



# Instructions and template: How to identify the content of a proposal

Environmental Protection Authority

March 2024

Version	Change	Date
1.0	Initial version	22 October 2021
1.1	Updated with new Environment Online submission and contact details; updated links.	March 2024

As EPA documents are updated from time to time, users should consult the [EPA website](#) to ensure they have the most recent version.

Environmental Protection Authority 2024,

*Instructions and template: How to identify the content of a proposal,*  
EPA, Western Australia.

This document is available in alternative formats upon request.

National Relay Service

TTY: 133 677

(To assist persons with hearing and voice impairment)

### **More information**

EPA Services

Department of Water and Environmental Regulation

Prime House, 8 Davidson Terrace

Joondalup WA 6027

Locked Bag 10

Joondalup DC WA 6919

p: 08 6364 7000

e: [info.epa@dwer.wa.gov.au](mailto:info.epa@dwer.wa.gov.au)

w: [www.epa.wa.gov.au](http://www.epa.wa.gov.au)

## Contents

1	Purpose of these instructions.....	2
2	Purpose of identifying the content of a proposal .....	2
3	Proposal content document template.....	3
3.1	General proposal content description .....	3
3.2	Proposal content elements .....	3
3.3	Proposal content elements table.....	4
3.4	Maximum extent/capacity .....	4
3.5	Proposal elements subject to regulation by another decision-making authority.....	4
3.6	Identification of entire proposal, and restrictions on decision-making for related activities...	5
3.7	Spatial data .....	6
4	Proposal content requirements at each stage of assessment .....	7
5	Submitting a proposal content document .....	10
	Submissions.....	10
	General enquiries.....	10
	Template: Proposal content document.....	11
	Example 1A: New proposal – Renewable energy project.....	12
	Example 1B: Amended proposal – Renewable energy project.....	14
	Example 2A: New proposal – Iron ore mine .....	17
	Example 2B: Amended proposal – Iron ore mine .....	19
	Example 3A: New proposal – Desalination and groundwater treatment plant .....	22
	Example 3B: Amended proposal – Desalination and groundwater treatment plant .....	25
	Example 4A: New proposal – Metal ore mine and processing plant.....	29
	Example 4B: Amended proposal – Metal ore mine and processing plant.....	32

## 1 Purpose of these instructions

The purpose of this document is to instruct proponents to provide the necessary information to identify the content of their proposal for the purposes of Part IV of the *Environmental Protection Act 1986* (EP Act). The instructions do not apply to strategic proposals.

## 2 Purpose of identifying the content of a proposal

Proposals are generally defined in the EP Act (section 3) to include a project, undertaking, development, change in land use, policy, plan, programme or an amendment of any of these.

Proposals also include significant amendments. Significant amendments include:

- an amendment to an approved proposal which is likely to have a significant effect on the environment, and/or
- an amendment to implementation conditions of an approved proposal that is likely to have a significant effect on the environment in addition to or different from the effect of the approved proposal.

It is necessary to identify the content of a proposal for the following reasons:

1. to provide certainty of the scope, nature and extent of the proposal which may, if approved, be implemented subject to the implementation conditions of a Ministerial statement
2. to enable the elements of the proposal which have the potential (separately or in combination) to have a significant effect on the environment to be identified
3. to assist the Environmental Protection Authority (EPA) to identify the preliminary key environmental factors for decision-making about and/or assessment of the proposal
4. to allow the EPA to assess and report on the effects of the proposal in the context of relevant key environmental factors
5. to identify proposal elements which may need to be subject to legally binding implementation conditions (including limits on extent or capacity) in a Ministerial statement
6. the implementation of the proposal in accordance with the Ministerial statement provides a defence to certain environmental offences under the EP Act
7. to identify the scope, nature and extent of any amendments to a proposal before, during or after the EPA's or other decision-makers' assessment (under sections 38C, 43A, 45C or 45D)
8. to assist the EPA to determine the relevant decision-making authorities and other statutory decision-making processes in relation to proposals
9. the scope of the proposal may affect the powers that other decision-makers have; for example, to grant works approvals and native vegetation clearing permits.

It is important to note that the proposal content cannot be identified in other information (such as supplementary reports) provided at or during the referral or assessment stage. To change a proposal during referral or assessment stages, a section 38C or section 43A is required.

- Proposal content documents will be published on the EPA website.
- Ministerial statements which are issued in relation to proposals will usually state that a

proposal as described in a proponent's proposal content document may be implemented, subject to the conditions in the Ministerial statement. The conditions may regulate the implementation of some elements of the proposal. This may include limiting the extent that proposal elements can be implemented.

### 3 Proposal content document template

There are two components to the proposal content document that must be completed by the proponent: the (i) general proposal description and the (ii) proposal elements.

Proponents may contact the EPA Services of the Department of Water and Environmental Regulation if they need assistance to identify the content of a proposal.

#### 3.1 General proposal content description

The general proposal content description (Table 1) requires information on the proposal title, proponent name and a short description of the proposal.

The **short description** should describe the proposal content in a high-level and simple way to provide an understanding of its nature, context, and location.

The **short description** should include:

- what the proposed development is (for example, a sand mine)
- a description of the main physical elements and infrastructure; for example, a mine, port, rail or road
- a description of the main construction, commissioning and operational elements; for example, dewatering, dredging, emissions or discharges, mining type, processing type, waste disposal techniques
- context of the proposal such as surrounding land uses or other proposals.

A map of the regional location should be attached to the proposal content document.

#### 3.2 Proposal content elements

Proposal elements include developments, actions, extractive activities, emissions and discharges from, and processes to be performed in, the implementation of a proposal. This includes physical elements and activity elements.

Physical elements are the proposed physical components that will be constructed or operated. They must be able to be defined or shown on a figure or a map – for example, a mine pit, bore field, dredge channel or infrastructure corridor.

Activity elements are the proposed activities associated with the construction or operation of a physical element. They occur within, or are related to a physical element, although they may have aspects (impacts) that extend outside the physical element. Examples include clearing, dewatering, power generation, stockpiling, tailings storage, and surface water diversion.

Note: When this document refers to the elements of the proposal which have the potential to have a significant effect on the environment, this is intended to include all elements that either separately or in combination may have that effect. For guidance on significance see the EPA's [Statement of environmental principles, factors, objectives and aims of EIA](#).

It is important that all elements that **could potentially** have a significant effect on the environment are listed, so that the EPA has sufficient information upon which to make decisions about the proposal, in the context of the environment.

### 3.3 Proposal content elements table

The proposal content elements table of the proposal content document should include:

- the proposal physical elements
- information on the **stages of the proposal**, for example, commissioning, rehabilitation, and decommissioning
- the proposal construction elements
- the **proposal operational elements** (including scope 1, 2 and 3 emissions for greenhouse gas emissions)
- **other elements** which are relevant to extent of effects on the environment, for example the maximum life of the project including the timeframe for construction, operations and decommissioning. This is important as a proposal implemented for five years is likely to have fewer environmental effects than the same proposal implemented for 20 years.

**Note:** proponents should provide realistic timeframes in their proposal content document, as a change to timeframe may result in the requirement to submit a change to proposal at referral (section 38C), assessment (section 43A) or post assessment stages (section 45C).

### 3.4 Maximum extent/capacity

The **maximum extent/capacity** of proposal elements must be included where relevant. A range of extents/capacities (including a maximum) can be included where some flexibility is needed given the stage of the proposal development and assessment.

The capacity and extent of proposal elements must be identified in specified quantitative/spatial formats where relevant, including:

1. maximum (or range) of capacity or extent of proposal elements
2. spatial data
3. maps and figures.

The units used for identifying the proposal elements must be consistent across the formats (reports, spatial data, maps and figures). For example, if hectares are used to describe the amount of clearing in the written description, hectares must also be used for the other formats.

### 3.5 Proposal elements subject to regulation by another decision-making authority

The EPA may, on a proposal-specific basis, take other statutory decision-making authority processes into account if those processes can mitigate the potential effects of the proposal on the environment.

All proposal content elements must, however, be included in a proposal content document even if the proponent believes they can be subject to regulation by another decision-making authority. This is because the fact that the EPA **may** take another statutory decision-making authority processes

into account in the EPA's decision-making does not alter the scope, nature or extent of the proposal itself.

### 3.6 Identification of entire proposal, and restrictions on decision-making for related activities

The EPA recommends careful consideration of proposal content elements because:

- The EPA can request additional information about the proposal if it considers it does not have enough information about the scope or content of the proposal at any stage (sections 38F, 40 and 45C). These requests may affect expected (non-statutory) decision-making timeframes.
- In some circumstances, the Minister, the EPA and other decision-making authorities have powers or duties to refer the entire proposal, if only part of it has been referred.
- The implementation of the proposal in accordance with the Ministerial statement provides a defence to certain environmental offences under the EP Act, as well as a clearing permit exemption.

