

# Environmental Impact Statement Guidelines

MMG Ltd

*2-5 Dam TSF – Stage 3  
Embankment Raise  
Rosebery, Tasmania*

*February 2023*



ENVIRONMENT PROTECTION AUTHORITY

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## Information for the Proponent

### *Purpose of the Guidelines*

The *Environmental Management and Pollution Control Act 1994* (EMPCA) requires the Board of the Environment Protection Authority (the Board) to provide guidance to the proponent about what should be included in the case for assessment (the Environmental Impact Statement).

The Board will assess environmental aspects of the proposal. The relevant Planning Authority (Council) will assess planning aspects if the *Land Use Planning and Approvals Act 1993* (LUPAA) applies.

These Guidelines provide information on preparing an Environmental Impact Statement (EIS) for an activity being assessed by the Board under EMPCA. They have been prepared based on the Notice of Intent for the proposed 2-5 Dam Tailings Storage Facility (TSF) – Stage 3 Embankment Raise by MMG Ltd dated 20 December 2022.

Information solely for the purpose of assessment under the relevant Planning Scheme should be supplied to the Planning Authority either:

- as required under s54 of LUPAA, where the planning application has commenced the environmental assessment process; or
- where it is intended to submit an EIS (draft or final) with the planning application, a combined planning and environmental report can be prepared. However, the information required for the Board's assessment must be distinguished from that supplied for the purposes of LUPAA.

### **Risk Based Assessment**

The EIS should be prepared using a risk-based approach. Not all issues nominated in these guidelines will have the same degree of relevance to all proposed activities. Depending on the nature of the proposed activity and its location, some of the issues may be more relevant than others, and some may not be applicable at all. The level of detail provided on each issue should be appropriate to the level of significance of that environmental issue to the proposal.

As well as the issues identified in the guidelines, other significant matters may emerge during preparation of the EIS from environmental studies, public comments or other sources, which will need to be factored into the EIS. The assessment process may also change the understanding of the level of risk associated with some of the issues. This may in turn change the level of detail needed in the EIS to reflect the level of significance of that environmental issue to the proposal.

After the public consultation phase, additional information may be requested from the proponent in response to public and government agency submissions. This generally takes the form of a supplement to the EIS.

### *Objectives of the EIS*

The EIS should provide:

- Information for individuals and groups to gain an understanding of the proposal, the need for the proposal, the alternatives, the environment that it could affect, the positive and negative environmental impacts that may occur and the measures that will be taken to maximise positive outcomes, and minimise any adverse environmental impacts, including specific management measures.
- A basis for public consultation and informed comment on the proposal.

- A framework against which decision makers, particularly the Board, and sometimes the relevant Planning Authority, can consider the proposal and determine the conditions under which any approval might be given.
- A demonstration that the proposal is consistent with the objectives of the relevant laws and policies, including the Tasmanian Resource Management and Planning System (RMPS) and the Environmental Management and Pollution Control System (EMPCS).

### How the Board uses the EIS

The EIS is the basis on which the Board makes its assessment. The Board considers the EIS, as well as other relevant information, against the objectives of the RMPS and EMPCS objectives. These objectives focus on the concept of sustainable development, which requires consideration of the economic and social needs of people now and in the future, while sustaining the environment and avoiding or mitigating adverse effects. The Board will consider the objectives and endeavour to make the decision which best furthers them, when considered together. That decision may be to approve the proposal with conditions, or in some cases, the Board may decide the objectives cannot be upheld and the proposal is rejected.

### Structure and Formatting of the EIS

The following points should be considered when writing the EIS:

- The title page should include the proponent's name, the activity name, the proposal address or location, the EIS version number (where relevant) and the month and year of publication.
- The main text of the EIS should be written in a clear and concise style that is easily understood by the general reader.
- Assertions and assumptions should be supported by adequate argument and/or evidence, and evidence relied upon should be referenced.
- Technical terminology should be avoided as far as possible. The detailed technical data and supplementary reports necessary to support the main text should be included in appendices.
- All sources of information should be referenced and the style of referencing should be consistent throughout. An indication should also be given about how current the information is and how its reliability was tested. In particular, the degree of confidence attached to any predictions should be indicated.
- Where necessary, to enhance understanding of the proposal, information should be presented in maps, plans, diagrams and photographs. These must be of high quality and reproducible in monochrome with all text and relevant features clearly visible. Maps and plans should include a north arrow and scale.
- When spatial information (including maps, plans, grid coordinates and heights) are provided or referred to, the coordinate reference system must be specified. It is recommended that the following coordinate reference systems are used:
  - **Horizontal** – Geocentric Datum of Australia 2020, Map Grid of Australia Zone 55 (GDA94 MGA55)
  - **Vertical** – Australian Height Datum (Tasmania) (AHD83)

Information on coordinate reference systems used in Tasmania can be found on the NRE website ([Coordinate, Height and Tide Datums - Tasmania | Department of Natural Resources and Environment Tasmania](#)).

Please note that although the Geocentric Datum of Australia 2020 (GDA2020) is the new official datum for recording the horizontal location of spatial information in Australia, implementation of this new datum in Tasmania is not yet complete and the Geocentric Datum of Australia 1994 (GDA1994) remains in use.

- Any sensitive information should be provided in a separate, confidential appendix. A comment should be made in the EIS that the information has been provided in this way.
- Specific management measures must be clearly identified in the text and included in the summary table referred to in Section 9 of these Guidelines.
- Where appropriate, information provided in other sections should be referenced to minimise duplication.
- The EIS should contain a summary table showing compliance with the guidelines.

### **Submission of draft and final document**

Close consultation with EPA while preparing the EIS is recommended. It is advisable for the proponent to submit a draft EIS for review before it is finalised. Please note that a draft document may be rejected without detailed review if it is incomplete, contains significant formatting or typographical errors, or does not comply with the EIS Guidelines. More than one draft may be necessary before the document is considered suitable for public release.

The EIS is to be submitted in electronic format (such as Microsoft Word), and suitable for publishing on the internet (PDF format). Printed copies may also be required at public consultation stage.

Once the proposal is advertised for public comment, copies of the EIS must be made available to the public on request, in either printed or electronic format. The EIS will also be available on the EPA website.

### **Commonwealth environmental assessment**

#### **If not yet referred or determination under EPBC not yet made:**

In addition to Tasmanian requirements, the Commonwealth Government may also have a role in the environmental assessment and approval of the proposal.

Approval under the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* (EPBCA) is required for an action which has, will have, or is likely to have, a significant impact on a matter of national environmental significance or on Commonwealth land. The matters of national environmental significance are:

- World Heritage properties;
- National Heritage Places;
- wetlands of international importance (RAMSAR wetlands);
- nationally listed threatened species and communities;
- nationally listed migratory species;
- Commonwealth marine areas;
- nuclear actions; and
- large coal mines with water quality impacts.

