

## Checklist for documents submitted for EIA on marine and terrestrial biodiversity

*This checklist is from Appendix 2 of the EPA's Draft Environmental Assessment Guideline No. 6 on Timelines for Environmental Impact Assessment of Proposals.*

### PURPOSE

It is hoped that this checklist will be useful to environmental consultants and proponents both during the proponent's initial project planning and environmental scoping process, and specifically in the final checking of documents they intend to submit to the Environmental Protection Authority (EPA) for environmental impact assessment (EIA). This checklist may be refined and reviewed periodically to refer to additional EPA guidance documents.

The purpose of this checklist is to provide the basis for consultants and proponents to conduct initial in-house screening of the quality of their EIA documents. The intent is to more clearly define a minimum standard for the fundamental elements of EIA documentation that is expected to be met before documents are submitted to the EPA. Meeting this minimum standard should, in turn, facilitate timely consideration of documents by the EPA.

The checklist has been set out in four parts. Part 1 addresses general elements of document quality. Parts 2 and 3 deal with key EIA requirements specific to marine and terrestrial biodiversity/marine water quality impacts respectively. Part 4 sets out the requirements for proponent certification of the checklist.

To confirm that each element has been addressed, proponents are asked to place a tick in the boxes provided. Where an element of the checklist is not relevant to the proposal, checking the box with "N/A" will be adequate.

A copy of this checklist certified by an appropriate proponent representative as complete and accurate must be lodged with EIA documentation submitted to the EPA. Completed checklists will be reviewed by the EPA when documents are lodged. **Incomplete or inaccurate checklists will be returned for proponents to address outstanding matters before the EPA will commence its review of EIA documents.**

It should be noted that the EPA's acceptance of a complete and accurate checklist simply indicates that basic requirements in terms of document quality and general comprehensiveness have been met. **The EPA's acceptance of the checklist does not imply adequacy of technical work or appropriateness of 'policy' application / interpretation.** These matters are reviewed in more detail later in the EIA process.

## THE CHECKLIST

### PART 1 – GENERAL QUALITY OF DOCUMENTS

Ensure that the following standard elements are present in all documentation (including appendices):

A clear and concise title that outlines basic information about the proposal and purpose of the document.

Date and document revision number.

Information identifying the document's author and publishing entity.

All issues identified in a scoping guideline or scoping document have been addressed and covered in the report.

Complete and correct tables of contents, maps, tables and figures.

Suitably-sized scale maps placing the proposal into both a regional and local context.

Figures, plates, maps, technical drawings or similar including scale bar, legend, informative caption, labels identifying important or relevant locations/features referred to in the document text.

All survey site locations and derived data products (e.g. benthic habitat maps, vegetation maps) have been provided in map and appropriate GIS-based electronic database forms.

All survey data from terrestrial biological surveys have been provided in electronic database form (Access/Excel).

Proposed infrastructure is shown on scale maps and associated spatial data and are provided in an appropriate GIS-based electronic database form.

A list of references that have been cross-checked to ensure that all references in the Reference list are cited in the text (and vice versa).

All information based on 'expert' opinion/judgement are explicitly attributed, by name and qualification, to a person/s or organisation.

Where relevant, appendices are attached to the main EIA document that describe the details of technical work undertaken to underpin the content of the main document, and explicitly attributed by name to the author/s and (if applicable) their organisation.

Description(s) of the proposal are internally consistent throughout all documentation and are couched to allow potential environmental impacts to be placed in local and regional contexts, including cumulative impacts of existing and approved developments.

Please identify relevant sections of the report in the box below.

PER - Section 6, 7 and 8

Descriptions of the local and regional environmental features most likely to be directly or indirectly affected by the proposal.

Please identify relevant sections of the report in the box below.

PER - Sections 6 - 11

**PART 2 – MARINE ENVIRONMENTAL ISSUES**      NOT APPLICABLE

For proposals likely to impact on arid zone tropical mangroves in the Pilbara, the EIA document describes how potential impacts have been addressed in the context of Guidance Statement No.1 (April 2001).