A clear identification, extent, and boundaries of the proposal elements (including their extent) will therefore directly affect whether a person is able to rely upon that defence or exemption. For example, if a particular proposal requires clearing of native vegetation for a road, but the road is not included as a proposal element, the proponent will not generally be able to rely on the Ministerial statement as a defence to a charge for causing environmental harm, or as the basis for a clearing permit exemption.

The EPA usually requires that proposals are identified in their entirety. Identifying and referring only part of proposals or referring parts of what are objectively the same proposal in separate referrals should be avoided.

The following should be considered when identifying the entire scope of the proposal for referral:

- whether the proposal includes all the elements which are required for the proposal to proceed or which are co-dependent
- whether separation of proposals in separate referrals will undermine assessment decisions by the EPA, decision-making by the Minister, or other decision-making processes which the EPA can consider
- the contractual arrangements of who is responsible for individual proposal elements is usually not determinative of the content of an entire proposal.

In relation to regulation under Part V of the EP Act, licences and clearing permits for clearing or activities connected or associated with a referred proposal are also subject to the following (when the relevant Act amendments are in force).

1. Clearing permits: under section 51F of the EP Act, the Department of Water and Environmental Regulation's CEO (or their delegate) is subject to restrictions when making a clearing decision for a related activity which is connected or associated with a referred proposal in such a way that the clearing would not need to be done if the referred proposal did not proceed. The CEO cannot make a clearing decision until a Ministerial statement is issued, and must not make a clearing decision contrary to, or otherwise than in accordance with, a Ministerial statement.



2. Licences: under section 60A of the EP Act, the Department of Water and Environmental Regulation's CEO (or their delegate) is subject to restrictions when making a licence decision for a related activity which is connected or associated with a referred proposal in such a way that the proposed licence grant, amendment or transfer would not need to be done if the referred proposal did not proceed. The CEO cannot make a licence decision until a Ministerial statement is issued, and must not make a licence decision contrary to, or otherwise than in accordance with, a Ministerial statement.

### 3.7 Spatial data

Maps and figures showing the development envelope/s, footprint and proposal elements should be attached to the proposal content document.

The EPA requires spatial data for the following proposal boundaries:

- development envelope/s – the maximum area within which the proposal footprint will be located
- footprint – the location within which the physical proposal elements will occur.

The development envelope approach provides some flexibility for the location of the proposal footprint, to allow for some changes to the proposal design, or to avoid or minimise impacts. A proposal with provision for flexibility within development envelopes can only be assessed by the EPA if sufficient surveys and information are provided to the EPA to support assessment of that flexibility. It is not correct to consider that a development envelope requires less environmental assessment than an indicative footprint.

If project flexibility is proposed, the potential impacts of all flexibility options will usually need to be assessed by the EPA before it can recommend the proposal be implemented. In the context of indicative footprints, this means the EPA's final assessment report must relate to the proposed extent of any footprint which may actually be implemented. Therefore, the assessment (and surveys) must be carried out for environmental impacts in all areas which may be subject to a final footprint, not just within any indicative footprint.

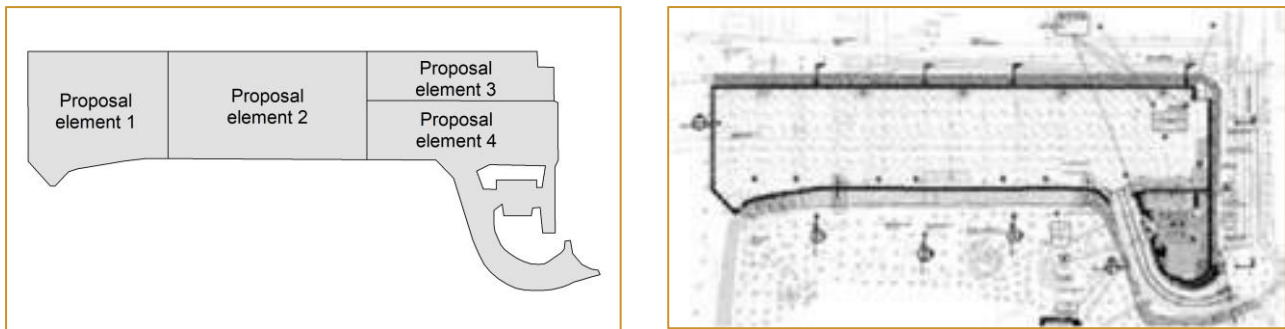
The development envelope should be as small as possible to:

- minimise the spatial extent of impacts
- avoid overlapping proposal boundaries.

The EPA requires that surveys cover the entire development envelope as a minimum standard.

The EPA will not accept development envelopes that are much greater than the maximum extent of a proposal element.





**Figure 1: The footprint data should only include the boundary of the footprint (left image), not complex engineering detail (right image).**

Provide spatial data that is geo-referenced and conforms to the following parameters:

- Data type: closed polygons that represent the proposal boundary (development envelope) and the activity areas for all physical elements of the proposal (footprint)
- Attribution: name the development envelope and each activity area in the attribute table of the spatial data
- Format: ESRI geodatabase or shapefile
- Coordinate System: GDA2020 (datum) (or as updated) and projected into the appropriate Map Grid of Australia (MGA) zone.

## 4 Proposal content requirements at each stage of assessment

**Table 1: The requirements for and use of the general proposal content description and table of proposal content elements during each stage of the environmental impact assessment process.**

Stage	Proposal content
<b>Stage 1 – Referral of proposal</b> Proposal content at this stage is defined by the proposal content document included in a referral, as amended by any approval under section 38C.  Note: Proposal content cannot be identified in other information provided at or during the referral stage.	<b>New referral</b> Proponent to provide a proposal content document: <ol style="list-style-type: none"> <li>1. general proposal content description (see example 1 and 2, Table 1)</li> <li>2. table of proposal content elements (see example 1 and 2, Table 2), including:               <ul style="list-style-type: none"> <li>• description of proposal elements</li> <li>• maximum (or range of) extent and capacity</li> <li>• development envelope (where relevant)</li> <li>• footprint (including footprint flexibility, if proposed)</li> <li>• spatial data for the above</li> <li>• all stages of the proposal including likely timeframes for each stage including construction phase, operation phase and maximum life of the proposal.</li> </ul> </li> </ol> <b>Amendment to proposal</b> Proponents may submit a written request for the EPA to approve an amendment to a referred proposal under section 38C of the EP Act – see <a href="#">Instructions – Request to amend proposal during referral under s. 38C of the</a>

Stage	Proposal content
	<p><a href="#">EP Act</a>.</p> <p>The proponent must describe any amendment to the general proposal content description and/or any addition, removal or amendment to the proposal content elements. The proponent is required to quantify any amendment to the proposal elements extent, capacity, or boundaries where relevant. See example 1 and 2.</p> <p>A consolidated updated proposal content document (which describes and tabulates the existing proposal content combined with the proposed amendment content) must be provided with any request for amendment.</p> <p><b>Additional information</b></p> <p>The EPA can request additional information about the proposal under section 38F of the EP Act if it considers it does not have enough information about it at the referral stage.</p> <p><b>Significant amendment to approved proposal</b></p> <p>If the proponent is referring a significant amendment, the proponent must describe any amendment to the existing proposal by amending the general proposal content description (Table 1 of the proposal content document template) and/or any addition, removal or amendment to the proposal content elements (Table 2 of the proposal content document template). The proponent is required to quantify any amendment to the proposal elements extent or boundaries where relevant. See example 1 and 2, and also <a href="#">Instruction and form – Referral of a proposal under section 38 of the EP Act</a>.</p> <p>A consolidated updated proposal content document (which describes and tabulates the existing proposal content combined with the proposed amendment content) must be provided with any significant amendment referral.</p>
<p><b>Stage 2 – Decision on referred proposal</b></p>	<p>EPA decides whether to assess the proposal, based on the information about the proposal in the proposal content document.</p> <p>The EPA can take into account whether another statutory decision-making process can mitigate the potential impacts of a proposal element/s on the environment.</p>
<p><b>Stage 3 – Assessment of proposals</b></p> <p>Proposal content can only be defined by the proposal content document in a referral, and any subsequent amendments approved under section 38C or section 43A.</p> <p>Note: Proposal content cannot be changed in environmental scoping documents, environmental review documents or any other documents provided during assessment such as management plans or assessment information, as those documents are part of</p>	<p>EPA assesses the proposal following the process decided by the EPA.</p> <p><b>Additional information</b></p> <p>The EPA can request additional information about the proposal under section 40 if it considers it does not have enough information during the assessment stage.</p> <p><b>Amendment to proposal</b></p> <p>Proponents may request that the EPA approve an amendment to a proposal during an assessment under 43A – see <a href="#">Instruction and form – Request to amend a proposal during assessment under s. 43A</a>.</p> <p>The proponent must describe any amendment to the general proposal content description and/or any addition, removal or amendment to the proposal content elements. The proponent is required to quantify any amendment to the proposal elements extent, capacity, or boundaries where relevant. See example 1 and 2.</p> <p>A consolidated updated proposal content document (which describes and tabulates the existing proposal content combined with the proposed amendment content) must be provided with any application for amendment.</p>