Information on the EPBC Act can be obtained from the Commonwealth Department of Climate Change, Energy, the Environment and Water website at [www.dcceew.gov.au/environment/epbc](http://www.dcceew.gov.au/environment/epbc) or by calling 1800 803 772.

#### **False or misleading statements**

Under section 43A of EMPCA, the EIS must not include information that is known to be false or misleading; and nothing should be omitted if it is known that without it the EIS would be false or misleading.

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## Contents of the EIS

### Executive Summary

An executive summary of the EIS should be included to provide a clear and concise overview of the proposal, its environmental implications, the approvals process and the function of the EIS in the context of the approvals process.

For larger EISs, it is recommended that the executive summary be written as a stand-alone document, able to be provided on request to interested parties who may not wish to read or acquire the full EIS.

### Table of Contents

A table of the contents of the report with reference to the relevant page numbers. It should also contain a list of figures and tables.

### List of Abbreviations

A list of the abbreviations, acronyms and, if relevant, a glossary of terms used in the EIS.

## Key Issues to be addressed

While the EIS should evaluate all potential effects of the proposal, it should be principally focused on the key issues identified in the table below. The level of detail provided on other issues should be appropriate to the level of significance of that issue for the proposal. Variables or assumptions made in the assessment must be clearly stated and discussed. The extent to which the limitations, if any, of available information may influence the conclusions of the environmental assessment should be discussed.

The key issues identified for this proposal, which should be the focus of the EIS, are:

Key Issues	
1	<i>Potential impacts on air quality associated with the construction phase and the sub-aerial operation (and closure) of the tailings storage facility.</i>
2	<i>Potential impacts on water quality (surface, seepage and ground water) arising from the relocation of infrastructure and emissions released during the construction, operational and closure phases.</i>
3	<i>Potential impacts on flora and fauna and impacts to water quality from vegetation clearing for the borrow pits.</i>
4	<i>Potential noise impacts on sensitive receptors associated with the construction phase.</i>
5	<i>Tailings storage facility closure design and management of impacts post-closure.</i>

***It should be noted that other matters deemed to be significant or matters that emerge as significant from environmental studies, public comments or otherwise during preparation of the EIS, should not be excluded from consideration.***



## Information to be provided

### 1. Introduction

Provide information on the following:

- Title of the proposal.
- Proponent details:
  - Name of proponent (legal entity)
  - Name of proponent (trading name)
  - Registered address of proponent
  - Postal address of proponent
  - ABN number
  - ACN number (where relevant)
- Contact person's details:
  - Name
  - Telephone
  - Email address
- Activity operator details (if the operator will be a different entity to the proponent).
- General background information on the proponent, such as relevant development and operational experience.
- General background information on the proposal, including the current status of the proposal, an overview of the principal components of the proposal, the proposal location, anticipated establishment costs, likely markets for the product, and the possibilities for future expansion.
- An examination of how the proposal relates to any other proposals that have been or are being developed, or that have been approved in the region affected by the proposal.
- Environmental legislation, standards and guidelines that will be applicable (such as policies, regulations and industry codes of practice).
- Other relevant Commonwealth, State and Local Government policies, strategies and management plans with which the proposal would be expected to comply.

### 2. Proposal Description

Where the proposal is to be subject to a permit application under LUPAA, the proposal description and specification of the site must be consistent with the intended or current permit application. Any works or activity that are for the purpose of the proposal (e.g. access works) must be included.

Provide a full description of the proposal, including construction, commissioning, operational and decommissioning phases, as well as any infrastructure and off-site ancillary facilities required for the proposal.

A detailed description should be provided of key physical components of the proposal, including their function, composition, size, capacity, operational life, technical and performance requirements, inter-relationships and method of construction, operation and maintenance.

The information listed below should be provided.

## 2.1 General

- Describe the existing activity, and the current approvals or regulatory conditions.
- The major items of equipment (including pollution control equipment) and on-site facilities should be described. Detailed technical information on major items of equipment may be included in appendices.
- The construction and operational processes should be described in a step-by-step manner using explanatory diagrams and flow charts, where appropriate, to compliment the text.
- Raw materials required for the operation and closure of the proposal (including water) should be specified. Quantities and characteristics should be detailed.
- Details of the Stage 3 embankment design including measures to ensure geotechnical stability should be provided. Measures to manage seepage such as lining or grouting should be discussed.
- Any changes to the existing tailings delivery including discharge to the facility should be described.
- Any proposed changes to the existing seepage ponds, stormwater diversions and decant structure should be described.
- Detail any changes to the internal access road.
- Details of the location and extraction of any materials that form part of the proposal.
- Energy requirements for the proposal should be outlined and the means of meeting this demand described.
- Details of the total tailings capacity and yearly tailings deposition rates in tonnes should be provided.
- The hours of operation for the proposal (hours per day and specific days per week) including any seasonal variations.
- The volume, composition, origin, destination and route for vehicle movements (including road, rail, shipping and air) likely to be generated during each phase of the proposal, including a break-down for over-dimension and heavy road vehicles.

## 2.2 Construction

- A step-by-step description and timetable for significant activities during the construction phase of the proposal. Indicative timeframes for the completion of major steps, and the likely sequencing of steps.
- Details of any pre-construction works, including site preparation works, and any temporary or permanent removal of vegetation including for investigative surveys, stockpiling of vegetation, erosion control measures and the potential transport of pollutants (e.g. suspended solids) from areas of disturbance during construction.
- Details of any pre-clearance surveys to be carried out prior to commencement of construction, including flora and fauna and geotechnical studies.
- Estimates of the quantities of major raw materials required for construction (e.g. gravel, sand/aggregate and water) and how and where these will be sourced, i.e. on-site and/or off-site.
- Nature, capacity and location(s) of temporary construction equipment required on-site (such as cranes, concrete batch plants, construction camps).
- Volume, composition, origin, destination and route for vehicle movements likely to be generated during the construction phase, including a breakdown for over-dimension and heavy vehicles.
- Information on the number of construction workers required in the various stages of construction, sources of labour, transport of workers to and from the site, accommodation, and support servicing requirements.

- Proposed hours per day and days per week of construction activities.

## 2.3 Commissioning

A step-by-step description of major commissioning activities (if any) following installation of equipment. Indicative timeframes for the completion of major steps, and the likely sequencing of steps. The point at which commissioning will be considered completed should be described.

## 2.4 Definition of the Land

A definition of the land on which the activity will take place must be provided. The land can be defined by:

- Cadastral boundaries (Title Reference, Property ID)
- Lease boundaries (Mining Lease, Crown Lease, etc.)
- Topographic features (roads, waterways, etc.)
- Surveyed grid coordinates
- Other boundary types

If the land is defined as the whole of an existing defined boundary, such as a title reference or lease, the definition of the land is simply the title reference or lease name (e.g. Title Reference 136529/1 or Mining Lease 901 IP/M). If not, it may be necessary to define the boundary by reference to specific topographic features and or surveyed grid coordinates. The boundary must be consistent with any intended or current permit application under LUPAA.

