

Guidelines for preparing  
an Environmental Impact  
Statement for  
*Asphalt Batch Production  
Increase*  
Asphalt Suppliers Pty Ltd

*October 2021*



ENVIRONMENT PROTECTION AUTHORITY

## Contents

Information for the Proponent.....	1
Contents of the EIS.....	1
Executive Summary .....	1
Table of Contents.....	1
List of Abbreviations .....	1
Key Issues to be addressed.....	2
Information to be provided .....	2
1. Introduction .....	2
2. Proposal Description .....	3
General note.....	3
2.1 General .....	3
2.2 Construction .....	3
2.3 Commissioning.....	4
2.4 Definition of the Land .....	4
2.5 General location map .....	4
2.6 Site plan.....	5
2.7 Off-site infrastructure.....	5
3. Project Alternatives .....	5
4. Consultation .....	6
5. The Existing Environment.....	6
5.1 Planning aspects.....	6
5.2 Environmental aspects .....	7
5.3 Socio-economic aspects.....	7
6. Potential Impacts and their Management .....	8
6.1 Key Issue 1: Air Quality .....	10
6.2 Key Issue 2: Noise emissions.....	11
6.3 Greenhouse gases emissions and climate change.....	12
6.4 Water quality and stormwater .....	12
6.5 Waste Management .....	13
6.6 Dangerous goods and environmentally hazardous materials.....	13
6.7 Biodiversity and Natural Values.....	14
6.8 Marine and Coastal .....	14
6.9 Socio-economic issues.....	15
6.10 Environmental Impacts of Traffic .....	15
7. Monitoring and Review.....	16
8. Decommissioning and Rehabilitation.....	16
9. Management Measures.....	16
10. Conclusion.....	16

11. References .....	16
12. Appendices.....	16
13. Glossary .....	16
Appendix A: Other issues and agency contacts .....	18

## Information for the Proponent

### Purpose

The *Environmental Management and Pollution Control Act 1994* (the EMPC Act) 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 where the *Land Use Planning and Approvals Act 1993* (the LUPA Act) applies. The Board has authorised EPA Tasmania to undertake administrative tasks and establish the information base to inform decision making on its behalf.

These guidelines provide information on preparing an Environmental Impact Statement (EIS) for an activity being assessed by the Board under the EMPC Act. They have been prepared based on the permit application (DA2021258) for the proposed increase of annual production limit at asphalt production Facility by Asphalt Suppliers Pty Ltd.

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 the LUPA Act, 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 LUPA Act.

### **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 using a consistent style 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 photos. 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 DPIPWE website (<https://dipwwe.tas.gov.au/land-tasmania/geospatial-infrastructure-surveying/geodetic-survey/coordinate-height-and-tide-datums-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 Tasmania while preparing the EIS is recommended. It is advisable for the proponent to submit a draft EIS to EPA Tasmania 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* (EPBC Act) 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 Environment and Energy's website at [www.environment.gov.au/epbc/](http://www.environment.gov.au/epbc/) or by calling 1800 803 772.

The Commonwealth and Tasmanian Governments have signed a bilateral agreement relating to environmental impact assessment under section 45 of the EPBC Act, which effectively accredits the State assessment process. Where the proposal has been determined to be a controlled action under the EPBC Act and is being assessed in accordance with the bilateral agreement, the EIS should specifically describe the implications of the proposal for the relevant EPBC Act controlling provisions.

If the proposal is being assessed under the bilateral agreement, the EIS should contain a summary table showing that it addresses the matters specified in Schedule 4 of the Commonwealth [Environment Protection and Biodiversity Conservation Regulations 2000](#).

***False or misleading statements***

Under section 43A of the EMPC Act, 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 primarily focus on the key issues identified in the table below. The level of detail provided on other issues should be appropriate to their level of significance for the proposal. Variables or assumptions made in the assessment must be clearly stated and discussed. The extent to which any limitations of the available information may influence the conclusions of the environmental assessment should be discussed.