Stage	Proposal content
the assessment of a proposal and do not define proposal content.	
<b>Stage 4 – EPA Report</b>	<p>The EPA prepares its assessment report on the outcome of its assessment of the proposal.</p> <p>The EPA recommends whether the proposal may be implemented and, if so, recommends whether any or all of the proposal content should be subject to an implementation condition which limits the proposal extent and capacity. The EPA will usually include a table (and figures) if it recommended limits of proposal content elements (including physical and operational elements).</p> <p>The EPA can consider whether another statutory decision-making process can mitigate the potential impacts of proposal element/s on the environment.</p>
<b>Stage 5 – Implementation of proposals Compliance</b>	<p>The Proponent is required to ensure implementation of the proposal is carried out in accordance with implementation conditions (section 47 of the EP Act).</p> <p>The implementation of the proposal in accordance with the Ministerial statement provides a defence to certain environmental protection offences under the EP Act. Clear identification of the proposal elements (including their extent) will therefore directly affect whether a person is able to rely upon that defence.</p> <p>The Proponent provides the Department of Water and Environmental Regulation with information about the proposal to assess compliance.</p>
<b>Stage 5 – Implementation of proposals Post-approval amendments</b>	<p><b>Change to proposal under section 45C</b></p> <p>Proponents may request that the EPA Chair (under delegation) approve an amendment to an approved proposal under section 45C.</p> <p>The Proponent must describe any amendment to the general proposal content description and/or any amendment to the proposal content elements. The Proponent is required to quantify any addition, removal or amendment to the proposal elements extent, capacity, or boundaries where relevant. See example 1 and 2, and <a href="#">Instruction and form – Request to amend proposal and/or implementation conditions under s. 45C</a>.</p> <p>A consolidated updated proposal content document (which describes and tabulates the existing proposal content combined with the proposed amendment content) must also be provided with any request for amendment.</p> <p>The EPA Chair (under delegation) can request additional information about the proposal amendment under section 45C(2) if the section 45C decision-maker considers it does not have enough information about the amendment.</p> <p><b>Significant amendment</b></p> <p>A significant amendment to an approved proposal must be referred under section 38. See requirements under Stage 1 – Referral of a proposal.</p>

## 5 Submitting a proposal content document

Ensure that all required information is provided with your request to the EPA Services of the Department of Water and Environmental Regulation. It is preferred that requests are submitted via [Environment Online](#); however, email and postal submissions will be accepted. For assistance in using Environment Online, please contact [EOsupport@dwer.wa.gov.au](mailto:EOsupport@dwer.wa.gov.au).

### Submissions

Environment Online portal: [environmentonline.dwer.wa.gov.au](http://environmentonline.dwer.wa.gov.au)

Email: [EOsupport@dwer.wa.gov.au](mailto:EOsupport@dwer.wa.gov.au)

Post: EPA Services

Department of Water and Environmental Regulation

Locked Bag 10, Joondalup DC, WA 6919

### General enquiries

Telephone: 6364 7000

Fax: 6364 0896

Email: [info.epa@dwer.wa.gov.au](mailto:info.epa@dwer.wa.gov.au)

Website: [www.epa.wa.gov.au](http://www.epa.wa.gov.au)

## Template: Proposal content document

**Table 1: General proposal content description**

<b>Proposal title</b>	
<b>Proponent name</b>	
<b>Short description</b>	

**Table 2: Proposal content elements**

<b>Proposal element</b>	<b>Location and description</b>	<b>Maximum extent, capacity or range</b>
<b>Physical elements</b>		
Physical element 1	Figure X	
Physical element 2	Figure X	
<b>Construction elements</b>		
Construction element 1	Figure X	
Construction element 2	Figure X	
<b>Operational elements</b>		
Operational element 1	Figure X	
Operational element 2	Figure X	
<b>Proposal elements with greenhouse gas emissions</b>		
Construction elements:		
	Scope 1	
	Scope 2	
	Scope 3	
Operation elements:		
	Scope 1	
	Scope 2	
	Scope 3	
<b>Rehabilitation</b>		
<i>Details</i>		
<b>Commissioning</b>		
<i>Details</i>		
<b>Decommissioning</b>		
<i>Details</i>		
<b>Other elements which affect extent of effects on the environment</b>		
Proposal time*	Maximum project life	
	Construction phase	
	Operations phase	
	Decommissioning phase	

\* Proponents should only provide realistic timeframes to avoid unnecessary change to proposal applications at referral (section 38C), assessment (section 43A) or post assessment (section 45C).

## Example 1A: New proposal – Renewable energy project

**Table 1: General proposal content description**

<b>Proposal title</b>	Pilbara renewable energy project
<b>Proponent name</b>	Green Energy Co
<b>Short description</b>	<p>The proposal is to for the construction and operation of a renewable energy project in the Pilbara, approximately 10 km east of Roebourne (Figure 1).</p> <p>The proposal will consist of up to 20 wind turbines and a solar farm, a battery energy storage system and substation, and associated infrastructure. A series of access tracks and roads will provide access to the site and provide a corridor for underground cabling to connect the wind turbines, solar farm and substation. A new 330kv transmission line will be constructed to connect the site to the existing main electricity grid operated by the state power provider.</p> <p>The proposal is located on land currently used predominantly for cattle grazing, mining and recreation.</p>

**Table 2: Proposal content elements**

Proposal element	Location and description	Maximum extent, capacity or range
<b>Physical elements</b>		
Temporary laydown areas during construction	Figure 2	<p>70 ha of temporary disturbance, including up to 50 ha of native vegetation clearing within the 1,200 ha development envelope</p> <p>Temporary laydown of &lt;3 ha per turbine</p> <p>10 ha construction laydown area at battery storage location</p>
Wind turbines	Figure 2	20 ha of disturbance, including up to 10 ha of native vegetation clearing within the 1,200 ha development envelope
Solar farm	Figure 2	1,000 ha of disturbance, including up to 600 ha of native vegetation clearing within the 1,200 ha development envelope
Battery storage system and substation	Figure 2	5 ha of disturbance, including up to 5 ha of native vegetation clearing within the 1,200 ha development envelope
Access roads, parking, cabling corridors	Figure 2	20 ha of disturbance, including up to 15 ha of native vegetation clearing within the 1,200 ha development envelope
Office and amenities	Figure 2	3 ha of disturbance, including up to 3 ha of native vegetation clearing within the 1,200 ha development envelope
<b>Construction elements</b>		
Concrete batching plant	At battery storage location	Maximum output capacity of 50 m <sup>3</sup> /hr

Operational elements		
Wind energy production	Figure 2	20 x 6 MW turbines Total 120 MW
Solar farm energy production	Figure 2	200 MW
Battery storage system	Figure 2	Design capacity 200 MW
Treated sewage discharge	Located adjacent to office and amenities Figure 2	Design capacity 15 m <sup>3</sup> /day
Greenhouse gas emissions		
Construction		
Scope 1	Land use change – vegetation clearing: 42,984 t CO <sub>2</sub> -e total over 18 months Plant and equipment: 1,490 t CO <sub>2</sub> -e total over 18 months	
Scope 2	None	
Scope 3	Embodied GHG 577,800 t CO <sub>2</sub> -e total emissions during manufacturing and construction of facility and equipment	
Operation		
Scope 1	Loss of soil carbon 21,542 t CO <sub>2</sub> -e over 25 years of operations	
Scope 2	None	
Scope 3	Offset of 5,060,825 t CO <sub>2</sub> -from fossil fuel power generation over 25 years of operations	
Rehabilitation		
Areas temporarily cleared for laydown will be rehabilitated following construction. Final closure and rehabilitation within 2 years of cessation of operations. Scope 1 emissions 42,984 t CO <sub>2</sub> -e removed from atmosphere to soil and vegetation over 70 years of rehabilitation.		
Commissioning		
NA		
Decommissioning		
Removal of all above-surface and buried infrastructure within 1 year of cessation of operations.		
Other elements which affect extent of effects on the environment		
Proposal time	Maximum project life	307 years from XX.
	Construction phase	~1.5 years
	Operations phase	25 years
	Decommissioning phase	~2 years post operations



