APPROVAL

Yeelirrie Uranium Mine, Shire of Wiluna, WA (EPBC 2009/4906)

This decision is made under sections 130(1) and 133(1) of the Environment Protection and Biodiversity Conservation Act 1999 (Cth). Note that section 134(1A) of the EPBC Act applies to this approval, which provides in general terms that if the approval holder authorises another person to undertake any part of the action, the approval holder must take all reasonable steps to ensure that the other person is informed of any conditions attached to this approval, and that the other person complies with any such condition.

Details

<table>
<thead>
<tr>
<th>Person to whom the approval is granted (approval holder)</th>
<th>Cameco Australia Pty Ltd</th>
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<tbody>
<tr>
<td>ABN of approval holder</td>
<td>65 001 513 088</td>
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<tr>
<td>Action</td>
<td>To develop Yeelirrie open cut uranium ore mine, ore processing plant and associated infrastructure in the Shire of Wiluna, 500 kilometres north of Kalgoorlie, Western Australia. This includes the mining and processing of uranium ore, sourcing and supply of water and electricity, upgrades to roads, accommodation of a workforce and transport of uranium oxide concentrate by road from the mine to Kalgoorlie, as described in the referral received by the department on 21 May 2009 [See EPBC Act referral 2009/4906].</td>
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Proposed Approval decision

My decisions on whether or not to approve the taking of the action for the purposes of each controlling provision for the action are as follows.

Controlling Provisions

<table>
<thead>
<tr>
<th>Listed Threatened Species and Communities</th>
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<tbody>
<tr>
<td>Section 18</td>
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<td>Section 18A</td>
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<th>Listed migratory species</th>
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<tr>
<td>Section 20</td>
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<td>Section 20A</td>
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### Nuclear actions

<table>
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<th>Section</th>
<th>Approval</th>
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<td>Section 21</td>
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<td>Section 22A</td>
<td>Approve</td>
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### Period for which the approval has effect

This approval has effect until 31 December 2043

### Decision-maker

**Name and position**

The Hon Melissa Price MP  
Minister for the Environment

**Signature**

**Date of decision**

10 April 2019

### Conditions of approval

This approval is subject to the conditions under the EPBC Act as set out in ANNEXURE A.
ANNEXURE A – CONDITIONS OF APPROVAL

Part A – Conditions specific to the action

1. To avoid and mitigate impacts on the environment, the approval holder must:
   a. implement conditions 8 – 16 of the WA approval, and
   b. not clear more than 2422 hectares within the 4875 hectare development envelope.

2. To avoid impacts on the stygofauna species *Atopobathynella* sp. ‘line K’, *Enchytraeidae* sp. Y4 and *Kinnecaris* ‘lined’ sp. n., the approval holder must ensure groundwater drawdown at the location of the *Atopobathynella* sp. ‘line K’, *Enchytraeidae* sp. Y4 and the *Kinnecaris* ‘lined’ sp. n. is limited to 0.5 metres for the life of the approval.

3. To manage impacts on subterranean fauna species, the approval holder must not exceed the 0.5 metre groundwater drawdown contour.

4. At least 12 months prior to the commencement of the action, the approval holder must develop a groundwater monitoring program to manage impacts on subterranean fauna species and troglofauna species. The groundwater monitoring program must be adequate to inform:
   a. groundwater abstraction rates and groundwater levels to confirm predicted drawdown levels,
   b. location of production bores to reduce impacts on subterranean fauna species,
   c. trigger levels to reduce impacts on subterranean fauna species and avoid impacts on troglofauna species within Area 2 defined at Attachment D,
   d. adaptive management of groundwater abstraction rates and groundwater levels,
   e. the outcomes of conditions 2 and 3 of this approval are being met, and
   f. the extent of impact on subterranean fauna species and troglofauna species.

5. The groundwater monitoring program must be reviewed by a suitably qualified subterranean fauna ecologist and suitably qualified hydrogeologist. Following review of the groundwater monitoring program by a suitably qualified subterranean fauna ecologist and suitably qualified hydrogeologist, the approval holder must submit the groundwater monitoring program to the Minister for approval. If the Minister approves the groundwater monitoring program then the groundwater monitoring program must be implemented upon commencement of the action.

