pollution Control Act*; and
- Management of hazardous materials such as chemicals, fuels, oils and explosives.

5.10 Traffic and Transport

Baseline

Describe the existing transport infrastructure at locations likely to be impacted by the project.

Impacts

- Describe how the project will, or has the potential to, impact on transport infrastructure during construction and operational phases. In addition, describe possible transport impacts as a result of the proposal including issues such as dust and road traffic noise.
- Identify anticipated utilization of existing transport services, especially the railway, and of the common-user infrastructure at the port.

Management

Describe proposed safeguards, management and monitoring strategies that will be implemented to minimise potential transport impacts during construction and operation including, but not limited to:

- Methods for complying with any relevant road vehicle axle limits;
- Methods for securing loads;
- Measures to prevent sediment transport off-site via transport vehicles including shakedown areas or properly controlled truck-wash facilities;
- Measures to reduce any road traffic noise impacts;
- Consultation with local communities affected by transport impacts;
- Traffic management; and
- Management of driver fatigue.

5.11 Socio-Economic

Baseline

Describe the socio-economic characteristics of the region as relevant to the proposal (including a prediction of trends over the expected operational life of the project)

Impacts

The section should present a balanced broad summary of the project's impact on the regional and Northern Territory economies in terms of direct effects on employment, income and production.

Describe the likely contribution of the project to the development of the mining industry, regional economic development and Indigenous economic development in the Northern Territory, with particular consideration given to:

- Estimating the quantity and value of production/exports;
- Estimating value of annual expenditure on regional goods and services
- Identifying the opportunities for local industry and Indigenous workforce participation in the construction and operation of the facility; and
- Identifying of impacts on existing land uses in the region.

It should specify:

- Estimated value of construction, highlighting the proportion to be spent in the Northern Territory and Pine Creek specifically;
- Estimate the value of annual expenditure on regional goods and services;
- Estimated the quantity and value of production/exports;
- Anticipated markets for products;
- An estimate of royalties and taxes to be paid to the Northern Territory Government and Traditional Owners;
- Opportunities for local industry and Indigenous workforce participation in the construction and operation of the facility;
- A breakdown of skills/trades required, including specific opportunities for skills development that may be of benefit to the local community, past the lifetime of the mine;
- Identification of opportunities for facilities and infrastructure development that may be of benefit to the local community, past the lifetime of the mine;
- Identification of negative impacts or potential synergies with existing land uses on Ban Ban Springs Station;
- A description of anticipated socio-economic impacts upon local residents, communities and towns; and
- Identification of the infrastructure, including housing, that would be required to accommodate employees in Pine Creek and how such infrastructure would be provided.

Management

- Outline how many potential local business and employment opportunities will be identified and communicated;
- Detail how potential local business and employment opportunities and opportunities for synergistic facilities and infrastructure development will be identified;
- Specify the mechanisms that will be utilised to inform local business community and workers of business and employment opportunities; and
- Detail the socio-economic indications that will be monitored on an ongoing basis.

5.12 Biting Insects

Biting insects need to be considered in the PER, the Environmental Management Plan and Closure Plan due to the potential of mine sites to create extensive breeding sites for mosquitos of pest and disease significance.

A detailed section in the PER that specifically deals with mosquitoes should include:

- A description of actual and potential mosquito breeding sites affecting the mine sites;
- A description of important mosquito species and likely abundance of important mosquito species at the mine sites;
- The potential of mosquito borne disease transmission at the mine sites;
- Measures that will be implemented to prevent the mine sties from introducing exotic dengue carrying mosquito species;
- Measures that will be taken to prevent the mine sites from introducing exotic dengue carrying mosquito species;
- Measures that will be taken to reduce the impact of mosquitos on mine personnel; and
- Rehabilitation procedures that will be implemented to ensure no artificially created mosquito breeding sites remain after cessation of operations.

A baseline Biting Insect Assessment should be conducted at the proposed mine site. Please refer to Appendix B for details.

Mining method and design needs to occur in a manner that prevents mosquito breeding. Please refer to the attached Guideline “Guidelines for Preventing Mosquito Breeding Sites associated with Mining Sites” at Appendix B.

6 HAZARDS AND RISKS TO HUMANS AND FACILITIES

The PER should include a preliminary hazard analysis and assessment of the risks to people, the environment and nearby facilities from potential accidents associated with the construction, operation and maintenance of the various components of the proposal, storage and transport of materials to and from the complex.