A plan is required clearly showing the boundary of the land in relation to cadastral boundaries and topographic features. The boundary of the land should also be provided to the Board in a geospatial vector format (shapefile or DXF). If a boundary survey is required to adequately identify the land boundary this may be requested during the assessment process.

## 2.5 General location map

A general location map (e.g. 1:25,000 scale or better as appropriate) which identifies the following is required:

- The location of the proposal site
- Topographical features, aspect and direction of drainage
- Road access to and from the site
- Location of waterways and drains (including ephemeral)
- The distance(s) to any nearby sensitive uses (such as residences)
- Electricity transmission lines
- Boundaries of the property on which the proposal is located
- Surrounding land tenure
- Surrounding land use (identify areas of conservation or recreational significance)
- Surrounding land zoning in the local government planning scheme
- The location and extent of any attenuation areas identified in the planning scheme

## 2.6 Site plan

A site plan(s) is required which includes existing and proposed conditions and features of the site and surrounding area. Where relevant, this may include:

- Elevation contours and levels.

- The positions of topographic features including roads, tracks, waterways and drains.
- The positions of facilities, buildings, structures, major items of equipment, materials storage areas and loading or unloading areas (existing and proposed).
- The route of any pipelines, tracks, roads, conveyors or similar means of transporting on-site materials.
- The location of raw materials storage areas.
- The locations of temporary and permanent storage areas for fuels, oils, reagents and other hazardous goods or chemicals.
- The locations of stormwater collection systems and details of drainage control measures such as cut-off drains, sediment settling ponds, seepage collection infrastructure including location of all discharge points (stormwater or other).
- Details of any screening vegetation or bund walls.
- The location of loading or unloading areas.
- The location(s) of any monitoring sites for air, noise, surface and groundwater.

If the site plan is not based on a feature and level survey and the Board determines that this information is needed to adequately assess the proposal, one may be requested during the assessment process.

Geospatial data included on the plan(s) should also be provided to the Board in a geospatial vector format (shapefile or DXF).

## 2.7 Off-site infrastructure

Any new infrastructure or off-site ancillary facilities required to allow the proposal to proceed should be described (for example water supply, electricity supply, roads or other transport infrastructure).

## 3. Project Alternatives

The rationale for the particular project proposed should be described.

Describe the site selection process, including site selection criteria, alternative sites considered and an assessment of those alternatives, (including for the borrow areas). The assessment should compare alternatives according to clearly defined environmental, social, economic and technical considerations, and provide a justification for the preferred site. The effect that any community consultation undertaken had on the selection process should be detailed.

A critique of other available technologies and the reason for the selection of the preferred technology, including from an environmental perspective, should be included where relevant. Transparency around alternatives and the criteria on which decisions have been based is encouraged as it can lead to better outcomes.

For any part of the proposal where alternative technologies, materials, design options or management practices with different environmental consequences may exist, the alternatives should be identified, their environmental performance evaluated and the reason for the proposed choice justified.

Alternatives should have regard to best practice environmental management, including those measures listed under section 4(2) of EMPCA.

#### 4. Consultation

Details of the nature and results of public consultation undertaken (if any) by the proponent during project planning and preparation of the EIS, as well as any proposals for further public consultation during and beyond project implementation.

Early community engagement often leads to better outcomes for all and is strongly encouraged. The Board has produced a guide to community engagement which is available on the EPA website at: <http://epa.tas.gov.au/assessment/assessment-process/guidance-documents>

The following agencies provided comments on the Notice of Intent:

- NRE Conservation Assessments and Wildlife Management (CAS) - provided advice on issues related to biodiversity and natural values. This advice has been incorporated into Section 6.4 of these Guidelines.
- TasWater – noted the presence of the Stitt River Weir, which is the raw water off-take point for the Rosebery drinking water plant during the drier months of the year. Consideration of the potential impacts to drinking water quality associated with the proposal must be addressed, in particular, the impact of fugitive dust particles on the Australian Drinking Water Guideline limits for lead and mercury and the potential for acid mine drainage from the tailings storage facility on the water quality of the Stitt River upstream from the plant intake point. Potential impacts to the drinking water supply during construction, operation and closure of the tailings storage facility (and any future tailings re-processing processes) are required to be avoided or mitigated to ensure the supply of potable water to the Rosebery community. The potential impact of the proposal on the quality of the Rosebery water supply must be addressed as detailed in Section 6.2 of these Guidelines.
- Aboriginal Heritage Tasmania (AHT) - noted that an Aboriginal heritage assessment had been undertaken for the northern portion of the Area 2 proposed borrow pit, and that the southern section and all of Area 1 had not been subject to a survey. The assessment determined a low likelihood of heritage in the area and that any works should proceed in accordance with the recommendations of the heritage consultants.
- Mineral Resources Tasmania (MRT) - responded that a revised mine plan for the proposal and any borrow pits will be required. MRT confirmed that a works program had been issued to MMG for site investigations.
- West Coast Council (WCC) – advised a Development Application is required for assessment of the proposal under the *Land Use Planning and Approvals Act 1993*.
- TasNetworks – responded that the proposal was not considered to impact any TasNetworks assets.
- Parks and Wildlife Service (PWS) – requested the EIS reference Mount Murchison Regional Reserve, located approximately 1km east of the proposal, and its on-going integrity and protection, and for any potential impacts to the reserve values from contaminated water to be addressed.
- Water Management and Assessment Branch – advised that the dam safety requirements under the *Water Management Act 1999* will focus on the embankment design and stability at the site. The proposal is to be referred by the Board under S.165F of the *Water Management Act 1999*.

## 5. The Existing Environment

Describe the proposed site location and provide an overview of the existing environment, which may be affected by construction, and operation of the proposal, including areas associated with any ancillary activities.

Include details of salient features of the existing environment and, where appropriate, include maps, plans, photographs, diagrams or other descriptive detail.

### 5.1 Planning aspects

- If a permit is required for the proposal under LUPAA provide:
  - Use Class of the proposed activity under the applicable Planning Scheme.
  - Permissibility of the activity under the applicable Planning Scheme.
- Information on land tenure and property boundaries of the proposed site, with certificate of title details.
- Land zonings for the proposed site and surrounding areas.
- Any rights of way, easements and covenants affecting the site.
- Land use and planning history of the site, including the potential for site contamination<sup>1</sup>, present use and any existing buildings and significant structures.
- A description of land use and ownership in the vicinity of the site and those areas which may be affected by the proposal, including:
  - The location and nature of industrial facilities.
  - Any sensitive uses<sup>2</sup> or residential zones within applicable attenuation distances including the location of individual residences, schools, hospitals, caravan parks and similar sensitive uses, and the location of any tourist or recreation facilities or routes (such as camping areas, picnic areas, walking tracks, historic routes).
  - Any proposed or potentially sensitive uses within this distance of the proposal site, which have been or are likely to be granted approval under the local planning scheme, should also be considered.