6. From commencement of the action, the groundwater monitoring program must be reviewed every three (3) years by a suitably qualified subterranean fauna ecologist and suitably qualified hydrogeologist to ensure it meets the requirements of the groundwater monitoring program set out in condition 4 of this approval. Within thirty (30) days of the
groundwater monitoring program being reviewed by a suitably qualified subterranean fauna ecologist and suitably qualified hydrogeologist, the approval holder must submit the groundwater monitoring program to the Minister for approval. If the Minister approves the groundwater monitoring program then the groundwater monitoring program must be implemented within 2-months of being approved in writing.

7. To avoid impacts on troglofauna species, the approval holder must submit for the Minister’s approval, evidence from a suitably qualified subterranean fauna ecologist that any action taken within Area 1 will not result in the extinction of troglofauna species located in Area 1. The approval holder must not commence clearing of Area 1 until the Minister has approved the evidence.

8. To mitigate impacts on the Western Atriplex yeelirrie population, the approval holder must:

a. implement a detailed micro-genetic study, translocation trials and minimum viable population analysis to define the reproductive and ecological attributes of the Western Atriplex yeelirrie population to demonstrate the viability of establishing a self-sustaining population of mature individuals of the Western Atriplex yeelirrie population that are capable of surviving long-term outside the development envelope within the Eastern Murchison (MUR1) IBRA subregion.

b. submit for the Minister’s approval, evidence from a suitably qualified flora ecologist who has been approved in writing by the Department, that a micro-genetic study, translocation trials and minimum viable population analysis has been undertaken; that reproductive and ecological attributes of the Western Atriplex yeelirrie population have been defined; and that a self-sustaining population of mature individuals of the Western Atriplex yeelirrie population can be established that is capable of undergoing natural population processes such as producing viable seed and recruitment of subsequent generations.

c. avoid any direct or indirect impacts on the Western Atriplex yeelirrie population within the development envelope until the Minister has approved the evidence referred to in condition 8(b) in writing.

9. Should the Minister approve the evidence, the approval holder must establish a self-sustaining population of mature individuals of the Western Atriplex yeelirrie population capable of surviving long-term, as defined by evidence provided at condition 8, outside the development envelope within the Eastern Murchison (MUR1) IBRA subregion.

10. Prior to the commencement of the action, the approval holder must engage a suitably qualified fauna ecologist to undertake a Night Parrot survey within the development envelope, in accordance with the WA DBCA recommended Night Parrot survey methods. Within three months of the Night Parrot survey being completed, the approval holder must provide the Department with the Night Parrot survey results.
11. Should the **Night Parrot** or evidence of the **Night Parrot** be recorded during the survey required under condition 9 of this approval, the approval holder must submit a **Night Parrot** Management Plan for the Minister’s approval. If the Minister approves the **Night Parrot** Management Plan then the **Night Parrot** Management Plan must be implemented.

12. If a **Night Parrot** Management Plan is required under condition 10, the approval holder must not **commence the action** unless the Minister has approved the **Night Parrot** Management Plan in writing.

13. The **Night Parrot** Management Plan must be consistent with the Department’s **Environmental Management Plan Guidelines**, and must include:

   a. The **Night Parrot** Management Plan environmental objectives, relevant **protected matter** and a reference to EPBC Act approval conditions to which the **Night Parrot** Management Plan refers,

   b. A table of commitments made in the **Night Parrot** Management Plan to achieve the objectives, and a reference to where the commitments are detailed in the **Night Parrot** Management Plan,

   c. Reporting and review mechanisms, and documentation standards to demonstrate compliance with the **Night Parrot** Management Plan,

   d. An assessment of risks to achieving **Night Parrot** Management Plan environmental objectives and risk management strategies that will be applied,

   e. Impact avoidance, mitigation and/or repair measures, and their timing; and

   f. A monitoring program, which must include:
      i. measurable performance indicators,
      ii. the timing and frequency of monitoring to detect changes in the performance indicators,
      iii. trigger values for corrective actions, and
      iv. proposed corrective actions, if trigger values are reached.