## Example 1B: Amended proposal – Renewable energy project

**Table 1: General proposal content description**

<b>Proposal title</b>	Pilbara renewable energy project
<b>Proponent name</b>	Green Energy Co
<b>Short description</b>	<p>The proposal is to for the construction and operation of a renewable energy project in the Pilbara, approximately 10 km east of Roebourne (Figure 1).</p> <p>The proposal will consist of up to 30 wind turbines and a solar farm, a battery energy storage system and substation, and associated infrastructure. A series of access tracks and roads will provide access to the site and provide a corridor for underground cabling to connect the wind turbines, solar farm and substation. A new 330kv transmission line will be constructed to connect the site to the existing main electricity grid operated by the state power provider.</p> <p>The proposal is located on land currently used predominantly for cattle grazing, mining and recreation.</p> <p>NO CHANGE.</p>

**Table 2: Proposal content elements**

<b>Proposal element</b>	<b>Location and description</b>	<b>Existing proposal extent, capacity or range</b>	<b>Proposed amendment</b> (Content of section 38C, 43A or 45C amendment)	<b>Combined extent, capacity or range</b> (total of existing approval + proposed change)
<b>Physical elements</b>				
Temporary laydown areas	Figure 2	<p>70 ha of temporary disturbance, including up to 50 ha of native vegetation clearing within the 1,200 ha development envelope.</p> <p>Temporary laydown of &lt;3 ha per turbine</p> <p>10 ha construction laydown area at battery storage location</p>	30 ha of disturbance, including up to 30 ha of native vegetation clearing within the 550 ha development envelope	100 ha of disturbance, including up to 80 ha of native vegetation clearing within the 1,750 ha development envelope
Wind turbines	Figure 2	20 ha of disturbance, including up to 10 ha of native vegetation clearing within the 1,200 ha development envelope	10 ha of disturbance, including up to 10 ha of native vegetation clearing within the 550 ha development envelope	30 ha of disturbance, including up to 20 ha of native vegetation clearing within the 1,750 ha development envelope
Solar farm	Figure 2 Adjacent to existing solar farm	1,000 ha of disturbance, including up to 600 ha of native vegetation clearing within the 1,200 ha development envelope	500 ha of disturbance, including up to 300 ha of native vegetation clearing within	1,500 ha of disturbance, including up to 900 ha of native vegetation clearing within

			the 550 ha development envelope	the 1,750 ha development envelope
Battery storage system and substation	Figure 2	5 ha of disturbance, including up to 1 ha of native vegetation clearing within the 1,200 ha development envelope	No change	5 ha of disturbance, including up to 1 ha of native vegetation clearing within the 1,750 ha development envelope
Access roads, parking, cabling corridors	Figure 2 Access for new turbines	20 ha of disturbance, including up to 15 ha of native vegetation clearing within the 1,200 ha development envelope	7 ha of disturbance, including up to 7 ha of native vegetation clearing within the 550 ha development envelope	27 ha of disturbance, including up to 22 ha of native vegetation clearing within the 1,750 ha development envelope
Office and amenities	Figure 2	3 ha of disturbance, including up to 3 ha of native vegetation clearing within the 1,200 ha development envelope	No change	3 ha of disturbance, including up to 3 ha of native vegetation clearing within the 1,750 ha development envelope
<b>Construction elements</b>				
Concrete batching plant	At battery storage location	Maximum output capacity of 50 m <sup>3</sup> /hr	No change	Maximum output capacity of 50 m <sup>3</sup> /hr
<b>Operational elements</b>				
Wind energy production	Figure 2	20 x 6 MW turbines Total 120 MW	10 x 6 MW turbines Total 60 MW	30 x 6 MW turbines Total 180 MW
Solar farm energy production	Figure 2	200 MW	100 MW	Total 300 MW
Battery storage system and substation	Figure 2	Design capacity 200 MW	Increase in capacity to 100 MW	Design capacity 300 MW
Treated sewage discharge	Located adjacent to office and amenities Figure 2	Design capacity 15 m <sup>3</sup> /day	No change	Design capacity 15 m <sup>3</sup> /day

Greenhouse gas emissions				
Construction				
Scope 1	Land use change – vegetation clearing: 42,984 t CO <sub>2</sub> -e Plant and equipment: 1,490 t CO <sub>2</sub> -e		Land use change – vegetation clearing: 64,822 t CO <sub>2</sub> -e Plant and equipment: 2,717 t CO <sub>2</sub> -e	
Scope 2	None		No change	
Scope 3	Embodied GHG 577,800 t CO <sub>2</sub> -e total emissions during manufacturing and construction of facility and equipment		Embodied GHG 866,700 t CO <sub>2</sub> -e total emissions during manufacturing and construction of facility and equipment	
Operation				
Scope 1	Loss of soil carbon 21,542 t CO <sub>2</sub> -e over 25 years of operations		Loss of soil carbon 32,527 t CO <sub>2</sub> -e over 25 years of operations	
Scope 2	None		No change	
Scope 3	Offset of 5,060,825 t CO <sub>2</sub> -e -from fossil fuel power generation over 25 years of operations		Offset of 7,591,237 t CO <sub>2</sub> -e -from fossil fuel power generation over 25 years of operations	
Rehabilitation				
Areas temporarily cleared for laydown will commence to be rehabilitated within one year following construction.				
Final closure and rehabilitation within 2 years of cessation of operations.				
For the original proposal, Scope 1 emissions 42,984 t CO <sub>2</sub> -e removed from atmosphere to soil and vegetation over 70 years of rehabilitation.				
For the revised proposal, Scope 1 emissions 64,822 t CO <sub>2</sub> -e removed from atmosphere to soil and vegetation over 70 years of rehabilitation.				
Commissioning				
NA				
Decommissioning				
Removal of all above-surface and buried infrastructure within 1 year of cessation of operations.				
Other elements which affect extent of effects on the environment				
Proposal time	Maximum project life	30 years	1 year	31 years
	Construction phase	~1.5 years	1 year	~2.5years
	Operations phase	25 years	No change	25 years
	Decommissioning phase	~2 years	No change	~2 years

## Example 2A: New proposal – Iron ore mine

**Table 1: General proposal content description**

<b>Proposal title</b>	Iron ore mine
<b>Proponent name</b>	Steel Works Pty Ltd.
<b>Short description</b>	<p>The proposal is to construct an iron ore mine approximately 200 kilometres (km) south of Port Hedland (Figure 1).</p> <p>The proposal includes:</p> <ul style="list-style-type: none"> <li>the development of above and below water table mine pits</li> <li>ore processing facility</li> <li>groundwater abstraction for water supply and for the dewatering of below water table mine pits</li> <li>surplus water management and discharge of excess water to Indi Creek</li> <li>mineral waste management (waste rock dumps and in-pit tailings storage facilities)</li> <li>infrastructure to manage surface water (diversion drains and culverts etc.)</li> <li>linear infrastructure (haul roads, pipeline corridors etc.)</li> <li>ancillary infrastructure (workshops, offices, hydrocarbon storage areas, laydown area, accommodation camp, water treatment plant, wastewater treatment plant etc.).</li> </ul> <p>The proposal is located within a 20,000 hectares (ha) development envelope and will require the clearing of up to 8,000 ha of native vegetation.</p>