### 5.2 Environmental aspects

- A description of the general physical characteristics of the site and surrounding area, including topography, local climate, geology, geomorphology, soils (including erodibility and acid sulphate soils), vegetation, fauna, groundwater and surface drainage (including waterways, lakes, wetlands, coastal areas etc).
- A description of natural processes of particular importance for the maintenance of the existing environment (e.g., fire, flooding, etc).
- Any existing conservation reserves located on or within 500 metres of the site.
- Any high-quality wilderness areas identified in the *Tasmanian Regional Forest Agreement* in the vicinity of the site.
- A description of the World and National Heritage values relevant to the action.

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<sup>1</sup> Information on potentially contaminating activities and contaminated site assessment can be found online at <http://epa.tas.gov.au/regulation/contaminated-sites>.

<sup>2</sup> Defined in the State Planning Provisions as 'a residential use or a use involving the presence of people for extended periods except in the course of their employment such as a caravan park, childcare centre, dwelling, hospital or school.'

- Information on species, sites or areas of landscape, aesthetic, wilderness, scientific or otherwise special conservation significance which may be affected by the proposal. Relevant information resources include the LIST ([www.thelist.tas.gov.au](http://www.thelist.tas.gov.au)) and the Natural Values Atlas (<https://www.naturalvaluesatlas.tas.gov.au>).
- An assessment of the vulnerability of the site to natural hazards (e.g. flooding, seismic activity, fire, landslips or strong winds).
- Any available ambient monitoring results for the vicinity of the proposed development (in tabular or graphical form). The results may be summarised (e.g. as annual averages) if the summary will provide adequate information.
- If the proposal is associated with an existing activity, information on current regulatory approvals and licences should be provided.

### 5.3 Socio-economic aspects

Briefly describe the existing social and economic environment that may be affected by the proposal, which may include information on the following:

- A summary of the social or demographic characteristics of the population living in the vicinity of the proposal site, identifying any special characteristics which may make people more sensitive to impacts from the proposal than might otherwise be expected.
- A summary of the characteristics of the local and regional economy.

## 6. Potential Impacts and their Management

### Guide to preparing this section

While some details of the proposal may not be finalised at the time the EIS is submitted, the information in the document should be as up to date as possible. Where information is unavailable or details have not yet been finalised, estimates and the range of alternative options should be provided. However, sufficient technical detail must be provided to enable an appropriate level of assessment. For each potential impact the following should be discussed.

#### **Existing conditions**

Outline the existing conditions relevant to the impact. In the case of a proposal which involves expansion or redevelopment of an existing activity, a summary of public complaints received in recent years and a discussion of the operator's response and how this may affect the current proposal.

#### **Performance requirements**

Identify the environmental performance requirements to be achieved for each environmental impact and provide evidence to demonstrate that these can be complied with. These may be standards or requirements specified in legislation, codes of practice, state policies, national guidelines or as determined by agreement with the assessing agencies. Industry best practice standards should be referred to where appropriate. **Unsupported assertions that performance requirements will be achieved will not be considered adequate.**

#### **Potential impacts**

Outline the potential environmental, social and economic impacts of the proposal (positive and negative) through all stages, including construction, operation and closure, in the absence of special control measures. Any foreseeable variations in impacts during the start-up and operational phases should be identified. Include an analysis of the significance of the relevant impacts.

**The level of detail provided on each issue should be appropriate to the level of significance of that environmental issue to the proposal.**

The evaluation of potential impacts should identify **plausible worst case consequences**, the vulnerability of the affected environment to the potential impacts, and the reversibility of the impacts. Potential cumulative impacts of this proposal in light of other activities underway or approved also need to be addressed. Interactions between biophysical, socio-economic and cultural impacts should be identified.

Predictions and evaluations of impacts should be based on scientifically supportable data (for existing operations this should include the results of monitoring of current emissions). The methodologies used or relied on should be referenced, together with the relevant research and investigations supporting them. Assumptions, simplifications and scientific judgements should be stated clearly, and the nature and magnitude of uncertainties should be clearly defined. Where relevant, the choice of a particular methodology over alternative methodologies should be explained. Where impacts are not quantifiable, they should be adequately described.

Where positive benefits are claimed it will generally be appropriate to explain what measures are to be taken to ensure that those positive outcomes are realised and sustained.

#### **Avoidance and mitigation measures**

Describe the measures proposed to avoid or mitigate potential adverse impacts (having regard to best practice environmental management as defined in EMPCA) in order to achieve the environmental performance requirements (such as through pollution control technology or



management practices). The extent to which they will overcome the anticipated impacts should be specified. Where there are clear, alternative avoidance or mitigation measures for a particular adverse environmental impact, the alternatives should be reviewed and the preferred option justified.

Where pollution control equipment and/or treatment processes are key factors in achieving satisfactory environmental performance, contingencies in the event of breakdown or malfunction of the equipment or processes should be discussed. It should be demonstrated that the maintenance of pollution control equipment can be provided for without causing performance requirements to be exceeded.

Where measures to control environmental impacts are necessary, but will not be undertaken by the proponent, the means by which the proponent will ensure that the necessary measures are implemented should be identified (e.g. lease conditions, trade waste agreement, contractual arrangement or other binding third party commitment). **Mitigation measures over which the proponent has no control will generally not be considered adequate.**

Specific measures can be presented in the form of a management plan, such as an Environmental Management Plan (EMP) that sets out the framework for management, mitigation and monitoring of relevant impacts of the action, including any provisions for independent environmental auditing. The EMP needs to address the project phases (construction, operation, decommission) separately.

### **Assessment of net impacts**

An assessment of the overall impacts of the development on the environment after allowing for the implementation of proposed avoidance and mitigation measures. This should include an evaluation of the significance of impacts, the potential for emissions to cause environmental and health impacts and comparison with current environmental conditions (for existing activities) and with state, national and international regulations and standards. Any net benefits likely to result from the proposal should be identified.

Discuss the impacts of the proposal in terms of the constraints or benefits it may place on the current or future use of land within the proposal site and surrounding area as a result of environmental impacts or emissions, including impacts on other uses, particularly sensitive uses.

