

<b>Rio Tinto Exploration – Australasia Region</b>	<b>Regional</b>
<b>ENVT 100 Environment Protection and Biodiversity Conservation (EPBC)</b>	

**1.0 ENVT 100 EPBC CHECKLIST**

DISTRICT:	<b>Australia</b>	_____
PROGRAM:	<b>Australian Bauxite</b>	_____
PROJECT:	<b>Cape Ford</b>	_____
TENEMENT/S:	<b>Cape Ford EL 1924</b>	_____
DATE:		_____
		<input type="checkbox"/> <input checked="" type="checkbox"/>
	<b>REFERRAL REQUIRED?</b>	<b>YES    NO</b>
Prepared by	<b>Gerard Anderson</b>	_____
Environmental Officer (or Mgr HSEC)		_____
Approved by		_____
	<b>Exploration Manager</b>	

**Use this Checklist with ENVT100 Environmental Protection and Biodiversity Conservation.**

**Step 1**

Follow the instructions on the Impact Identification and Management Table to complete the table.

**Step 2**

**Go to:**

- Click on 'Interactive Map'
- Click on the 'Interactive Map Search'
- 'Accept' the caveat conditions. This will take you to the EPBC Interactive Map.
- Outline the tenement boundary of the project
- Conduct a search on the selected area.

**Step 3**

Using the EPBC Interactive map, and the report produced, answer the following questions. This will assist in establishing whether the actions identified in the Impact Management Table will have a significant impact, and if they are a matter of National Environmental Significance (NES).

## **2.0 IMPACT IDENTIFICATION AND MANAGEMENT**

**Note:** Only complete the sections for planned activities. Leave the remainder blank.

**Text in [ ] are examples only.**

1. Establish the activities planned for this programme.
2. Identify the Actions (Tasks) involved with each Activity.
3. Identify the Potential Impact (without controls ie. Environmental procedures).
4. Establish the existing controls (procedures), and any additional controls needed ie. Monthly water testing.
5. Identify the degree of any residual impact (with controls).
6. Determine if the residual impact is significant or not.
7. Decide if the Impact is a matter of National Environmental Significance (NES).

**ENVT 100 Environment Protection and Biodiversity Conservation (EPBC)**

Exploration Activity	Impact Identification and Management			Assessment of Impact		
	Action (Identify tasks involved with activity)	Potential Impact (Without Controls)	Controls (Refer to relevant RTE-AR Procedures)	Residual Impact (with Controls)  None-Low-Med- High	Residual Impact significant  Yes-No	Matter of NES? Y-N  If Yes, which NES?
Establishing a field camp	Handling, transport, storage and use of Hydrocarbons and Hazardous Substances	Soil and vegetation contamination, ground water pollution, adversely affect fauna.	ENVT111 Hydrocarbons and Hazardous Substances; SAFE 109 Hazardous Substances (Minimum Standards), and Australia District Field Operations Hazardous Materials Procedure.	Low	No	No
Data Gathering Airborne Survey <ul style="list-style-type: none"> <li>• Aerial photographs</li> <li>• Spectral scanning</li> </ul> Geophysical surveys	Flying aircraft	Transient noise	ENVT101 Environmental Management Plan	Low	No	No
Hand Sampling Geological Mapping <ul style="list-style-type: none"> <li>• Hand sampling of rocks and soils</li> <li>• Passive gravity measurements</li> <li>• Handheld magnetic measurements</li> </ul>	Foot access, Tyred vehicle access  Digging, Rock chipping	Compaction, minor ground disturbance (soil and vegetation), water and wind erosion	ENVT110 Sampling  ENVT112 Flagging	Low	No	No
Construction of Access Tracks	Construction of tracks and use of vehicles (heavy and light) on tracks	Compaction, vegetation destruction, heritage site damage, impact on local fauna / flora distribution, water and wind erosion, dust generation, river and creek bank damage	ENVT102 Ground Disturbance  ENVT112 Flagging	Low	No	No