**Table 2: Proposal content elements**

Proposal element	Location and description	Maximum extent, capacity or range
<b>Physical elements</b>		
<p>Mine elements, including:</p> <ul style="list-style-type: none"> <li>Open pits (maximum 3 open at one time)</li> <li>Haul roads</li> <li>Waste rock landforms – adjacent to open pits</li> <li>Topsoil stockpiles</li> </ul>	Figure X	Up to 12,000 ha disturbance, including clearing of up to 8,000 ha native vegetation, within 20,000 ha development envelope
<p>Processing elements, including:</p> <ul style="list-style-type: none"> <li>Ore stockpiles</li> <li>Crushing plant</li> <li>Processing plant</li> <li>Tailings storage facility</li> <li>Evaporation pond</li> </ul>		
<p>Infrastructure elements, including:</p> <ul style="list-style-type: none"> <li>Accommodation</li> <li>Supporting</li> </ul>		

infrastructure		
• Ancillary buildings		
Operational elements		
Groundwater abstraction for water supply and mine dewatering	Figure X	Abstraction of 10 gegalitres per annum (GL/a).
Management of surplus water	Figure X	Discharge of up to 4 GL/a to Indi Creek.
Pit lakes	Figure X	Formation of pit lakes in pit A and B only, all other below water table pits to be backfilled to prevent the formation of pit lakes
TSF capacity	Figure X	x wet tonnes of tailings deposited per annum to a maximum y tonnes.
Evaporation pond capacity	Figure X	Evaporation pond capacity of x m³
Crushing plant processing limit	Figure X	Processing of ore to produce XX tonnes per annum of mineral concentrate
Waste rock landform height	Figure X	Waste rock landform height of x m AHD and area of x m³
Greenhouse gas emissions		
Peak annual average		
Scope 1	Plant and equipment: Less than 100,000 t CO <sub>2</sub> -e	
Scope 2	Electricity use: 10,000 t CO <sub>2</sub> -e	
Annual average life of mine		
Scope 1	Plant and equipment: Less than 80,000 t CO <sub>2</sub> -e	
Scope 2	Electricity use: 7,000 t CO <sub>2</sub> -e	
Total (based on annual average Scope 1 and Scope 2) – 20-year life of mine		
1,740,000 t CO <sub>2</sub> -e		
Commissioning		
Commissioning of the processing facility to be undertaken subject to operational limits above.		
Rehabilitation and closure		
Progressive rehabilitation will be undertaken over the life of the mine with rehabilitation of pits commencing within one year of pit closure.		
Areas disturbed through implementation of this proposal will be designed to be safe and non-polluting and will be constructed so that their final shape, size, stability, and ability to support local native vegetation are comparable to natural landforms in the area.		
Other elements which affect extent of effects on the environment		
Proposal time	Maximum project life	20 years

## Example 2B: Amended proposal – Iron ore mine

**Table 1: General proposal content description**

<b>Proposal title</b>	Iron ore mine
<b>Proponent name</b>	Steel Works Pty Ltd.
<b>Short description</b>	<p>The proposal is to construct an iron ore mine approximately 200 kilometres (km) south of Port Hedland (Figure 1).</p> <p>The proposal includes, but is not limited to:</p> <ul style="list-style-type: none"> <li>the development of above and below water table mine pits</li> <li>ore processing facility</li> <li>groundwater abstraction for water supply and for the dewatering of below water table mine pits</li> <li>surplus water management and discharge of excess water to Indi Creek</li> <li>mineral waste management (waste rock dumps and in-pit tailings storage facilities)</li> <li>infrastructure to manage surface water (diversion drains and culverts etc.)</li> <li>linear infrastructure (haul roads, pipeline corridors etc.)</li> <li>ancillary infrastructure (workshops, offices, hydrocarbon storage areas, laydown area, accommodation camp, water treatment plant, wastewater treatment plant etc.).</li> </ul> <p>The proposal is located within a 20,000 hectares (ha) development envelope and will require the clearing of up to 8,500 ha of native vegetation.</p>

**Table 2: Proposal content elements**

Proposal element	Location and description	Existing proposal extent, capacity or range	Proposed max extent, capacity or range	Combined max extent, capacity or range
<b>Physical elements</b>				
Mine elements, including: <ul style="list-style-type: none"> <li>Open pits (maximum 3 open at one time)</li> <li>Haul roads</li> <li>Waste rock landforms – adjacent to open pits</li> <li>Topsoil stockpiles</li> </ul>	Figure X	Up to 12,000 ha disturbance, including clearing of up to 8,000 ha native vegetation, within 20,000 ha development envelope	Additional clearing of 500 ha	Clearing of up to 8,500 ha within a 20,000 ha development envelope <ul style="list-style-type: none"> <li>No clearing of TEC</li> <li>clearing of x ha of <i>Triodia species</i> x (PEC)</li> <li>no clearing of groundwater water dependent vegetation (inc. riparian vegetation)</li> </ul>
Processing elements, including: <ul style="list-style-type: none"> <li>Ore stockpiles</li> <li>Crushing plant</li> <li>Processing plant</li> </ul>				

<ul style="list-style-type: none"> <li>Tailings storage facility</li> <li>Evaporation pond</li> </ul>				
Infrastructure elements, including: <ul style="list-style-type: none"> <li>Accommodation</li> <li>Supporting infrastructure</li> <li>Ancillary buildings</li> </ul>				
<b>Operational elements</b>				
Groundwater abstraction for water supply and mine dewatering	Figure X	Abstraction of 10 gegalitres per annum (GL/a)	Additional abstraction of 2 GL/a	Abstraction of 12 GL/a
Management of surplus water	Figure X	Discharge of up to 4 GL/a to Indi Creek	No change	Discharge of 4 GL/a to Indi Creek
Pit lakes		Formation of pit lakes in pit A and B only, all other below water table pits to be backfilled to prevent the formation of pit lakes	No change	Formation of pit lakes in pit A and B only, all other below water table pits to be backfilled to prevent the formation of pit lakes
TSF capacity	Figure X	x wet tonnes of tailings deposited per annum to a maximum y tonnes	Additional xx wet tonnes of tailings deposited per annum to a maximum of yy tonnes	x+xx wet tonnes of tailings deposited per annum to a maximum of y+yy tonnes
Evaporation pond capacity	Figure X	Evaporation pond capacity of x m <sup>3</sup>	Additional evaporation pond capacity of y m <sup>3</sup>	Evaporation pond capacity of x+y m <sup>3</sup>
Crushing plant processing limit	Figure X	Processing of ore to produce XX tonnes per annum of mineral concentrate	Additional processing of ore to produce YY tonnes per annum of mineral concentrate	Processing of ore to produce XX+YY tonnes per annum of mineral concentrate
Waste rock landform height	Figure X	Waste rock landform height of x m AHD and area of y m <sup>3</sup>	Additional waste rock landform height of xx m AHD and area of yy m <sup>3</sup>	Waste rock landform height of x+xx m AHD and area of y+yy m <sup>3</sup>



<b>Greenhouse gas emissions</b>			
Peak annual average			
Scope 1	Plant and equipment: Less than 100,000 t CO <sub>2</sub> -e	No change	Plant and equipment: Less than 100,000 t CO <sub>2</sub> -e
Scope 2	Electricity use: 10,000 t CO <sub>2</sub> -e	No change	Electricity use: 10,000 t CO <sub>2</sub> -e
Annual average life of mine			
Scope 1	Plant and equipment: Less than 80,000 t CO <sub>2</sub> -e	No change	Plant and equipment: Less than 80,000 t CO <sub>2</sub> -e
Scope 2	Electricity use: 7,000 t CO <sub>2</sub> -e	No change	Electricity use: 7,000 t CO <sub>2</sub> -e
<b>Total (based on annual average Scope 1 and Scope 2) – 20-year life of mine</b>			
1,740,000 t CO <sub>2</sub> -e		Increase to the life of mine by 2 years	<b>1,914,000 t CO<sub>2</sub>-e (22-year life of mine)</b>
<b>Commissioning</b>			
Commissioning of the processing facility subject to operational limits above.			
<b>Rehabilitation and closure</b>			
<p>Progressive rehabilitation will be undertaken over the life of the mine with rehabilitation of pits commencing within one year of pit closure.</p> <p>Areas disturbed through implementation of this proposal will be designed to be safe and non-polluting and will be constructed so that their final shape, size, stability, and ability to support local native vegetation are comparable to natural landforms in the area.</p>			
<b>Other elements which affect extent of effects on the environment</b>		<b>Existing LOM</b>	<b>Proposed LOM</b>
Proposal time	Maximum project life	20 years	22 years

## Example 3A: New proposal – Desalination and groundwater treatment plant

**Table 1: General proposal content description**

<b>Proposal title</b>	Desalination and groundwater treatment plant
<b>Proponent name</b>	Water Works
<b>Short description</b>	<p>The proposal is to construct a Desalination and Groundwater Treatment Plant approximately 40 km north of Perth (Figure 1).</p> <p>The proposal involves construction of a desalination plant, a groundwater treatment plant, seawater intakes and brine outlets, marine pipelines, an integration pipeline from the plant site to the main reservoir and a spur pipeline to a tank site.</p> <p>During operation, the proposal will intake seawater, extract groundwater, discharge brine to the marine environment and result in scope 2 greenhouse gas emissions.</p> <p>The desalination plant is proposed to be developed in four equal stages. Up to two stages may be developed simultaneously. The groundwater treatment plant will be constructed during stage 1. Timing of stages will be dependent on water demand, groundwater allocation, streamflow conditions and timing of other source option development. The proposal will operate for up to 100 years from commencement of operation.</p> <p>The desalination and groundwater treatment plants are to be located within the existing water precinct in an area of increasing urban development. The terrestrial pipeline primarily follows existing road reserves and crosses urban, rural, and industrial zoned areas and areas of State forest. The marine infrastructure occurs in an area of dual reef lines and a deep, sand-dominated lagoon.</p> <p>A portion of the pipeline will intersect perpendicular to the Northern Rail proposal.</p>