### **Offsetting unavoidable adverse impacts**

If adverse residual environmental impacts from the proposal are considered unavoidable despite the adoption of best practice environmental management avoidance and mitigation measures, then proposals to offset such impacts should be detailed. For example, if the loss of conservation values, community assets or amenities is considered unavoidable, measures to compensate for those losses should be proposed in proportion to the loss. Any offset actions proposed must be demonstrated to be 'real' actions. That is, **the offset actions must have a measurable and relevant benefit which would otherwise not have occurred.**

## 6.1 Key Issue 1: Air Quality

The air quality assessment must detail potential impacts of the proposal on local air quality and provide evidence that the activity would not cause environmental nuisance or harm. The air quality assessment is required to:

- Identify and show on a site map the land boundary and all sensitive receptors that could potentially be affected by fugitive dust and particulate matter emissions from activities associated with the Stage 3 embankment raise and subsequent operation, especially during unfavourable meteorological conditions.
- Identify (on a site map) and characterise all possible sources of dust emissions from the site, including borrow pits Area 1 and 2. This includes but is not limited to dust generated from the disturbed topsoil/vegetation clearing, levelling/compacting, stockpiles, blasting, excavating, loading/unloading, and traffic movements on and off site.
- Provide details of the materials handled and equipment used on the site. Provide the location of the equipment.
- Discuss and assess the potential impact of fugitive dust and particulate matter emissions from the proposed activity on the environment and the likelihood for the activity to cause environmental nuisance or harm at or beyond the site boundary. Consider local terrain and meteorological conditions including annual rainfall, the direction and strength of prevailing winds, and land use in the vicinity of the activities.
- Use dispersion modelling results to demonstrate that the potential impact of fugitive dust and particulate emissions from the surface of the 2-5 Dam TSF augmented by the embankment raise would not cause environmental nuisance or harm. Consider how the changing climatology of the region (La Niña, El Niño) might affect the emissions of fugitive dust and particulate matter from the surface and detail what mitigation measures would be implemented if required.
- Describe any measures to reduce dust movement from the site, especially during unfavourable meteorological conditions. This may include but not be limited to watering or sealing roads, covering of truck loads, reduced vehicle speed, road surfacing/maintenance details, enclosures, water sprays, windbreaks, revegetation/stabilisation and closure cover design. Discussion of the ongoing requirement to provide an adequate water supply should be included.
- Describe potential upset or emergency conditions that may arise during construction or operation of the augmented dam and demonstrate that the air emissions from the site are not likely to cause environmental nuisance or harm.
- Provide analysis of the monitoring data collected at the current 2-5 Dam monitoring stations. Use the outcomes of the analysis to propose suitable sites for the location of monitoring stations for this project to facilitate the proper management of dust emissions and minimize the possibility of environmental nuisance or harm. Provide a dust monitoring plan for fugitive dust and particulate matter emissions at the 2-5 Dam site and the borrow pits during the construction activities and the operation phase.

### **Legislative and policy requirements**

Consideration should be given to the requirements of the Tasmanian *Environment Protection Policy (Air Quality)* (see <http://epa.tas.gov.au/policy-site/Pages/Air-Quality-EPP.aspx>) and any supplementary documents.

## 6.2 Key Issue 2: Water Quality (Surface and Discharge)

Discuss potential impacts of the proposal on surface water, including:

- A map of the location of all point sources of liquid emissions, identifying any proposed new point source liquid emissions (decant water, seepage and contaminated stormwater).
- Details of stormwater management (including during reasonably foreseeable flood events) including the location of any clean water diversion drains and sediment management structures. The potential for pollutants to become entrained in stormwater should be assessed.
- Describe the potential impacts of the activity on the receiving environment, with specific consideration of sediment and waterway disturbance, AMD, groundwater dependent ecosystems, environmental values and downstream water uses.
- Detail the potential impacts to the potable water supply for Rosebery, in particular the Stitt River Weir off-take and include consideration of the potential for very low levels of contaminated dust and acid mine drainage to impact compliance with the Australian Drinking Water Guidelines limits for drinking water.
- Describe the management measures that will be employed to control surface water and reduce the potential for erosion and sediment loss. Control measures include: minimisation of areas of disturbance; minimisation of stormwater ingress and sediment mobilisation through the use of perimeter drains, cut-off drains and bunding; sediment basins or stilling areas to capture entrained sediment; and swales, rock filters, wetlands or vegetated discharge zones to remove fine suspended sediment.
- Describe any other management measures proposed to minimise impact on waterways and aquatic values and include the footprint and engineering liner design of the relocated seepage collection pond.
- Provide the details of the proposed means of preventing or minimising leakage from the proposed raise into the environment and how any existing leaks will be captured and/or remedied.
- Describe the waterbodies and aquatic values on site and in the surrounding area, including relevant Protected Environmental Values as per the State Policy on Water Quality Management 1997: <https://epa.tas.gov.au/environment/water/pevs-for-tasmanian-surface-waters>. State the distance from the activity to the nearest waterbody.
- Identify and characterise any other liquid emissions which could arise from the proposal, including the management of liquid emissions released as part of the tailings storage facility drawdown process and any rock storage areas. Provide details of the nature of the effluent (estimated volume and characteristics), proposed treatment, monitoring (as relevant) and likely impact on the receiving environment (provide water quality data where available).
- Details of the location and proposed management of the borrow pit/s, particularly in relation to the sediment controls to manage total suspended solids and impacts to waterways associated with vegetation clearance and ground disturbance.

### Legislative and policy requirements

It must be demonstrated that the proposal is consistent with the objectives and requirements of relevant water management policies and legislation including the *Water Management Act 1999*, the *State Policy on Water Quality Management 1997*, and the *Tasmanian State Coastal Policy 1996*.

In particular, it must be demonstrated that the proposal will not prejudice the achievement of any water quality objectives set for water bodies under the *State Policy on Water Quality Management*

1997 (see <http://epa.tas.gov.au/policy-site/Pages/Water-Quality-Policy.aspx>). Where water quality objectives have not yet been set, EPA should be consulted to identify the baseline water quality data required to enable the water quality objectives to be determined.

### 6.3 Groundwater

Discuss potential impacts of the proposal on groundwater (quality and quantity), including:

- A report detailing the existing groundwater monitoring and modelling which includes all known bore logs for the monitoring bores.
- A conceptual site model which should identify sources, pathways, and receptors (including the town water supply) and any complete linkages between the three. Where a complete linkage exists, risk mitigation measures should be discussed.
- Details of the proposed groundwater monitoring activities (including the location of new bores) and a summary table of all bores with respect to the targeted aquifer (e.g. shallow [unconsolidated] or deep [consolidated] geological unit).

Information on groundwater in Tasmania is available at: <http://wrt.tas.gov.au/groundwater-info>

### 6.4 Key Issue 3: Biodiversity and Natural Values

Discuss impacts of the proposal on biodiversity and nature conservation values (terrestrial and aquatic) including:

- A Natural Values Assessment of all areas to be impacted by the proposal prepared by a suitably qualified person in accordance with the Guidelines for Natural Values Assessments: Survey Guidelines for Development Assessments | Department of Natural Resources and Environment Tasmania ([nre.tas.gov.au](http://nre.tas.gov.au)), including a map of existing vegetation and type and threatened flora and fauna species and associated habitat.
- In accordance with CAS recommendations, a Wedge-tailed Eagle (WTE) nest survey must be undertaken by a suitably qualified and experienced person to determine whether unknown (or potential habitat) exists within 1 km of the proposed works. WTEs are sensitive to disturbance during their breeding season, and it is generally recommended that activity within 500 m or 1 km line-of-sight of an active nest is avoided during the breeding season (July to January, inclusive). Searches for the presence of nests should be undertaken outside of the breeding season management constraint period (July to January, inclusive).
- Impacts on flora, vegetation communities and habitat, with particular reference to rare and threatened species, communities and habitats, including those listed under the relevant Schedules of the Commonwealth EPBCA and the Tasmanian Threatened Species Protection Act 1995.