14. To compensate for the loss of **Malleefowl habitat** within the development envelope, the approval holder must:

   a. legally secure for the life of the approval an offset area(s) containing **Malleefowl habitat** that is equal to or greater in size and quality to the **Malleefowl habitat** to be cleared within the development envelope; and

   b. submit for the Minister’s approval, a **Malleefowl** Offset Strategy detailing the environmental attributes of the offset area(s). The **Malleefowl** Offset Strategy must:
      i. specify the proposed environmental offset area(s) including, but not limited to:
         - location,
Australian Government
Department of the Environment and Energy

- proximity to high-value ecological corridors,
- tenure,
- suitability to offset impacts to the Malleefowl, and
- baseline condition quantified using quality score for area of habitat, and if applicable, the number of Malleefowl individuals present.

ii. provide evidence of the capacity of the offset site(s) to meet the requirements and intent of this condition, and the principles of the EPBC Act Environmental Offsets Policy (2012),

iii. detail when and how the offset area(s) will be protected in perpetuity under a conservation mechanism,

iv. demonstrate the adequacy of the proposed conservation mechanism proposed to legally secure the offset area(s), and describe any means by which a future site owner may seek to amend or remove the mechanism,

v. provide a completed EPBC Act Offsets Assessment Guide (offset calculator) for the Malleefowl offset area(s), and

vi. present evidence substantiating inputs to the offset calculator, including:
   - confidence in result, time until ecological benefit, start and future condition (scale of 1 - 10), and risk of loss,
   - the specific components used to derive start and future condition (i.e. stocking rate, site context and site condition) of the Malleefowl habitat at the offset site, and current condition of the Malleefowl habitat at the impact site, and
   - set-out in general terms potential offset management activities considered feasible to achieve future condition and time until ecological benefit.

If the Minister approves the Malleefowl Offset Strategy then the Malleefowl Offset Strategy must be implemented. The approval holder must not commence the action unless the Minister has approved the Malleefowl Offset Strategy in writing.

Part B - Standard administrative conditions

Notification of date of commencement of the action

15. The approval holder must notify the Department in writing of the date of commencement of the action within ten (10) business days after the date of commencement of the action.
Compliance records

16. The approval holder must maintain accurate and complete compliance records.

17. If the Department makes a request in writing, the approval holder must provide electronic copies of compliance records to the Department within the timeframe specified in the request.

Note: Compliance records may be subject to audit by the Department or an independent auditor in accordance with section 458 of the EPBC Act, and or used to verify compliance with the conditions. Summaries of the result of an audit may be published on the Department’s website or through the general media.

Preparation and publication of plans

18. The approval holder must:

a. submit plans electronically to the Department for approval by the Minister;

b. publish each plan on the website within 20 business days of the date the plan is approved by the Minister or of the date a revised action management plan is submitted to the Minister, unless otherwise agreed to in writing by the Minister;

c. exclude or redact sensitive ecological data from plans published on the website or provided to a member of the public; and

d. keep plans published on the website until the end date of this approval.

19. The approval holder must ensure that any monitoring data (including sensitive ecological data), surveys, maps, and other spatial and metadata required under conditions 4, 12 and 15 of this approval, are prepared in accordance with the Department’s Guidelines for biological survey and mapped data (2018) and submitted electronically to the Department in accordance with the requirements of the plans.

Annual compliance reporting

20. The approval holder must prepare a compliance report for each 12 month period following the date of commencement of the action, or as otherwise agreed to in writing by the Minister. The approval holder must:

a. publish each compliance report on the website within 60 business days following the relevant 12 month period;

b. notify the Department by email that a compliance report has been published on the website within five business days of the date of publication;

c. keep all compliance reports publicly available on the website until this approval expires;

d. exclude or redact sensitive ecological data from compliance reports published on the website; and
e. where any sensitive ecological data has been excluded from the version published, submit the full compliance report to the Department within 5 business days of publication.

Note: Compliance reports may be published on the Department's website.

Reporting non-compliance

21. The approval holder must notify the Department in writing of any: incident; non-compliance with the conditions; or non-compliance with the commitments made in plans. The notification must be given as soon as practicable, and no later than two business days after becoming aware of the incident or non-compliance. The notification must specify:
   a. the condition which is or may be in breach; and
   b. a short description of the incident and/or non-compliance.