**Table 2: Proposal content elements**

Proposal element	Location and description	Maximum extent, capacity or range
<b>Physical elements</b>		
Marine infrastructure – intakes, outlets, and pipeline	Local assessment unit shown in Figure x	<p>Disturbance of up to 9 ha of benthic habitat within a 17 ha development envelope.</p> <p>Intake pipeline approximately 2.9 km from pump station</p> <p>Outfall pipeline approximately 4.4 km from outfall tank</p> <p>Intake structure – 8.5 m diameter, screened, approximately 2 m above seabed.</p>
Water treatment plants Pump Station Outfall Tanks	Water precinct shown in Figure x	25 ha of disturbance, including up to 24 ha of native vegetation, within a 30 ha development envelope.
Laydown	Figure x	Disturbance of up to 2 ha in existing disturbed area.
Integration pipeline and spur	Water precinct to reservoir and tank site as shown in Figure x	55 ha of disturbance, including up to 14 ha of native vegetation, within a 30 m wide, 35 km long, 100 ha development envelope to install a 1400 mm diameter

		pipe. Disturbance within a 12 to 16 m wide construction corridor.
Construction elements		
Tunnelling – marine	Within the water precinct site to the seawater intake and brine outfall sites	18 m diameter vertical shaft within precinct  Two 3.5 m diameter tunnels, minimum horizontal depth of 7 m beneath seabed
Seawater intake	x m offshore within consolidated substrate	2 m diameter vertical risers drilled into seabed  Ground anchors and seabed preparation
Brine outfall	x m offshore within unconsolidated substrate	2 m diameter vertical risers drilled into seabed  Ground anchors and seabed preparation
Plant	Water precinct	Up to 600,000 m³ of surplus fill  Berm construction
Trenching - terrestrial	Water precinct to reservoir and spur to tank site	Open trenching within existing road reserves up to 7 m wide and 3 m deep, will require stockpiling of fill.  Pipe to be surrounded by engineered material and backfilled.  Trenchless construction where open trenches are not feasible – major road crossings, at a minimum depth of 2 m with launch and retrieval pits.
Operational elements		
Seawater intake	x m offshore in area of consolidated substrate (Figure x)	Up to 700 ML/d at no more than 0.15 m/sec  Up to 100 GL/a
Groundwater abstraction	Deep aquifer	Up to 6 GL/a
Brine outfall	x m offshore in an area of unconsolidated substrate (Figure x)	Up to 420 ML/d with a salinity of no more than 75,200 mg/L  Up to 100 GL/a
Plant	Desalination	Maintenance chemicals to be discharged to ocean.  Solids from cleaning to be disposed to licensed landfill.  Filter cleaning rinsate containing commercial compounds and neutralising chemicals to be discharged to ocean.
Greenhouse gas emissions		
Construction		
Scope 1	Land use change – vegetation clearing: less than 20,000 ppm CO <sub>2</sub> equivalent per annum  Plant and equipment: less than 30,000 ppm CO <sub>2</sub> -e per annum	
Scope 2	None	
Scope 3	None	
Operation		
Scope 1	None	
Scope 2	350,000 ppm CO <sub>2</sub> -e per annum	

Scope 3	None	
Rehabilitation		
Western berm will be stabilised to prevent wind erosion and revegetated with native vegetation.		
Areas cleared for construction of phases 2 to 4 will be stabilised using native grasses until construction of additional phases occurs.		
Areas of native vegetation cleared in excess of a 5 m wide maintenance corridor along the terrestrial pipeline corridor will be revegetated on completion of installation of the pipeline.		
Commissioning		
Desalination plant		
Water sourced from either ocean or potable supply.		
Discharged to ocean via diffuser.		
Integration pipeline		
Pressure testing and disinfection of construction works.		
Reuse of water where practical, sourced from potable supply.		
Water neutralised and discharged to terrestrial environment using infiltration or direct discharge.		
Decommissioning		
Removal of all above surface infrastructure.		
Buried pipelines to be decommissioned and left in situ.		
Removal of power infrastructure to be undertaken in consultation with provider.		
Seawater intake and brine outfall will be cut to below seabed surface, removed, and disposed of.		
Other elements which affect extent of effects on environment		
Proposal time	Maximum project life	100 years
	Construction phase – marine	Approximately one year
	Construction phase – pipeline	Approximately one year
	Commissioning	Six to eight months
	Construction phase – plant	Earthworks and veg clearing – approximately one year GTP – approximately one year SDP – approximately two years Four phases of construction
	Operation phase	Up to 335 operational days per year over 100 years

## Example 3B: Amended proposal – Desalination and groundwater treatment plant

**Table 1: General proposal content description**

<b>Proposal title</b>	Desalination and groundwater treatment plant
<b>Proponent name</b>	Water Works
<b>Short description</b>	<p>The proposal is to construct a Desalination and Groundwater Treatment Plant approximately 40 km north of Perth (Figure 1).</p> <p>The proposal involves construction of a desalination plant, a groundwater treatment plant, seawater intakes and brine outlets, marine pipelines, an integration pipeline from the plant site to the main reservoir and a spur pipeline to a tank site.</p> <p>During operation, the proposal will intake seawater, extract groundwater, discharge brine to the marine environment and result in scope 2 greenhouse gas emissions.</p> <p>The desalination plant is proposed to be developed in four equal stages. Up to two stages may be developed simultaneously. The groundwater treatment plant will be constructed during stage 1. Timing of stages will be dependent on water demand, groundwater allocation, streamflow conditions and timing of other source option development. The proposal will operate for up to 100 years from commencement of operation.</p> <p>The desalination and groundwater treatment plants are to be located within the existing water precinct in an area of increasing urban development. The terrestrial pipeline primarily follows existing road reserves and crosses urban, rural, and industrial zoned areas and areas of State forest. The marine infrastructure occurs in an area of dual reef lines and a deep, sand-dominated lagoon.</p> <p>A portion of the pipeline will intersect perpendicular to the Northern Rail proposal.</p> <p>NO CHANGE</p>

**Table 2: Proposal content elements**

Element	Location and description	Existing proposal extent, capacity or range	Proposed amendment (Content of section 38C, 43A or 45C amendment)	Combined extent, capacity or range (total of existing approval + proposed change)
<b>Physical elements</b>				
Marine infrastructure – intakes, outlets, and pipeline	Local assessment unit shown in Figure x	<p>Disturbance to 9 ha of benthic habitat within a 17 ha development envelope.</p> <p>Intake pipeline 2.9 km from pump station</p> <p>Outfall pipeline 4.4 km from outfall tank</p> <p>Intake structure – 8.5 m diameter, screened, 2 m above seabed.</p>	<p>Increase in disturbance of benthic habitat to 13 ha within a 20 ha development envelope (resulting from realignment to avoid conservation</p>	<p>Disturbance to 13 ha of benthic habitat within a 20 ha development envelope.</p> <p>Intake pipeline 2.9 km from pump station</p> <p>Outfall pipeline 4.4 km from outfall tank</p> <p>Intake structure – 8.5 m diameter, screened, 2 m above seabed.</p>

			significant benthic habitat)	
Water treatment plants Pump Station Outfall Tanks	Water precinct shown in Figure x	25 ha of disturbance, including 24 ha of native vegetation, within a 30 ha development envelope.	No change	25 ha of disturbance, including 24 ha of native vegetation, within a 30 ha development envelope.
Laydown	Figure x	Disturbance of up to 2 ha in existing disturbed area	No change	Disturbance of up to 2 ha in existing disturbed area
Integration pipeline and spur	Water precinct to reservoir and tank site as shown in Figure x	55 ha of disturbance, including 14 ha of native vegetation, within a 30 m wide, 35 km long, 100 ha development envelope to install a 1400 mm diameter pipe. Disturbance within a 12 to 16 m wide construction corridor.	Change to alignment reducing the development envelope from 100 ha to 95 ha and increasing clearing of native vegetation from 14 ha to 20 ha (resulting from confirmation in construction technique and 16 m wide construction corridor.)	55 ha of disturbance, including 20 ha of native vegetation, within a 30 m wide, 35 km long, 95 ha development envelope to install a 1400 mm diameter pipe. Disturbance within a 16 m wide construction corridor.
<b>Construction elements</b>				
Tunnelling – marine	Within the water precinct site to the seawater intake and brine outfall sites	18 m diameter vertical shaft within precinct  Two 3.5 m diameter tunnels, minimum horizontal depth of 7 m beneath seabed	No change	18 m diameter vertical shaft within precinct  Two 3.5 m diameter tunnels, minimum horizontal depth of 7 m beneath seabed
Seawater intake	x m offshore within consolidated substrate	2 m diameter vertical risers drilled into seabed  Ground anchors and seabed preparation	No change	2 m diameter vertical risers drilled into seabed  Ground anchors and seabed preparation
Brine outfall	x m offshore within unconsolidated substrate	2 m diameter vertical risers drilled into seabed  Ground anchors and seabed preparation	No change	2 m diameter vertical risers drilled into seabed  Ground anchors and seabed preparation
Plant	Water precinct	Up to 600,000 m <sup>3</sup> of surplus fill	No change	Up to 600,000 m <sup>3</sup> of surplus fill