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Exploration Activity	Impact Identification and Management			Assessment of Impact		
	Action (Identify tasks involved with activity)	Potential Impact (Without Controls)	Controls (Refer to relevant RTE-AR Procedures)	Residual Impact (with Controls)  None-Low-Med- High	Residual Impact significant  Yes-No	Matter of NES? Y-N  If Yes, which NES?
Camping < 8 persons <ul style="list-style-type: none"> <li>• Establishing and using fly camp or one caravan or less</li> </ul>	Establishing and utilising an area for temporary use as accommodation and messing facilities.	Compaction, vegetation destruction, heritage site damage, pollution, water and wind erosion, visually unappealing.	ENVT103 Camp Management  ENVT102 Ground Disturbance  ENVT 111 Hydrocarbons and Hazardous Substances.	Low	No	No
Camping > 8 persons <ul style="list-style-type: none"> <li>• Establishing and using camp of size more than one caravan</li> </ul>	Establishing and utilising an area for use as accommodation and messing facilities.	Compaction, vegetation destruction, heritage site damage, pollution, water and wind erosion, visually unappealing.	ENVT103 Camp Management  ENVT102 Ground Disturbance  ENVT 111 Hydrocarbons and Hazardous Substances	Low	No	No
Geochemical Surveys <ul style="list-style-type: none"> <li>• Sampling by pick/shovel/trowels</li> </ul>	Foot access  Construction of access tracks, tyred vehicle access, digging of shallow (<30cm deep) trenches/pits	Compaction, minor ground (vegetation and soil) disturbance, water erosion	ENVT110 Sampling  ENVT102 Ground Disturbance	Low	No	No
Geophysical Surveys <ul style="list-style-type: none"> <li>• Looped conductor wire method</li> <li>• Peg and hole method</li> </ul>	Foot access  Tyred vehicle access, construction of access tracks	Transient noise, Minor compaction, minor ground disturbance (soil and vegetation), minor water and wind erosion	ENVT110 Sampling  ENVT102 Ground Disturbance	Low	No	No

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Exploration Activity	Impact Identification and Management			Assessment of Impact		
	Action (Identify tasks involved with activity)	Potential Impact (Without Controls)	Controls (Refer to relevant RTE-AR Procedures)	Residual Impact (with Controls)  None-Low-Med- High	Residual Impact significant  Yes-No	Matter of NES? Y-N  If Yes, which NES?
<ul style="list-style-type: none"> <li>Seismic Shot hole</li> </ul>						
Drilling <ul style="list-style-type: none"> <li>RAB</li> <li>Air Core</li> <li>RC</li> <li>Diamond</li> </ul>	Construction of access tracks, tyred vehicle access  Drill pad construction, heavy equipment mobilisation, drilling waste discharge, drilling	Ground and surface water contamination, vegetation and soil disturbance, water and wind erosion, dust generation	ENVT102 Ground Disturbance  ENVT107 Drilling  ENVT108 Drill Hole Capping  ENVT109 Water Bores  ENVT114 Monitoring Equipment	Low	No	No
Bulk Sampling	Tyred vehicle access, construction of access tracks  Ground excavation, heavy equipment mobilisation, Soil removal and storage	Ground and surface water contamination, vegetation and soil disturbance, water erosion, dust generation	ENVT110 Sampling  ENVT102 Ground Disturbance  ENVT114 Monitoring Equipment  ENVT 111 Hydrocarbons and Hazardous Substances	Low	No	No

**3.0 PRELIMINARY QUESTIONS**

If you answer 'Yes' to any of the following questions, please fill out the corresponding section in the Checklist.

Note All questions below are to be answered.

1. Are the actions on, near or likely to adversely affect a World Heritage Property (WHP)?

Yes  No  If 'Yes', complete Section 1. If 'No' go to Question 2

2. Are the actions on, near or likely to adversely affect a Ramsar Wetland?

Yes  No  If 'Yes', complete Section 2. If 'No' go to Question 3.

3.

a) Do any listed Australian flora or fauna, that is, listed in the Act as being extinct in the wild, critically endangered, endangered or vulnerable occur on the project area?

Yes  No  If 'Yes', list the species:  
.....  
.....

b) Are the actions likely to have a significant environmental impact on these species?

Yes  No  If 'Yes', complete Section 3. If 'No' go to Question 4.

4.

a) Do any listed migratory species occur on the project area?

Yes  No

b) Are the actions likely to have a significant environmental impact on these listed migratory species?

Yes  No  If 'Yes', complete Section 4. If 'No' go to Question 5.

5. Do the actions involve nuclear material/products, or an activity or facility for processing nuclear material/products?

Yes  No  If 'Yes', Complete Section 5. If 'No' Go To Question 6.