If applicable, please identify relevant sections of the report in the box below.

For proposals likely to impact on benthic primary producer habitat, the EIA document describes how potential impacts have been addressed in the context of Environmental Assessment Guideline No.3 (December 2009), including:

- details of the measures taken to address the Overarching Environmental Protection Principles;
- scale benthic habitat maps showing the current extent and distribution of benthic habitats and the areas of habitat predicted to be lost if the proposal proceeds;
- descriptions of technical work (e.g. benthic habitat surveys) carried out to underpin the benthic habitat map (e.g. a technical appendix); and
- clearly set out calculations of cumulative loss.

If applicable, please identify relevant sections of the report in the box below.

For proposals that involve marine dredging activities, potential impacts have been addressed in the context of the Environmental Assessment Guideline No. 7 for Marine Dredging Proposals (September 2011) to ensure that the predicted extent, severity and duration of impacts to benthic habitats are presented in a clear and consistent manner.

If applicable, please identify relevant sections of the report in the box below.

For proposals that involve any type of waste discharge or disposal in State coastal waters between Mandurah and Yanchep, or off the Pilbara coast, potential impacts are couched in the context of the *State Environmental (Cockburn Sound) Policy 2005*, *Perth's Coastal Waters: Environmental Values and Objectives* (EPA, 2000), or *Pilbara Coastal Water Quality Project Consultation Outcomes* document (DoE, 2006) and relevant guidance provided in the *Australian and New Zealand Guidelines for Fresh and Marine Water Quality* (ANZECC/ARMCANZ, 2000).

If applicable, please identify relevant sections of the report in the box below.

For proposals that involve any type of waste discharge or disposal in State coastal waters outside of the areas described above, potential impacts are couched in the context of the guidance provided in the *State Water Quality Management Strategy Document No.6* (Government of WA, 2004) and the *Australian and New Zealand Guidelines for Fresh and Marine Water Quality* (ANZECC/ARMCANZ, 2000).

If applicable, please identify relevant sections of the report in the box below.

For proposals with potential to impact on an existing or proposed marine conservation reserve, potential impacts are couched in the context of the guidance provided in the relevant indicative or final Management Plan for the reserve on the advice of DEC or another designated management agency.

If applicable, please identify relevant sections of the report in the box below.

If numerical modelling has been carried out to inform the prediction of environmental impacts, the report(s) associated with this modelling, including the key assumptions, is (are) provided as a technical appendix.  N/A

If applicable, please identify the relevant appendix in the box below.

### **PART 3 – TERRESTRIAL BIODIVERSITY ISSUES**

For proposals with the potential to impact on areas of native vegetation, or other natural environments.

For proposals likely to impact on native flora and vegetation/plant communities, the EIA document describes how potential impacts have been addressed in the context of EPA Guidance Statement No. 51, *Terrestrial Flora and Vegetation Surveys for Environmental Impact Assessment* (June 2004), including:

- determining the level of flora and vegetation survey consistent with that expected in Table 3 (Appendix 2);
- describing the survey area and methodologies, including reference to timing, duration, survey effort, any survey limitations, and the nomenclature used (WA Herbarium);
- maps and text describing the survey area/plot sites, location of significant species, vegetation mapping, vegetation condition assessment and predicted extent of impact on the vegetation;
- a comprehensive list of flora species identified and assessment of threatened, priority or other significant flora / Ecological Communities (TECs, PECs) known or reasonably expected to occur in the area (as defined in Guidance Statement 51);
- evaluating the impact of the proposal on the species/communities, including reference to the extent of regional clearing of the vegetation complex/type and ecological linkage; and
- All quadrat data used in reporting provided as electronic database in raw form, in addition to hardcopy reports.

If applicable, please identify relevant sections of the report in the box below.