The preliminary hazard analysis and risk assessment should outline and take into account emergency plans that detail strategies, response procedures and staff responsibilities in the event of an emergency or accident. Issues such as floods, bush fires, lightning strikes, mine collapse and landslip should be considered. Contingency plans for dealing with spillage of any hazardous materials should be detailed. The risks in relation to open pit rescue should also be discussed.

The hazard and risk analysis should identify the critical areas that need to be addressed in management plans, monitoring programs, contingency and emergency plans. To demonstrate an understanding and ownership of issues, the comments on issues should be ranked in a hierarchy according to foreseeable effects, as distinct from making general responses or comments.

7 PROJECT ENVIRONMENTAL MANAGEMENT

BOPL’s current Environmental Management Plan (EMP) should be reviewed and expanded to include comprehensive information and management strategies relating

to North Point and Princess Louise. A draft EMP should be provided in a form suitable for inclusion in a Mining Management Plan as required under the *Mining Management Act*. The draft EMP should be strategic, describing a framework for environmental management. Where possible specific management policies, practices and procedures should be included in the draft EMP. A final EMP would be prepared at the conclusion of the assessment, taking into consideration comments on the PER and incorporating the Assessment Report recommendations.

The draft EMP should:

- Define the management structure of both the construction and operational phases and the relationship to the environmental management of the site;
- Describe the proposed measures to minimise adverse impacts and the effectiveness of these safeguards (e.g. provide performance indicators by which all anticipated and potential impacts can be measured);
- Describe monitoring to allow early detection of adverse impacts;
- Describe remedial action for any impacts that were not originally predicted;
- Detail how monitoring will be able to determine the differences between predicted and actual impacts;
- Include a summary table listing undertakings and commitments made in the PER, including performance indicators, with cross-references to the text of the report; and
- Provide for the periodic review of the management plan itself.

Reference should be made to relevant legislation and standards, and proposed arrangements for necessary approvals and permits should be noted. The agencies responsible for implementing and overseeing the management plan should be identified. Proposed reporting procedures on the implementation of the management plan, independent auditing or self auditing and reporting of accidents and incidents should also be described.

8 PUBLIC INVOLVEMENT AND CONSULTATION

Public involvement and the role of government organisations should be clearly identified. The outcomes of surveys, public meetings and liaison with interested groups should be discussed, and any resulting changes made to the proposal clearly identified. Details of any ongoing liaison should also be discussed including any negotiations with native title claimants.

Negotiations and discussions with local and community government, the Northern Territory Government and the Australian Government should be detailed, and any outcomes referenced. Details of any ongoing negotiations and discussion should also be presented.

9 INFORMATION SOURCES, REFERENCE LIST, BIBLIOGRAPHY

The PER should contain a comprehensive reference list or bibliography. Any source of information such as studies, research, maps and personal communications used in the preparation of the PER should be clearly identified, cited in the text and referenced in the bibliography.

10 APPENDICES, GLOSSARY

Information and data related to the PER, but unsuitable for inclusion in the main body of the statement, should be included as appendices. This may include detailed analyses, monitoring studies, baseline surveys, and raw data.

A glossary should be provided, defining the meaning of technical terms, abbreviations and colloquialisms. (Note: throughout the PER, technical terms and jargon should be minimised).

11 ADMINISTRATION

- At least one week prior to the PER being released for public exhibition, it should be submitted digitally to the Environment Protection Agency (EPA) Program. This version of the PER should be in Word.doc format (unsecured .pdf format may be suitable for images) on CD/DVD, so the PER can be placed on the Agency's Internet site and separated into chapters to facilitate easier internet access.
- ~ 20 copies of the PER should then be submitted to the EPA Program for distribution to NT Government advisory bodies (EPA Program will advise on exact numbers and formats).
- The PER should be publicly advertised for review and comment in the NT News, The Australian and the Katherine Times. The PER is to be made available for public comment for 28 days.
- The PER should be placed on public review at NRETA and the Department of Primary Industry, Fisheries and Mines offices in Darwin and Katherine, council offices and the NT Library, Parliament House, Darwin.
- The PER is to be provided to the:-
 - NT Environment Centre
 - Northern Land Council
- The EPA Program action office for this project is Sally-anne Strohmayer telephone (08) 8924 4123, facsimile (08) 8924 4053, email: sally-anne.strohmayer@nt.gov.au