6. Is the action in, near or likely to impact on a Commonwealth Marine area?

Yes  No  If 'Yes', Complete Section 6. If 'No' follow the directions below.

When complete, attach the relevant Sections to these 'Preliminary Questions'.

If the answer is 'Yes' to Questions 1, 2, 3b, 4b, 5, or 6, then the action is likely to have a significant environmental impact on a matter of National Environmental Significance. Submit this completed EPBC checklist must to the Environmental Officer, or the Manager HSEC, before any fieldwork. Fieldwork is not to commence until the Environmental Officer and/or the Manager HSEC have approved the checklist.

If you answered 'No' to all the questions, attach these 'Preliminary Questions' and your EPBC Search Report as an appendice to the Project EMP.

**4.0 EPBC CHECKLIST**

**4.1 Section 1 World Heritage Properties (WHP)**

All WHP's are listed at: <http://www.ea.gov.au/heritage/awh/worldheritage/index.html>

1. From your search, select the WHP that was on, near or likely to be affected:

- Heard and McDonald Islands
- The Greater Blue Mountains Area
- Australian Fossil Mammal Sites (Naracoorte)
- Australian Fossil Mammal Sites (Riversleigh)
- Central Eastern Rainforest Reserves of Australia
- Shark Bay, Western Australia
- Wet Tropics of Queensland
- Ulura-Kata Tjuta National Park
- Macquarie Island
- Lorde Howe Island
- Fraser Island
- Great Barrier Reef
- Kakadu National Park
- Willandra Lakes Region
- Tasmanian Wilderness

2. What are the World Heritage Values for the relevant WHP?

To answer this question, start at: <http://www.ea.gov.au/heritage/awh/worldheritage/index.html>

Select 'Values' next to the relevant WHP.

What values have you identified (if there is insufficient space provided append additional information to the EPBC Checklist)?

.....  
.....  
.....  
.....

3. Is the action likely to result in one or more of these World Heritage values being lost, damaged or degraded? (To answer this question, you will need to form an opinion. This opinion should be based on the advice of a person with the relevant scientific expertise or experience.)

- Yes  No  Unsure

If the answer is 'Yes' or 'Unsure' to any questions in Section 1, then refer the actions.

If the answer is 'No' to all of Section 1, go to Question 2.



**Part A**

Record the listed species and ecological communities under the following classifications.

**Species**

Those species that are extinct in the wild:

.....  
.....

Those species that are critically endangered or endangered:

.....  
.....

Those species that are vulnerable:

.....  
.....

**Ecological Communities**

Those ecological communities that are critically endangered or endangered:

.....  
.....

Continue with the following questions in Part B.

**Part B**

(To answer the following questions, you will need to form an opinion. This opinion should be based on the advice from a person with the relevant scientific expertise or experience.)

**Species**

1. For those species that are extinct in the wild, will or is the action, likely to:
  - adversely affect a captive or propagated population, or one recently introduced or re-introduced into the wild? Yes  No

**or**

  - interfere with the recovery of the species, or its re-introduction to the wild? Yes  No
  
2. For those species that are critically endangered or endangered, will or is the action, likely to:
  - lead to a long term decrease in the size of a population? Yes  No
  
  - reduce the area of distribution of the species? Yes  No

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- fragment an existing population into two or more populations? Yes  No
- adversely affect habitat critical to the survival of a species? Yes  No
- disrupt the breeding cycle of a population? Yes  No
- modify, destroy, remove isolate or decrease the availability or quality of habitat to the extent that the species is likely to decline? Yes  No
- result in invasive species that are harmful to a critically endangered or endangered species becoming established in the habitat of the endangered or critically endangered species? Yes  No
- interfere with the recovery of the species? Yes  No

3. For those species that are vulnerable, will or is the action, likely to:

- lead to a long-term decrease in the size of an 'important population' of a species? Yes  No
- reduce the area of distribution of an 'important population'? Yes  No
- fragment an existing 'important population' into two or more populations? Yes  No
- adversely affect habitat critical to the survival of a species? Yes  No
- disrupt the breeding cycle of an important population? Yes  No
- modify, destroy, remove, isolate or decrease the availability, or quality, of habitat to the extent that the population of the species is likely to decline? Yes  No
- result in invasive species, that are harmful to a vulnerable species, becoming established in the habitat of the vulnerable species? Yes  No
- interferes substantially with the recovery of the species? Yes  No