The key issues identified for this proposal are:

Key Issues	
1	<i>Potential impacts on air quality associated with operation of the proposal.</i>
2	<i>Potential noise impacts associated with operation of the proposal on noise sensitive premises.</i>

**Other matters considered significant or matters that emerge from environmental studies, public comments or otherwise during the course of the preparation of the EIS should not be excluded from consideration.**

## Information to be provided

### I. 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

### General note

Where the proposal is to be subject to a permit application under the LUPA Act, the proposal description and specification of the site must be consistent with the permit application. Any works or activities 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

- 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 industrial/extractive process 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 of the proposal (including water) should be specified. Quantities and characteristics should be detailed.
- Energy requirements for the proposal should be outlined and the means of meeting this demand described.
- Details of production capacity and production rates for relevant processes including peak rates, daily average rates and annual production rates.
- The hours of operation for the proposal (hours per day and specific days per week) including any seasonal variations. Include a discussion about out of hours operations which have occurred previously and are likely to occur in the future.
- 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.
- If the proposal is associated with an existing activity, describe any current approvals or regulatory conditions.

### 2.2 Construction

If any physical works are required for the proposal, provide the following information:

- 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, 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 before starting 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**

If any commissioning is required for the proposal, provide a step-by-step description of major commissioning activities following installation of equipment with timeframes. Describe the point at which commissioning will be considered completed.

### **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, Marine Farming 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 the LUPA Act.

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

## 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, 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 and sediment settling ponds, 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.

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

Describe any new infrastructure or off-site ancillary facilities required to allow the proposal to proceed (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. 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 the EMPC Act.

#### **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>

#### **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.

The following details should be included.

##### **5.1 Planning aspects**

- If a permit is required for the proposal under the LUPA Act 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.

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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>.

- 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.
- 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.

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<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.'

## 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

Discuss potential impacts of the proposal on the local and regional air environment. As a minimum, this should:

- Identify and describe all possible sources of emissions to air (i.e. point and fugitive emission sources such as raw materials, the production plant, storage of product, heating/mixing of bituminous materials, loading of trucks and transport of materials) from the existing and upgraded activity. Describe emission sources associated with the proposed upgrading process. Show the location of all sources on the site plan or another plan.
- For each source discuss the likely composition of emissions to the atmosphere. For each source provide estimate of emission rates at maximum production level and the times of the day when the emissions occur.
- Provide an assessment of the potential for emissions to air from the different stages of the upgraded production process (including preparation, storage of raw material and handling the product) to cause environmental nuisance or harm. Worst-case scenarios and upset conditions should be included. The assessment should contain information about time (of the day), duration, frequency and potential impact of air emissions from the facility in order to establish suitable parameters for use in atmospheric dispersion modelling.
- Undertake atmospheric dispersion modelling to assess the potential impacts of air emissions relative to the requirements of the [Environment Protection Policy \(Air Quality\) 2004](#)<sup>3</sup>. Modelling should be conducted in accordance with the EPA's [Atmospheric Dispersion Modelling Guidelines](#)<sup>4</sup> by a suitably qualified specialist. It is strongly recommended that the scope and method of atmospheric dispersion modelling be discussed with the EPA's Air Modelling Officer prior to commencement of modelling. Some input data used in the previous modelling may not be suitable and would need to be updated for the new modelling. It is noted that the previous modelling conducted in 2009 used the AUSPLUME model and meteorology for Devonport for 2002 and indicated that the site would not be compliant with Schedule 3 of the *Environmental Protection Policy (Air Quality) 2004*.
- Identify and discuss measures to mitigate any potential impacts on sensitive receptors that may result from the operation of the plant including worst-case scenarios and upset conditions.
- Demonstrate application of Accepted Modern Technology (AMT) for reduction of unavoidable emissions. All emission management measures to be employed should be described in detail.
- Provide a history of any complaints related to the operation of the existing facility received in the last 5 years and the likely causes

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<sup>3</sup> Available at [https://epa.tas.gov.au/Documents/EPP\\_Air\\_Quality\\_2004.pdf](https://epa.tas.gov.au/Documents/EPP_Air_Quality_2004.pdf)

<sup>4</sup> Available at <https://epa.tas.gov.au/Documents/Atmospheric%20Dispersion%20Modelling%20Guidelines.pdf>

## 6.2 Key Issue 2: Noise emissions

Discuss impacts of the proposal on background (surrounding) noise levels during the operational phases. As a minimum, this should:

- Identify and describe all major sources of noise.
- Provide a map of the location of all major sources of noise.
- Provide details of any mobile equipment associated with the proposed development.
- Describe potential impacts from noise generated by the new activity. Consider and discuss the need or otherwise for detailed technical review.
- Identify and discuss any historic exceedances of the existing noise emission limits for the activity.
- Identify and discuss any mitigation measures for noise emissions from the existing and new activity
- Demonstrate that the cumulative noise impact from existing and proposed activities (proposed increase in production limit) will not exceed the existing noise emission limits for the activity.
- Consider the potential for noise emissions during operational phases to cause nuisance for nearby land users, particularly at noise sensitive premises (NSPs).<sup>5</sup> While assessing nuisance at the NSPs, the existing permit conditions, the Tasmanian [Environment Protection Policy \(Noise\) 2009](#)<sup>6</sup> and the existing acoustic environment of the NSPs should be discussed. All methods of measurement must be in accordance with the Tasmanian [Noise Measurement Procedure Manual 2008](#).
- Will the activity result in or require substantial transport of goods or materials to or from the site, which may affect either ambient noise levels on the land and in proximity to the land? If yes, provide details such as vehicle types, number of vehicle movements, times of movements and route(s).

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<sup>5</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.

<sup>6</sup> Available at [https://epa.tas.gov.au/Documents/EPP\\_Noise\\_2009.pdf](https://epa.tas.gov.au/Documents/EPP_Noise_2009.pdf)

### 6.3 Greenhouse gas emissions and climate change

Discuss impacts of the proposal in relation to greenhouse gases. As a minimum, this should:

- Describe the direct and indirect effects of the proposal on greenhouse gas production and ozone depleting substances and any greenhouse benefits of the proposal.
- Provide an estimate of scope 1, scope 2 and total greenhouse gas emissions, energy production, and energy consumption for a year of operation. Calculators are available on the [Australian Government Clean Energy Regulator website](#)<sup>7</sup>. Discuss potential annual variation that may occur.
- Demonstrate that the development will use reasonable measures to avoid and reduce the proposal's future greenhouse gas emissions.
- Include details of proposed measures to minimise emissions and the anticipated effectiveness of these measures. Where less emissions-intensive options are not adopted, provide sufficient justification and/or mechanisms to offset greenhouse gas emissions.
- 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](#)<sup>8</sup>

**Note:** Proponents must determine whether they are required to report to the Commonwealth under the [National Greenhouse and Energy Reporting Act 2007](#)<sup>9</sup>.

### 6.4 Water quality and stormwater

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

- Identifying any proposed new point source liquid emissions (wastewater and stormwater). Note: wastewater means water used or contaminated during carrying out the activity and does not include clean stormwater arising from rainfall on the proposal site.
- A map of the location of all point sources of liquid emissions.
- Details of stormwater management (including during reasonably foreseeable flood events). The potential for pollutants to become entrained in stormwater should be assessed.
- A map of the location of stormwater collection systems and details of drainage control measures such as cut-off drains and sediment settling ponds.
- If the proposal anticipates a discharge to a municipal sewerage system (including tankered waste) then a suitably detailed agreement with the operator of the municipal sewerage system should be negotiated.
- Where available, provide water quality data describing the downstream aquatic environment.
- Justification for any proposed emission of contaminants to surface water in accordance with the principles under the *State Policy on Water Quality Management 1997*.
- For information about water quality management framework and evaluation criteria in Tasmania refer to [Technical Guidance for Water Quality Objectives \(WQOs\) Setting for Tasmania, August 2020](#).<sup>10</sup>

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<sup>7</sup> Available at <http://www.cleanenergyregulator.gov.au/NGER/Forms-and-resources/Calculators#Emissions-and-Energy-Threshold-Calculator-202021-and-user-guide>

<sup>8</sup> Available at [http://www.dpac.tas.gov.au/divisions/climatechange/tasmanias\\_climate\\_change\\_action\\_plan\\_20172021](http://www.dpac.tas.gov.au/divisions/climatechange/tasmanias_climate_change_action_plan_20172021)

<sup>9</sup> Available at <https://www.legislation.gov.au/Details/C2007A00175>

<sup>10</sup> Available at <https://epa.tas.gov.au/epa/water/water-quality-objectives-for-tasmania>

## 6.5 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 the EMPC Act and associated regulations. A non-exhaustive listing of categories of controlled waste can be found on the internet at <http://epa.tas.gov.au/regulation/waste-management/controlled-waste>.