22. The approval holder must provide to the Department the details of any incident or non-compliance with the conditions or commitments made in plans as soon as practicable and no later than 10 business days after becoming aware of the incident or non-compliance, specifying:
   a. any corrective action or investigation which the approval holder has already taken or intends to take in the immediate future;
   b. the potential impacts of the incident or non-compliance; and
   c. the method and timing of any remedial action that will be undertaken by the approval holder.

Independent audit

23. The approval holder must ensure that independent audits of compliance with the conditions are conducted for the 12 month period from the date of this approval and for every subsequent twelve (12) month period.

24. For each independent audit, the approval holder must:
   a. provide the name and qualifications of the independent auditor and the draft audit criteria to the Department;
   b. only commence the independent audit once the audit criteria have been approved in writing by the Department; and
   c. submit an audit report to the Department within the timeframe specified in the approved audit criteria.

25. The approval holder must publish the audit report on the website within ten (10) business days of receiving the Department’s approval of the audit report and keep the audit report published on the website until the end date of this approval.
Revision of action management plans

26. The approval holder may, at any time, apply to the Minister for a variation to an action management plan, program or offset strategy approved by the Minister under conditions 5, 11 and 13, or as subsequently revised in accordance with these conditions, by submitting an application in accordance with the requirements of section 143A of the EPBC Act. If the Minister approves a revised action management plan (RAMP) then, from the date specified, the approval holder must implement the RAMP in place of the previous action management plan.

27. The approval holder may choose to revise an action management plan, program or offset strategy approved by the Minister under condition 5, 11 and 13, or as subsequently revised in accordance with these conditions, without submitting it for approval under section 143A of the EPBC Act, if the taking of the action in accordance with the RAMP would not be likely to have a new or increased impact.

28. If the approval holder makes the choice under condition 27 to revise an action management plan without submitting it for approval, the approval holder must:

a. notify the Department in writing that the approved action management plan has been revised and provide the Department with:
   i. an electronic copy of the RAMP;
   ii. an electronic copy of the RAMP marked up with track changes to show the differences between the approved action management plan and the RAMP;
   iii. an explanation of the differences between the approved action management plan and the RAMP;
   iv. the reasons the approval holder considers that taking the action in accordance with the RAMP would not be likely to have a new or increased impact; and
   v. written notice of the date on which the approval holder will implement the RAMP (RAMP implementation date), being at least 20 business days after the date of providing notice of the revision of the action management plan, or a date agreed to in writing with the Department.

b. subject to condition 30, implement the RAMP from the RAMP implementation date.

29. The approval holder may revoke their choice to implement a RAMP under condition 27 at any time by giving written notice to the Department. If the approval holder revokes the choice under condition 27, the approval holder must implement the previous action management plan approved by the Minister.

30. If the Minister gives a notice to the approval holder that the Minister is satisfied that the taking of the action in accordance with the RAMP would be likely to have a new or increased impact, then:
a. condition 27 does not apply, or ceases to apply, in relation to the RAMP; and
b. the approval holder must implement the action management plan specified by the Minister in the notice.

31. At the time of giving the notice under condition 30, the Minister may also notify that for a specified period of time, condition 27 does not apply for one or more specified action management plans.

Note: conditions 27, 28, 29 and 30 are not intended to limit the operation of section 143A of the EPBC Act which allows the approval holder to submit a revised action management plan, at any time, to the Minister for approval.

Completion of the action

32. Within 30 days after the completion of the action, the approval holder must notify the Department in writing and provide completion data.