		Berm construction		Berm construction
Trenching - terrestrial	Water precinct to reservoir and spur to tank site	Open trenching within existing road reserves up to 7 m wide and 3 m deep, will require stockpiling of fill.  Pipe to be surrounded by engineered material and backfilled.  Trenchless construction where open trenches are not feasible – major road crossings, at a minimum depth of 2 m with launch and retrieval pits	No change	Open trenching within existing road reserves up to 7 m wide and 3 m deep, will require stockpiling of fill.  Pipe to be surrounded by engineered material and backfilled.  Trenchless construction where open trenches are not feasible – major road crossings, at a minimum depth of 2 m with launch and retrieval pits
Operational elements				
Seawater intake	x m offshore in area of consolidated substrate (Figure x)	700 ML/d at no more than 0.15 m/sec  Up to 100 GL/a	Additional 20 ML/d	Up to 720 ML/d at no more than 0.15 m/sec  Up to 120 GL/a
Groundwater abstraction	Deep aquifer	6 GL/a	No change	Up to 6 GL/a
Brine outfall	x m offshore in an area of unconsolidated substrate (Figure x)	440 ML/d with a salinity of 75,200 mg/L  Up to 100 GL/a	Additional 20 ML/day	Up to 460 ML/d with a salinity of 75,200 mg/L  Up to 105 GL/a
Plant	Desalination	Maintenance chemicals to be discharged to ocean.  Solids from cleaning to be disposed to licensed landfill.  Filter cleaning rinsate containing commercial compounds and neutralising chemicals to be discharged to ocean.	No change	Maintenance chemicals to be discharged to ocean.  Solids from cleaning to be disposed to licensed landfill.  Filter cleaning rinsate containing commercial compounds and neutralising chemicals to be discharged to ocean.
Greenhouse gas emissions				
Construction				
Scope 1	Land use change – vegetation clearing: less than 20,000 ppm CO <sub>2</sub> -e per annum  Plant and equipment: less than 30,000 ppm CO <sub>2</sub> -e per annum		No change	
Scope 2	None		No change	
Scope 3	None		No change	
Operation				



Scope 1	None	No change	
Scope 2	350,000 ppm CO <sub>2</sub> -e per annum	No change	
Scope 3	None	No change	
<b>Rehabilitation NO CHANGE</b>			
Western berm will be stabilised to prevent wind erosion and revegetated with native vegetation.			
Areas cleared for construction of phases 2 to 4 will be stabilised using native grasses until construction of additional phases occurs.			
Areas of native vegetation cleared in excess of a 5 m wide maintenance corridor along the terrestrial pipeline corridor will be revegetated on completion of installation of the pipeline.			
NO CHANGE			
<b>Commissioning NO CHANGE</b>			
Desalination plant			
Water sourced from either ocean or potable supply.			
Discharged to ocean via diffuser			
<b>Decommissioning NO CHANGE</b>			
Removal of all above surface infrastructure.			
Buried pipelines to be decommissioned and left in situ.			
Removal of power infrastructure to be undertaken in consultation with provider.			
Seawater intake and brine outfall will be cut to below seabed surface, removed, and disposed of.			
<b>Elements which affect extent of effects on environment</b>			
Proposal time	Maximum project life	100 years	No change
	Construction phase – marine	Approximately one year	Approximately three years
	Construction phase – pipeline	Approximately one year	No change
	Commissioning	Six to eight months	Approximately 18 months
	Construction phase – plant	Earthworks and veg clearing – approximately one year GTP – approximately one year SDP – approximately two years	No change
	Operation phase	Up to 335 operational days per year over 100 years	No change

## Example 4A: New proposal – Metal ore mine and processing plant

**Table 1: General proposal content description**

<b>Proposal title</b>	Metal ore mine and processing plant
<b>Proponent name</b>	Metallica Pty Ltd
<b>Short description</b>	<p>The proposal is to develop and operate a metal ore mine and associated infrastructure 400 km north-east of Perth (Figure 1).</p> <p>The proposal involves the development of three open pits that will extend below the water table. The proposal requires the construction of haul roads, waste rock landforms, crushing and (specific) processing infrastructure, power generation plant, tailings storage facility, evaporation pond, accommodation village and ancillary buildings and supporting infrastructure.</p> <p>Tailings from the processing of the ore will be deposited in a lined tailings storage facility and will include seepage interception trench and monitoring bores.</p> <p>Construction and operational water requirements will be met from dewatering of pits. This water will also be treated via a water treatment plant to supply potable water. Excess groundwater from dewatering will be discharged to surface water downstream of mining operations.</p> <p>The gas-fired power plant, mobile plant and equipment and vegetation clearing will result in Scope 1 greenhouse gas emissions. The power plant will meet operational requirements and supply the accommodation village.</p> <p>Mining will occur concurrently across ore bodies. Rehabilitation and closure will be progressive and in accordance with the Mine Closure Plan. Decommissioning is expected to take three years following mine closure.</p> <p>The proposal is located within the Mid-West Region in an area currently used for agricultural purposes. The proposal is in proximity to several existing metal ore mines in the region.</p>

**Table 2: Proposal content elements**

Proposal element	Location and description	Maximum extent, capacity or range
<b>Physical elements</b>		
Open pits including haul roads	Three pits and associated haul road network as shown in Figure x	1,100 ha of disturbance, including up to 900 ha of native vegetation, within the 5,000 ha development envelope
Waste rock landforms	Adjacent to the three pits as shown in Figure x.	750 ha of disturbance, including up to 500 ha of native vegetation clearing, within the 5,000 ha development envelope
Topsoil stockpiles	As shown in Figure x	20 ha of disturbance, on existing disturbed areas, within the 5,000 ha development envelope
Ore stockpiles Run of mine pad	In proximity to the crushing and processing plant as shown in Figure x	55 ha of disturbance, including up to 50 ha of native vegetation clearing within the 5,000 ha development envelope
Crushing and processing plant	As shown in Figure x	20 ha of disturbance, including up to 18 ha of native vegetation clearing within the 5,000 ha development envelope

Tailings storage facility	As shown in Figure x	460 ha of disturbance, including up to 450 ha of native vegetation clearing within the 5,000 ha development envelope
Evaporation pond	As shown in Figure x	250 ha of disturbance, including up to 230 ha of native vegetation clearing within the 5,000 ha development envelope
Ancillary buildings and supporting infrastructure	As shown in Figure x	120 ha of disturbance, including up to 110 ha of native vegetation clearing within the 5,000 ha development envelope
Accommodation village	As shown in Figure x	10 ha of disturbance, including up to 9.5 ha of native vegetation clearing within the 5,000 ha development envelope
Construction elements		
No relevant elements		
Operational elements		
Pit dewatering and groundwater abstraction	Superficial aquifer	30 ML per day up to 10 GL per annum 1 metre drawdown extent not to exceed 500m from pit boundary
Tailings deposition		65,000 wet tonnes of tailings deposited per annum to a maximum of 1,300,000 tonnes
Brine evaporation		XX ML per annum
Material movement		XX tonnes combined ore, waste rock and topsoil removal
Metal ore processing		Processing of ore to produce XX tonnes per annum of mineral concentrate
Power plant		Consumption of up to XX Terra Joules Natural gas to produce up to 50 MWh per annum
Power Plant Air Emissions		NOx – 31ppmv (gas turbine above switchover) 60ppmv (gas turbine below switchover); 880 tonnes/year SO <sub>2</sub> – 4 tonnes/year CO <sub>2</sub> -e – 0.42 tonnes CO <sub>2</sub> -e/MWh; 0.75Mt/year CO – 750 tonnes/year VOCs – 2 tonnes/year PAHs – 3 kilograms/year
Greenhouse gas emissions		
Construction		
Scope 1	110,000 t CO <sub>2</sub> -e vegetation clearing and fuel emissions	
Scope 2	None	
Scope 3	None	
Operation		
Scope 1	150,000 t CO <sub>2</sub> -e per annum, 3,000,000 t CO <sub>2</sub> -e over 20 years	