### *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

## 6.6 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.

## 6.7 Biodiversity and Natural Values

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

- Any records from the Natural Values Atlas and TASVEG 3.0<sup>11</sup> of any listed threatened flora/fauna species or threatened vegetation communities on or near the site. If any are present, or if the site has potential habitat for any such species, a detailed survey is likely to be required and the results should be presented in the EER.
- Details of any flora or fauna surveys undertaken on the site. Surveys must comply with the requirements of the Guidelines for Terrestrial Natural Values Surveys related to Development Proposals<sup>12</sup> and any relevant species-specific guidelines.
- Any proposed clearing or disturbance of native vegetation or potential habitat for native fauna as part of the proposal, including details of the nature of vegetation and habitat values to be cleared or disturbed, and the area of vegetation affected (in hectares).
- Any other known natural values on or near the site, including aquatic values.
- Geoconservation values present on or near the site, e.g. karsts.
- Any other ways in which the proposal has the potential to affect natural values, including:
  - Movement/noise/lights during sensitive avifauna breeding seasons;
  - Roadkill from vehicles;
  - Disturbance of aquatic or riparian environments (NB surface water and contaminant runoff may be addressed in other sections below as relevant);
  - Disturbance of geoconservation sites;
- Describe any weeds<sup>13</sup>, pests or pathogens known to be or likely to be present on or near the site.
- Does the proposal has the potential to introduce or spread weeds, pests or diseases? If yes, provide details of any proposed management measures.

## 6.8 Marine and Coastal

Identify any potential impacts of the proposal on marine and coastal areas not addressed in other sections. It should identify measures to avoid and mitigate any possible adverse impacts and assess the overall impacts on marine and coastal areas following implementation of the proposed avoidance and mitigation measures. Cross referencing should be made to other relevant sections dealing with conservation values (marine flora and fauna, geoconservation) and coastal impacts.

### *Legislative and policy requirements*

It must be demonstrated that the proposal is consistent with the objectives and requirements of all relevant marine and coastal policies and legislation, including the *Living Marine Resources Management Act 1995*, *State Policy on Water Quality Management 1997*, and the *Tasmanian State Coastal Policy 1996*.

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<sup>11</sup> Both can be accessed on the internet at: <https://www.naturalvaluesatlas.tas.gov.au/>

<sup>12</sup> Available on the internet at: <https://dppw.tas.gov.au/conservation/development-planning-conservation-assessment/survey-guidelines-for-development-assessments> .

<sup>13</sup> Plant species declared as a weed under the *Weed Management Act 1999*.

## 6.9 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.

### 6.10 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 or Closure 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

EIS                    Environmental Impact Statement

EMPC                *Environmental Management and Pollution Control Act 1994*

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EMPCS	Environmental Management and Pollution Control System objectives to be found in Schedule I of EMPCA
EPBC Act	<i>Environment Protection and Biodiversity Conservation Act 1999 (Cth)</i> JAMBA/CAMBA - Japan-Australia and China-Australia Migratory Bird Agreements
RMPS	Resource Management and Planning System of Tasmania objectives to be found in Schedule I of EMPCA
Tasmanian RFA	Tasmanian Regional Forest Agreement



## Appendix A: Other issues and agency contacts

In addition to a permit under the LUPA Act and the EMPC Act, 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 LUPA Act or the EMPC Act. The following list identifies some of the key agencies you may need to contact:

Note: your proposal may be referred to other agencies in the process of preparing guidelines. Should assessments or approval outside of the Board's responsibilities be required, the respective agency will engage with you to progress them.

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

Natural and Cultural Heritage Division

Telephone: (03) 6165 4396

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

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

*Historic cultural heritage, including State-level site listings, impacts and permits as required under the Historic Cultural Heritage Act 1995:*

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)

Note: 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, including desktop assessment, artefact survey requirements, permits:*

Aboriginal Heritage Tasmania

Telephone: (03) 6165 3152

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

Website: <http://www.aboriginalheritage.tas.gov.au>

Note: your proposal will be referred to Aboriginal Heritage Tasmania (AHT) on submission or referral to the Board. If Aboriginal Heritage matters are identified, AHT will engage directly with the proponent regarding relevant assessments and approvals.

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*Parks and reserves, including where any proposal may impact on land managed by Parks & Wildlife:*

Parks and Wildlife Service

Telephone: 1300 827 727

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

*Crown land, including where any proposal may impact on land owned by the Crown:*

Property Services – Parks and Wildlife

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)

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

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)

*Mining leases:*

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)

*Works impacting natural waterway flow, e.g. dams or fords:*

Agriculture and Water Division

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)



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