CAS notes that some of the threatened flora recorded in the area are orchids or ephemeral species. Surveys should be undertaken at a suitable time to capture most of these species during their flowering season to aid identification. Information on optimal survey times is available for many species on the Threatened Species Link website:

<http://www.threatenedspecieslink.tas.gov.au/>.

- Impacts on fauna, including impacts on species, communities and habitats, with particular reference to rare and threatened species, migratory species, communities and habitats, including those listed under the relevant Schedules of the Commonwealth EPBCA and the

*Tasmanian Threatened Species Protection Act 1995.* Assessment of impacts should not be limited to clearing or disturbance and may include noise, lights, vehicle movements etc.

- Impacts on identified areas or habitats of conservation significance, including designated conservation areas, areas relating to the requirements of international treaties (e.g. Japan-Australia and China-Australia Migratory Bird Agreements (JAMBA/CAMBA) and Ramsar (wetlands) Convention), or wetlands listed in A Directory of Important Wetlands in Australia.
- Identify any freshwater ecosystems of high conservation management priority using the Conservation of Freshwater Ecosystem Values (CFEV) database (accessible on the internet under <https://wrt.tas.gov.au/cfev>). The scope of investigation should encompass the vicinity of the proposed development where there is likelihood of alteration to the existing environment. The specific CFEV information used for EISs should be Conservation Management Priority Potential which is appropriate for development proposals.
- Impacts on sites of geoconservation significance or natural processes (such as fluvial features), including sites of geoconservation significance listed on the Tasmanian Geoconservation Database.
- Impacts on existing conservation reserves which may be affected by the proposal, with reference to the management objectives of the reserve(s) and the reserve management plan(s) (if any).
- Impacts on any high-quality wilderness areas identified in the Tasmanian Regional Forest Agreement (Tasmanian RFA) which may be affected by the proposal.
- Impacts on other species, sites or areas of special conservation significance, including areas of wilderness, scientific, or geodiversity value.
- Clearing of native vegetation and habitat associated with the construction and maintenance of the proposal and the impact of any clearing on sites, species or ecological communities of special conservation significance, including any impact on the:
  - comprehensive, adequate and representative reserve system identified as part of the Tasmanian RFA;
  - maintenance of forest communities under the [Permanent Native Forest Estate Policy](#);
  - wildlife habitat strips under the *Tasmanian Forest Practices Code 2015* (<http://www.fpa.tas.gov.au>); and
  - non-forest communities.
- The potential for migration and/or introduction of pests, weeds and plant and animal diseases as a result of the proposal.
- Where impacts cannot be avoided, proposed measures to mitigate and/or compensate adverse impacts on biodiversity and nature conservation values should be presented.
- Describe the rehabilitation of disturbed areas following the completion of construction activities and cessation of the activity, including any proposed seed collection.

Advice from CAS is that if any listed threatened flora species are identified and will be impacted by the proposed development, a permit to take under the TSPA will be required. The processing of permit applications may take up to four weeks. Information on applying for a permit, including application forms, can be found on the NRE Tas website: [Permit to Take Threatened Species \(for Consultants & Development-related Activities\) | Department of Natural Resources and Environment Tasmania \(nre.tas.gov.au\)](#).

### **Requirements for surveys**

Any flora and fauna surveys must, as a minimum, comply with the requirements of the document [Guidelines for Natural Values Assessments](#) published by the Department of Natural Resources and Environment (NRE). The methodology for surveys should be developed in consultation with the Department.

## 6.5 Key Issue 4: Noise emissions

Provide a noise impact assessment report covering the following:

- Identify and describe all major noise sources associated with the proposed activities that will be operated during the daytime, evening and night-time periods.
- A map of the location of all major sources (mobile and fixed) of noise.
- A map showing the location of the nearest noise sensitive premises<sup>[1]</sup>.
- Predict noise emissions from the proposed activities at the nearest sensitive premises;
- Predict cumulative noise emissions from the existing and proposed activities at the nearest sensitive premises.
- Discuss the potential for noise generated during the construction and operational phases to impact the surrounding environment.
- A description of noise attenuation measures that will be implemented.
- Provide details of the need for blasting, the expected number of blasts per year and the notional blast plan, including:
  - Results of ground vibration modelling to predict peak particle velocity contours out to 1mm/s;
  - Results of airblast overpressure modelling to predict dB (lin) level contours out to 100 dB(lin).
- Discuss the proposed noise and vibration management plan to minimise impact and to address noise/vibration related complains.

### *Legislative and policy requirements*

Consideration should be given to the requirements of the Tasmanian *Environment Protection Policy (Noise) 2009* (see <https://epa.tas.gov.au/policy/statutory-policies/state-policies-and-environment-protection-policies/environment-protection-policy-%28noise%29-2009>).

## 6.6 Key Issue 5: Tailings storage facility closure

It is noted that due to engineering limitations, the proposed Stage 3 embankment raise is contingent on subaerial deposition of tailings during Stage 2. It is also noted that a change in operations to subaerial tailings deposition for Stage 2 is currently before the Board of the EPA for assessment.

It is further understood that due to engineering limitations, the final closure mode for Stage 3 cannot be a permanent 2m water cover. The EIS must describe the risks and benefits of the

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<sup>[1]</sup> 'noise sensitive premise' is defined as: residences and residential zones (whether occupied or not), schools, hospitals, caravan parks and similar land uses involving the presence of individual people for extended periods, except in the course of their employment or for recreation.

proposed final closure system, and also an on-going, staged approach to closure both during operations and once deposition of tailings to the TSF has ended. The EIS must also address unanticipated early closure.

A conceptual closure plan must be provided. The plan must reference the results of any closure prefeasibility studies and include the following details:

- Identification of objectives and criteria for closure.
- Details of the proposed final closure strategy/ strategies for the TSF, including details of any drawdown scenarios, mechanisms to reduce the long-term potential for AMD formation and emissions, and any ongoing water quality management requirements.
- Details of strategies to manage the facility in the event of unanticipated early closure including drawdown, mechanisms to reduce the long-term potential for AMD formation and emissions, and any ongoing water quality management requirements.
- An environmental risk analysis comparing the previously proposed 2-5 Dam TFS Stage 2 subaqueous cover and the alternative cover system proposed for Stage 3 final closure. The risk-based analysis must evaluate the geochemical and geotechnical aspects of closure and include the following:
  - expected pollutants formed within the TSF,
  - the rate and quality of pollutants released from the TSF (surface water, groundwater and seepage) post closure,
  - the structural integrity of the TSF,
  - ongoing maintenance requirements post closure; and
  - any other risks identified for TSF closure.
- An independent third-party peer review of the environmental risk analysis is required. The review must be undertaken by a suitably qualified person/s, approved by the Director, EPA.
- Details of the approximate quantities, types and sources of any cover materials required for TSF closure including clays, gravels, rock, organic materials or synthetic low permeability barriers.
- Outline vegetation types for the post closure landform and how the cover conceptual design(s) encourage the desired vegetation.
- A preliminary post closure water balance to demonstrate that proposed closure strategies are achievable. A range of climatic scenarios should be considered referencing appropriate data from <https://www.climatechangeinaustralia.gov.au/en/>
- Details of the proposed final landform to support the post mining land use. Geotechnical stability of the structure in perpetuity must be considered.
- Details of monitoring and maintenance required to ensure the long-term performance and integrity of the rehabilitated structure.
- Provision of cost estimates to effectively close the TSF. Both unanticipated and planned closure scenarios must be costed.