Part C - Definitions

33. In these conditions, except where contrary intention is expressed, the following definitions are used:

a. Area 1 is the area defined in Attachment D that covers the troglofauna species located through surveys within bores YYAC0018C, YYAC26, YYAC36 and YYD22.

b. Black-flanked rock-wallaby habitat means habitat for the EPBC Act listed Petrogale lateralis lateralis comprising rocky outcrops that provide shelter such as caves, cliffs, screes and rockpiles that co-exists with foraging habitat such as grasses, forbs, shrubs and occasionally seeds and fruits.

c. Business days means a day that is not a Saturday, a Sunday or a public holiday in the state or territory of the action.

d. Clear, clearing means the cutting down, felling, thinning, logging, removing, killing, destroying, poisoning, and ringbarking, uprooting or burning of vegetation (but not including weeds – see the Australian weeds strategy 2017 to 2027 for further guidance).

e. Cleared area means an area or areas (in hectares) within the development envelope where loss or long-term modification of habitat has occurred.

f. Commence the action or commencement of the action means the first instance of any specified activity associated with the action including clearance of vegetation and construction of any infrastructure. Commencement does not include minor physical disturbance necessary to:
   – undertake pre-clearance surveys or monitoring programs;
- install signage and/or temporary fencing to prevent unapproved use of the project area;

- protect environmental and property assets from fire, weeds and pests, including erection or construction of fencing and signage, and maintenance or use of existing surface access tracks, if agreed in writing by the Department.

g. Completion data means an environmental report and spatial data information clearly detailing how the conditions of this approval have been met. The Department’s preferred spatial data format is shapefile. The environmental report and spatial data information must include the date, location, approved development envelope, actual total cleared area, total area and type of Night Parrot habitat, Malleefowl habitat, Greater bilby habitat, Princess parrot habitat, Great Desert skink habitat and Black-flanked rock-wallaby habitat cleared, mine pit boundary and the environmental condition of the groundwater within the development envelope.

h. Completion of the action means all specified activities associated with the action have permanently ceased.

i. Compliance records means all documentation or other material in whatever form required to demonstrate compliance with the conditions of approval in the approval holder’s possession or that are within the approval holder’s power to obtain lawfully;

j. Compliance reports means written reports:
   i. providing accurate and complete details of compliance, incidents, and non-compliance with the conditions and the plans;
   ii. consistent with the Department’s Annual Compliance Report Guidelines (2014);
   iii. include a shapefile of any clearance of any protected matters, or their habitat, undertaken within the relevant 12 month period; and
   iv. annexing a schedule of all plans prepared and in existence in relation to the conditions during the relevant 12 month period.

k. Construction means the erection of a building or structure that is or is to be fixed to the ground and wholly or partially fabricated on-site; the alteration, maintenance, repair or demolition of any building or structure; preliminary site preparation work which involves breaking of the ground (including pile driving); the laying of pipes and other prefabricated materials in the ground, and any associated excavation work; but excluding the installation of fences and signage.

l. Department means the Australian Government agency responsible for administering the EPBC Act.

m. Development envelope is the 4875 hectare area defined in Attachment A.
n. **Environmental condition** is the state of the groundwater on completion of the action, relative to the baseline environmental data defined in the baseline surveys required under condition 11 of the WA approval.

o. **EPBC Act** means the *Environment Protection and Biodiversity Conservation Act 1999 (Cth).*

p. **Evidence** means written report, including photographic material.

q. **Great desert skink habitat** means habitat for the EPBC Act listed *Liopholis kintorei* comprising of spinifex (*Triodia* spp.) and scattered shrubs (*Acacia* spp., *Eucalyptus* spp., *Hakea* spp., *Grevillea* spp.) or mulga.

r. **Greater bilby habitat** means habitat for the EPBC Act listed *Macrotis lagotis* comprising of open tussock grassland on uplands and hills, *Acacia aneura* (mulga) woodland/shrubland growing on ridges and rises, and hummock grassland in plains and alluvial areas.

s. **Groundwater drawdown contour** means the 0.5 m drawdown level defined in Attachment B.

t. **IBRA** means Interim Biogeographic Regionalisation for Australia, version 7.

u. **Incident** means any event which has the potential to, or does, impact on protected matter(s).


w. **Legally secured** means obtain a long-term protection under a voluntary agreement as provided for under the *Soil and Land Conservation Act 1945* (WA) or *Biodiversity Conservation Act 2016* (WA).

x. **Life of the approval** means the period for which the approval has effect.

y. **Long-term** means greater than 20 years.

z. **Malleefowl** means the EPBC Act listed *Leipoa ocellata*.