**4.4 Ecological Communities**

1. For those ecological communities that are critically endangered, will or is the action, likely to:
- lead to a long-term adverse effect on an ecological community? Yes  No
  - reduce the area of distribution of a community? Yes  No
  - fragment an existing population of the community? Yes  No
  - adversely affect habitat critical to the survival of an ecological community? Yes  No
  - modify, destroy, remove, isolate or decrease the availability, or quality, of habitat to the extent that the population of the species is likely to decline? Yes  No
  - result in invasive species, that are harmful to the critically endangered or endangered community, becoming established in a population of the community? Yes  No
  - interferes with the recovery of the ecological community? Yes  No
2. Has the Commonwealth adopted any Recovery Plans for this ecological community? Yes  No

All the existing Recovery Plans adopted by the Commonwealth are listed at:

<http://www.ea.gov.au/biodiversity/threatened/recovery/list.html#swa>

If 'Yes', do they provide any guidance on whether an action is likely to be significant?

What are the guidelines (If this is insufficient space, append the additional information to the EPBC Checklist)?

On the basis of such guidance, will or is the action, likely to have a significant impact?

If the answer is 'Yes' to any of Part B then refer the action.

If the answer is 'No' to all of Part B then go to Question 4.

**4.5 Section 4 Migratory Species**

All migratory species protected under the EPBC Act are listed at:

<http://www.ea.gov.au/biodiversity/migratory/list.html>

The EPBC Interactive Map Search Report provides this information.

1. What listed migratory species has the search identified?

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.....  
.....  
.....

2. For those migratory species identified, will or is the action, likely to:

- substantially modify (by, altering fire regimes, nutrient cycles or hydrological cycles, and fragmenting populations), destroy or isolate an area of important habitat of the migratory species? Yes  No  Unsure
  
- result in an invasive species that is harmful to the migratory species becoming established in an area of important habitat of the migrating species? Yes  No  Unsure
  
- seriously disrupt the life cycles (breeding, feeding, migration or resting behaviour) of an ecologically significant proportion of the population of the species? Yes  No  Unsure
  
- For the migratory species listed above, what is an ecologically significant proportion of the population of that species? Yes  No  Unsure

If the answer is 'Yes' or 'Unsure' to any of section 4 then refer the action.

If the answer is 'No' to all of Section 4 then go to Question 5.

**4.6 Section 5 Nuclear Action**

1. Does the action involve:

- establishing or significantly modifying a nuclear installation or a facility for storing spent nuclear fuel? Yes  No
  
- transporting spent nuclear fuel or radioactive waste products arising from reprocessing? Yes  No
  
- establishing or significantly modifying a facility for storing radioactive waste products arising from reprocessing? Yes  No
  
- mining or milling uranium ore? Yes  No
  
- establishing or significantly modifying a large-scale disposal facility for radioactive waste? Yes  No
  
- de-commissioning or rehabilitating of any facility or area on which an activity described above has been undertaken? (as at 31 October 2000, there are no such actions.) Yes  No
  
- any other action prescribed by the Regulations (as at 31 October 2000, there are no such actions). Yes  No

If the answer is 'Yes' to any of Section 5, then refer the action.

If the answer is 'No' to all of Section 5, then go to Question 6.

**4.7 Section 6 Commonwealth Marine Environment**

All such Commonwealth marine areas are listed at:

<http://www.ea.gov.au/coasts/information/marinearea.html>

1. Which area is identified?

... *Australian Commonwealth Marine area*

.....  
...  
.....  
.....

2. Will, or is, the action likely to:

- result in a known or potential pest species becoming established in the Commonwealth marine area? Yes  No
- modify, destroy, fragment or disturb a substantial area of habitat resulting in an adverse impact on the marine ecosystem function or integrity within a Commonwealth marine area? Yes  No
- have a substantial adverse effect on a population of a marine species or cetacean including its life cycle (breeding, feeding, migration behaviour and life expectancy) and spatial distribution? Yes  No
- result in a substantial change in air or water quality (including temperature) which may adversely impact on biodiversity, ecological integrity, social amenity or human health. Yes  No
- result in organic chemicals, heavy metals, or other potentially harmful chemicals accumulating in the marine environment, which adversely affects the biodiversity, ecological integrity, social amenity or human health? Yes  No