## 6.7 Waste Management

Discuss the impacts of waste generated by the proposal, including:

- Identify the source, nature and quantities of all wastes, (liquid, atmospheric or solid) including general refuse and by-products from the various stages of the process likely to be generated.
- Methods and facilities proposed to collect, store, reuse, treat or dispose of each waste stream should be identified. Maintenance requirements should be included.
- The source, nature, quantity, and method of treatment, storage and disposal for each controlled waste should be described. Note: controlled waste is defined in EMPCA and associated regulations. A non-exhaustive listing of categories of controlled waste can be found on the internet at <https://epa.tas.gov.au/business-industry/regulation/waste-management/controlled-waste/controlled-waste-category-codes> .

### *Legislative and policy requirements*

Waste management measures must be in accordance with the following hierarchy of waste management, arranged in decreasing order of desirability:

- avoidance
- recycling/reclamation
- re-use
- treatment to reduce potentially adverse impacts
- disposal

## 6.8 Dangerous goods and environmentally hazardous materials

Discuss impacts of the proposal in relation to dangerous goods and environmentally hazardous materials (any substance or mixture of substances of a nature or held in quantities which present a reasonably foreseeable risk of causing serious or material environmental harm if released to the environment and includes fuels, oils, waste and chemicals), including:

- The nature, quantity and storage location of all environmentally hazardous materials including Dangerous Goods (as defined in the Australian Code for the Transport of Dangerous Goods by Road and Rail) that will be used during the construction and operation of the proposal.
- A map showing the location of temporary and permanent storage areas for fuels, oils, and other dangerous goods or chemicals.
- The measures (such as bunded areas or spill trays) to be adopted to prevent or control any accidental releases of dangerous goods and environmentally hazardous materials.
- Contingency plans for when control measures, equipment breakdowns or accidental releases to the environment occur, including proposed emergency and clean-up measures and notification procedures.
- Identify any safety management requirements for the protection of human health and safety affecting the community.

## 6.9 Greenhouse gases, ozone depleting substances and climate change

For proposals with the potential for significant release of greenhouse gas emissions or the release of ozone depleting substances, discuss impacts of the proposal in relation to Greenhouse Gases and ozone depleting substances including:



- A description of the direct and indirect effects of the proposal on greenhouse gas production and ozone depleting substances and any greenhouse benefits of the proposal discussed.
- Demonstration that the development will implement cost-effective greenhouse best practice measures to achieve on going minimisation of greenhouse gas emissions.
- Provision of a competent estimate for ‘whole of life’ greenhouse gas emissions for the proposed development. Details should also be provided of proposed measures to minimise emissions and the anticipated effectiveness of these measures. Where less emissions-intensive options are not adopted, justification should be provided and/or mechanisms to offset greenhouse gas emissions identified.
- Describe the potential impacts of climate change upon the proposal. For example, it may be appropriate to plan for more intense storm events, more severe fire weather, long-term sea level rise, etc.

### **Legislative and policy requirements**

Discuss impacts of the proposal in terms of the evolving national response to climate change and greenhouse gas emissions and the targets set in the Climate Change Action Plan 2017 – 2021. Proponents will need to determine whether they are required to report to the Commonwealth under the *National Greenhouse and Energy Reporting Act 2007*.

### **6.10 Socio-economic issues**

Discuss the social and economic impacts of the proposal. Details may include the following:

- An estimate of total capital investment for the proposal and where that capital will be expended (particularly in relation to the source of large capital items of processing equipment).
- Operational expenditures and revenues.
- The impacts on local and State labour markets for both the construction and operational phases of the proposal. The number and nature of direct and indirect jobs arising from the proposal must be detailed. Skills and training opportunities should also be discussed.
- The impacts on upstream/downstream industries, both locally and for the State.
- The extent to which raw materials, equipment, goods and services will be sourced locally.
- A qualitative assessment of impacts on local social amenity and community infrastructure, including recreational, cultural, health and sporting facilities and services. Any proposals to enhance or provide additional community services or facilities should be described.
- Community demographic impacts (changes to cultural background, occupation, incomes).
- Impacts on land values, and demand for land and housing.
- Impacts on the local, regional, state and national economies.
- Any publicly funded subsidies or services to be relied upon for the construction or operation of the proposal.
- Any impacts on Local, State and Federal Government rate, taxation and royalty revenues.

**The extent to which socio-economic considerations need to be described depends on the nature and extent of any negative impacts or risks to the environment from the proposal.**

Modest proposals with relatively low level and localised environmental impacts or risks may only need details of intended capital expenditure, operational expenditures, revenues and employment (distinguishing between direct and indirect employment) and a qualitative discussion of other socio-economic aspects of particular relevance.

Proposals with higher level or broader scale environmental impacts will need a more comprehensive analysis of economic and social benefits to allow the Board to assess the benefits and adverse impacts of the proposal. This may include an explanation of the methods used to model impacts and describe the manner and results of engagement with the local community to determine their needs and aspirations in relation to the proposal.

### **6.11 Fire risk**

Discuss the potential fire risk associated with the proposal, including:

- Consideration of fire within the site, fire escaping from the site and the impact of wildfire originating outside the development and the environmental impacts that could result from such an event.
- The objectives and management principles to be adopted to prevent and respond to potential fire events.
- Where a fire response plan is appropriate, it should be fully integrated with other relevant documents, such as a Tasmania Fire Service Local Area Fire Management Plan, a Forestry Tasmania Fire Management Plan and a Parks and Wildlife Service Fire Action Plan for relevant districts.

### **6.12 Infrastructure and off-site ancillary facilities**

Discuss potential environmental impacts of the proposal on any significant off-site or infrastructure facilities (including increased use of existing infrastructure, such as roads, ports and quarries), identify measures to avoid and mitigate any possible adverse impacts and assess the overall impacts following implementation of the proposed avoidance and mitigation measures.

Identify roads and other infrastructure to be used by vehicles for the proposal (during both construction and operation). Potential environmental impacts associated with construction and use of such infrastructure should be assessed.

### **6.13 Cumulative and interactive impacts**

Where relevant, this section should contain an assessment of the potential cumulative impacts of the proposal in the context of existing and approved developments in the region, if such impacts have not been addressed in previous sections.