Scope 2	None	
Scope 3	None	
Rehabilitation		
Progressive rehabilitation undertaken over the life of the mine.		
Final closure and rehabilitation within XX years of cease of operations.		
Commissioning		
Not applicable		
Decommissioning		
Removal of all process related infrastructure within two years of cessation of operations (excluding periods of care and maintenance).		
Other elements which affect extent of effects on environment		
Proposal time	Maximum project life	23 years
	Operation phase	Approximately 20 years
	Decommissioning	Approximately three years

## Example 4B: Amended proposal – Metal ore mine and processing plant

**Table 1: General proposal content description**

<b>Proposal title</b>	Metal ore mine and processing plant
<b>Proponent name</b>	Metallica Pty Ltd
<b>Short description</b>	<p>The proposal is to develop and operate a metal ore mine and associated infrastructure 400 km north-east of Perth (Figure 1).</p> <p>The proposal involves the development of three open pits that will extend below the water table. The proposal requires the construction of haul roads, waste rock landforms, crushing and (specific) processing infrastructure, power generation plant, tailings storage facility, evaporation pond, accommodation village and ancillary buildings and supporting infrastructure.</p> <p>Tailings from the processing of the ore will be deposited in a lined tailings storage facility and will include seepage interception trench and monitoring bores.</p> <p>Construction and operational water requirements will be met from dewatering of pits. This water will also be treated via a water treatment plant to supply potable water. Excess groundwater from dewatering will be discharged to surface water downstream of mining operations.</p> <p>The gas-fired power plant, mobile plant and equipment and vegetation clearing will result in Scope 1 greenhouse gas emissions. The power plant will meet operational requirements and supply the accommodation village.</p> <p>Mining will occur concurrently across ore bodies. Rehabilitation and closure will be progressive and in accordance with the Mine Closure Plan. Decommissioning is expected to take three years following mine closure.</p> <p>The proposal is located within the Mid-West Region in an area currently used for agricultural purposes. The proposal is in proximity to several existing metal ore mines in the region.</p> <p>NO CHANGE</p>

**Table 2: Proposal content elements**

Element	Location and description	Existing proposal extent, capacity or range	Proposed amendment	Combined extent, capacity or range
<b>Physical elements</b>				
Open pits including haul roads	Three pits and associated haul road network as shown in Figure x	1,100 ha of disturbance, including up to 900 ha of native vegetation clearing, within the 5,000 ha development envelope.	1,000 ha of disturbance, including up to 850 ha of native vegetation clearing	2,100 ha of disturbance, including up to 1,750 ha of native vegetation clearing
Waste rock landforms	Adjacent to the three pits as shown in Figure x.	750 ha of disturbance, including up to 500 ha of native vegetation clearing, within the 5,000 ha development envelope	400 ha disturbance, including up to 375 ha of native vegetation clearing	1,150 ha of disturbance, including up to 875 ha of native vegetation clearing, within the 7,500 ha development envelope

Topsoil stockpiles	As shown in Figure x	20 ha of disturbance, within the 5,000 ha development envelope	No change	20 ha of disturbance, within the 7,500 ha development envelope
Ore stockpiles Run of mine pad	In proximity to the crushing and processing plant as shown in Figure x	55 ha of disturbance, including up to 50 ha of native vegetation clearing within the 5,000 ha development envelope	45 ha of disturbance, including up to 40 ha of native vegetation clearing	100 ha of disturbance, including up to 90 ha of native vegetation clearing within the 7,500 ha development envelope
Crushing and processing plant	As shown in Figure x	20 ha of disturbance, including up to 18 ha of native vegetation clearing within the 5,000 ha development envelope	No change	20 ha of disturbance, including up to 18 ha of native vegetation clearing within the 7,500 ha development envelope
Tailings storage facility	As shown in Figure x	460 ha of disturbance, including up to 450 ha of native vegetation clearing within the 5,000 ha development envelope	No change	460 ha of disturbance, including up to 450 ha of native vegetation clearing within the 7,500 ha development envelope
Evaporation pond	As shown in Figure x	250 ha of disturbance, including up to 230 ha of native vegetation clearing within the 5,000 ha development envelope	No change	250 ha of disturbance, including up to 230 ha of native vegetation clearing within the 7,500 ha development envelope
Ancillary buildings and supporting infrastructure	As shown in Figure x	120 ha of disturbance, including up to 110 ha of native vegetation clearing within the 5,000 ha development envelope	No change	120 ha of disturbance, including up to 110 ha of native vegetation clearing within the 7,500 ha development envelope
Accommodation village	As shown in Figure x	10 ha of disturbance, including up to 9.5 ha of native vegetation clearing within the 5,000 ha development envelope	No change	10 ha of disturbance, including up to 9.5 ha of native vegetation clearing within the 7,500 ha development envelope
<b>Operational elements</b>				
Pit dewatering and groundwater abstraction	Superficial aquifer	30 ML per day up to 10 GL per annum 1 metre drawdown extent not to exceed 500m from pit boundary.	No change	30 ML per day up to 10 GL per annum 1 metre drawdown extent not to exceed 500m from pit boundary.
Tailings deposition		65,000 wet tonnes of tailings deposited per annum to a maximum of 1,300,000 tonnes.	No change	65,000 wet tonnes of tailings deposited per annum to a maximum of 1,300,000 tonnes.

Brine evaporation		XX ML per annum	No change	XX ML per annum
Material movement		XX tonnes combined ore, waste rock and topsoil removal	No change	XX tonnes combined ore, waste rock and topsoil removal
Metal ore processing		Processing of ore to produce XX tonnes per annum of mineral concentrate	No change	Processing of ore to produce XX tonnes per annum of mineral concentrate
Power plant		Consumption of up to XX Terra Joules Natural gas to produce up to 50 MWh per annum.	No change	Consumption of up to XX Terra Joules Natural gas to produce up to 50 MWh per annum.
Power Plant Air Emissions		NOx - 31ppmv (gas turbine above switchover) 60ppmv (gas turbine below switchover); 880 tonnes/year SO <sub>2</sub> - 4 tonnes/year CO <sub>2</sub> -e - 0.42 tonnes CO <sub>2</sub> -e /MWh; 0.75Mt/year CO - 750 tonnes/year VOCs - 2 tonnes/year PAHs - 3 kilograms/year	No change	NOx – 31 ppmv NOx (gas turbine above switchover) 60 ppmv (gas turbine below switchover); 880 tonnes/year SO <sub>2</sub> - 4 tonnes/year CO <sub>2</sub> -e - 0.42 tonnes CO <sub>2</sub> -e /MWh; 0.75Mt/year CO - 750 tonnes/year VOCs - 2 tonnes/year PAHs - 3 kilograms/year
Greenhouse gas emissions				
Construction				
Scope 1	110,000 t CO <sub>2</sub> -e vegetation clearing and fuel emissions		No change	
Scope 2	None		No change	
Scope 3	None		No change	
Operation				
Scope 1	150,000 t CO <sub>2</sub> -e per annum, 3,000,000 t CO <sub>2</sub> -e over 20 years		150,000 t CO <sub>2</sub> -e per annum, 5,000,000 t CO <sub>2</sub> -e over 38 years	
Scope 2	None		No change	
Scope 3	None		No change	
Rehabilitation				
Progressive rehabilitation undertaken over the life of the mine.				
Final closure and rehabilitation within XX years of cease of operations.				
Commissioning				
Not applicable				



<b>Decommissioning</b>			
Removal of all process related infrastructure within two years of cessation of operations (excluding periods of care and maintenance).			
<b>Elements which affect extent of effects on environment</b>			
Proposal time	Maximum project life - 23 years	Additional 15 years	38 years
	Operation phase - Approximately 20 years	Additional 15 years	Approximately 35 years
	Decommissioning – Approximately three years	No change	Approximately three years

**Table 3: Condition changes (for section 45C requests only)**

<b>Condition No.</b>	<b>Condition</b>	<b>Condition change</b> (may be shown in mark up, depending on complexity)	<b>Brief reason for change</b>	<b>Proposal elements relevant to condition change</b>
New	Flora	The proponent shall not directly disturb more than 10 ha of TEC XX within the 7,500 ha development envelope	To limit clearing of TEC affected by the proposed amendment	Open pits including haul roads