PER - Sections 6 - 11

For proposals likely to impact on vertebrate fauna or fauna habitat, the EIA document describes how potential impacts have been addressed in the context of EPA Guidance Statement No. 56, *Terrestrial Fauna Surveys for Environmental Impact Assessment* (June 2004), including:

- determining the level of fauna survey consistent with that expected in Table 3 (Appendix 2) of Guidance Statement No. 56;
- describing the survey methodologies in the context of EPA and DEC (2010) Technical Guide – Terrestrial Vertebrate Fauna Surveys for Environmental Impact Assessment, including reference to timing, duration and survey effort used to sample each of the fauna groups sampled, any survey limitations and the nomenclature used (WA Museum/Birds Australia);
- maps and text describing the survey area, fauna habitats and predicted extent of impact on the habitat; and
- a comprehensive list and assessment of vertebrate fauna known or reasonably expected to occur in the area, including Specially Protected and other significant fauna (as defined in Guidance Statement No. 56), and an evaluation of the impact of the proposal on the species and key habitat/s.

If applicable, please identify relevant sections of the report in the box below.

PER - Section 7 and Appendix 7

For proposals with the potential to impact on short range endemic (SRE) invertebrate fauna or SRE habitat, the EIA document describes how potential impacts have been addressed in the context of EPA Guidance Statement No. 20, *Sampling of Short Range Invertebrate Fauna for Environmental Impact Assessment in Western Australia* (May 2009), including:

- early initial assessment for restricted habitat types that have potential to support SRE fauna, including advice from the WA Museum and the DEC/OEPA.
- maps and text describing the survey area, potential SRE habitats and regional context and extent of predicted impact on the habitat.
- describing the survey methodologies, including reference to timing, duration and survey effort used to sample each of the fauna groups sampled, and any survey limitations.
- a survey report with assessment of SRE fauna found or reasonably expected to occur in the area, including any Specially Protected and other significant fauna, their known occurrence/habitats locally and their wider status if known, and an evaluation of the risk of the proposal to long-term survival of the species and community.

If applicable, please identify relevant sections of the report in the box below.

PER - Section 7 and Appendix 7

For proposals with the potential to impact on subterranean (stygofauna and troglofauna) fauna, the EIA document describes how potential impacts have been addressed in the context of EPA Guidance Statement No. 54 and 54a, *Sampling Methods and Survey Considerations for Subterranean Fauna in Western Australia* (Draft 2007), including:

- early initial desktop review to determine if the site has potentially suitable geology /substrate habitat that could support subterranean fauna, including advice from the WA Museum and the DEC/OEPA and a pilot study, if appropriate;  N/A
- a subterranean fauna survey report, if the site has a very high or high likelihood of supporting subterranean fauna, or a pilot study indicated that the site supports a significant subterranean fauna;  N/A
- maps and text identifying and describing the survey sites/area, and the geology/ habitat supporting subterranean fauna, and extent of predicted impacts on the habitat (Note the survey area should extend beyond the predicted impact zone);  N/A
- describing the survey methodologies (see Guidance Statement No. 54a), including

reference to timing, duration and survey effort used to sample each of the fauna groups sampled, species identification, and any survey limitations; and

- a comprehensive list and assessment of subterranean fauna recorded or reasonably expected to occur in the area, including any Specially Protected and other significant fauna and their known occurrence/habitats locally and their wider status if known, and an evaluation of the risk of the proposal to long-term survival of the species and community.

N/A

N/A

If applicable, please identify relevant sections of the report in the box below.

**PART 4 – PROPONENT’S CERTIFICATION OF COMPLETENESS AND ACCURACY OF RESPONSES**

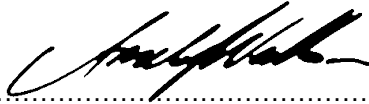
Name Amy Walton

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Position Project Manager - Yoongarillup Mineral Sands Project

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Signature



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Date 01/05/2014