Other proposals which have been formally proposed, and for which there is sufficient information available to the proponent to allow a meaningful assessment of their impacts, should also be considered in that assessment. Uncertainties about potential impacts in such cases should be identified.

Interactions between biophysical, socio-economic and cultural impacts of the proposal should be discussed.

## 6.14 Environmental Impacts of Traffic

This section should identify the traffic routes for the proposal (both during construction and operation) and the likely volume and nature of traffic and timing of traffic flows, including details of the current usage of these roads. Environmental impacts associated with current and altered traffic flows and usage should be discussed (such as noise and dust impacts on other roads users and residences adjacent to roads). The assessment should focus on roads within the land defined by the proposal but also indirect impacts on public roads.

## 7. Monitoring and Review

This section should provide an outline of any monitoring, review and reporting programmes for the proposal. The programme should be designed to meet the following objectives:

- Monitoring of compliance with emission standards and other performance requirements identified in the EIS.
- Assessing the effectiveness of the performance requirements and environmental safeguards in achieving environmental quality objectives.
- Assessing the extent to which the predictions of environmental impacts in the EIS have eventuated.
- Assessing compliance with management measures defined in the EIS.

A map showing the location of all monitoring sites and a table of proposed monitoring including location, parameters and frequency should be included.

## 8. Decommissioning and Rehabilitation

The EIS should describe an on-going, staged approach to site decommissioning and rehabilitation throughout the proposal life.

A preliminary Decommissioning and Rehabilitation Plan should be outlined.

## 9. Management Measures

This section should contain a consolidated management measures table listing all of the management measures made throughout the EIS. Measures must be sequentially numbered, unambiguous statements of intent. For each measure, the table must specify when it is to be implemented and refer to the section of the EIS where the measure is detailed.

## 10. Conclusion

Describe the proposal and draw together the critical environmental, social and economic impacts of the proposal, both positive and negative; present a balanced overview of the net impacts of the proposal, and the extent to which any adverse impacts can be satisfactorily avoided, mitigated, remediated or compensated and positive impacts promoted and sustained. The conclusion should also describe how the proposal meets and furthers the objectives of relevant Commonwealth and State legislation, policies, plans and strategies. This should be done by itemising the RMPS and

EMPCS objectives and providing a commentary about how the proposal addresses each of the objectives.

## 11. References

This section should provide details of authorities consulted, reference documents etc.

## 12. Appendices

As a means of improving readability of the EIS document, detailed technical information which supports the EIS should be included in appendices. The salient features of the appendices should be included in the main body of the EIS. Care should be taken to avoid inconsistencies between technical content of Appendices and the EIS itself, unless carefully explained.

## 13. Glossary

AMD	Acid Mine Drainage
CFEV	Conservation of Freshwater Ecosystem Values
EIS	Environmental Impact Statement
EMPCA	<i>Environmental Management and Pollution Control Act 1994</i>
EMPCS	Environmental Management and Pollution Control System objectives to be found in Schedule 1 of EMPCA
EPBCA	<i>Environment Protection and Biodiversity Conservation Act 1999 (Cth)</i>
LUPAA	<i>Land Use Planning and Approvals Act 1993</i>
RMPS	Resource Management and Planning System of Tasmania objectives to be found in Schedule 1 of EMPCA
Tasmanian RFA	Tasmanian Regional Forest Agreement
TFS	Tailing Storage Facility



## Appendix A: Other issues and agency contacts

In addition to a permit under the LUPAA and the EMPCA, there may be other legal requirements to allow your proposal to proceed. These may include other permits, licences or landowner consent. You may also need to contact other Government agencies to obtain information for the purpose of assessment under the LUPAA or the EMPCA.

Your proposal may have been referred to other agencies in the process of preparing Guidelines. Should assessments or approval outside of the Board's responsibilities be required, you should engage with the respective agency to progress them. The following list identifies some of the key agencies you may need to contact.

### **Conservation Assessments**, Department of Natural Resources and Environment Tasmania

Telephone: (03) 6165 4396

Email: [conservationassessments@nre.tas.gov.au](mailto:conservationassessments@nre.tas.gov.au)

Website: [www.nre.tas.gov.au/conservation](http://www.nre.tas.gov.au/conservation)

Purpose: Natural values including flora, fauna, and geoconservation values, or permits to deal with threatened species.

### **Heritage Tasmania**

Telephone: (03) 6165 3700

Email: [enquiries@heritage.tas.gov.au](mailto:enquiries@heritage.tas.gov.au)

Website: [www.heritage.tas.gov.au](http://www.heritage.tas.gov.au)

Purpose: Historic cultural heritage, including State-level site listings, impacts and permits as required under the Historic Cultural Heritage Act 1995. Where works are proposed in or in close proximity to a heritage place entered on the Tasmanian Heritage Register or likely to be of heritage significance to the whole of Tasmania, and a permit is required under the *Land Use Planning and Approvals Act 1993*, the proposal will be referred to Heritage Tasmania by the planning authority. There may also be additional sites listed under local planning schemes, impacts on which are assessed by the relevant planning authority.

### **Aboriginal Heritage Tasmania**

Telephone: 1300 487 045

Email: [aboriginal@dpac.tas.gov.au](mailto:aboriginal@dpac.tas.gov.au)

Website: [www.aboriginalheritage.tas.gov.au](http://www.aboriginalheritage.tas.gov.au)

Purpose: Aboriginal heritage, including desktop assessment, artefact survey requirements, permits and advice.

### **Parks and Wildlife Service**

Telephone: (03) 6169 9015

Email: [PropertyServices@parks.tas.gov.au](mailto:PropertyServices@parks.tas.gov.au)

Website: [www.parks.tas.gov.au](http://www.parks.tas.gov.au)

Purpose: Impacts on parks and reserves managed by Parks and Wildlife, or Crown Land.

### **Department of State Growth**

Telephone: (03) 6166 3369

Email: [permits@stategrowth.tas.gov.au](mailto:permits@stategrowth.tas.gov.au)

Website: [www.transport.tas.gov.au](http://www.transport.tas.gov.au)

Purpose: State roads, including where any proposal requires works on or access from a State-managed road.

### **Mineral Resources Tasmania**

Telephone: 03 6165 4800

Email: [info@mrt.tas.gov.au](mailto:info@mrt.tas.gov.au)

Website: [www.mrt.tas.gov.au](http://www.mrt.tas.gov.au)

Purpose: Mining leases

### **Agriculture and Water, Department of Natural Resources and Environment Tasmania**

Telephone: (03) 6165 3222

Email: [Water.Enquiries@dpipwe.tas.gov.au](mailto:Water.Enquiries@dpipwe.tas.gov.au)

Website: [www.dpipwe.tas.gov.au/water](http://www.dpipwe.tas.gov.au/water)

Purpose: Water licences and works impacting natural waterway flow (e.g., dams or fords).



ENVIRONMENT PROTECTION AUTHORITY