aa. **Malleefowl habitat** means habitat for the EPBC Act listed Malleefowl comprising of shrublands and low woodlands dominated by mallee or acacia and occasionally woodland dominated by eucalypts such as Wandoo *E. wandoo*, Marri *Corymbia calophylla* and Mallet *E. astringens*.

bb. **Micro-genetic study** means a detailed genetic analysis that will determine the comprehensive micro-genetic diversity of the impacted Western *Atriplex yeelirrie*.
population, including the population genetic structure spatially and through sampling of seed generated from the plants.

c. **Minimum viable population analysis** means a study to determine the ecological threshold that specifies the smallest number of individuals of Western Atriplex yeelirrie population capable of persisting long-term in the environment.

d. **Monitoring data** means the data required to be recorded under the conditions of this approval.

ee. **Mine Pit** means the areas defined as Pit – East and Pit – West in Attachment C.

ff. **Minister** means the Australian Government Minister administering the EPBC Act including any delegate thereof.

gg. **New or increased impact** means a new or increased environmental impact or risk relating to any protected matter, when compared to the likely impact of implementing the action management plan that has been approved by the Minister under condition 12, including any subsequent revisions approved by the Minister, as outlined in the Guidance on ‘New or Increased Impact’ relating to changes to approved management plans under EPBC Act environmental approvals (2017) available from [http://www.environment.gov.au/epbc/publications/new-increased-impact-guidance](http://www.environment.gov.au/epbc/publications/new-increased-impact-guidance).

hh. **Night parrot habitat** means the EPBC Act listed Pezoporus occidentalis.

ii. **Night parrot habitat** means habitat for the EPBC Act listed Night parrot comprising of sandplains supporting a mosaic of long-unburnt spinifex hummocked grasslands with supporting vegetation dominated by chenopod and/or grass species.

jj. **Plan(s)** means any of the documents required to be prepared, approved by the Minister, and/or implemented by the approval holder and published on the website in accordance with these conditions (includes action management plans and/or strategies);

kk. **Princess parrot habitat** means habitat for the EPBC Act listed Polytelis alexandrae comprising of shrubland in swales between sand dunes, with a variety of shrubs (including Grevillea, Hakea, Cassia and Eremophila species) among scattered emergent trees and a ground-cover of spinifex Triodia species, and breeding habitat consisting of overstorey species with hollows including Eucalyptus camaldulensis (river red gum), E. gongylocarpa (marble gum) and Allocasuarina decaisneana (desert oak).

ll. **Protected matter** means a matter protected under a controlling provision in Part 3 of the EPBC Act for which this approval has effect.
mm. **Reference community** means the pre-disturbance **Western Atriplex yeelirrie population**.

nn. **Sensitive ecological data** means data as defined in the Australian Government Department of the Environment (2016) *Sensitive Ecological Data – Access and Management Policy V1.0*.

oo. **Shapefile** means an ESRI shapefile containing '.shp', '.shx' and '.dbf' files and other files capturing attributes defined in the conditions of approval.


qq. **Suitably qualified** means a person who has professional qualifications, training, skills and/or experience related to the nominated subject matter and can give authoritative independent assessment, advice and analysis on performance relative to the subject matter using the relevant protocols, standards, methods and/or literature.

rr. **Translocation trials** means the transfer of genetic material generated from the micro-genetic study to a range of recipient sites to determine:

- The genetic representativeness of the translocated plants as assessed to the **reference community**, 
- The population growth, development and demographic diversity matching or exceeding the **reference community**, and
- The factors influencing seedling recruitment, plant fecundity and seedling establishment as assessed to the **reference community**.

ss. **Troglofauna species** means *Austrohorus* sp. n Y1, *Pauropoda* sp. S6B, *Symphyla* sp. Y7 and *Tyrannochthonius* sp. n. Y1 that are only known to occur within the **mine pit**.

tt. **WA approval** means Ministerial Statement 1053 signed 16 January 2017, which states that a proposal may be implemented under the *Environment Protection Act 1986* (WA).

uu. **WA DBCA** means the Western Australian Department of Biodiversity, Conservation and Attractions or any other agency responsible for administering the *Conservation and Land Management Act 1984* (WA) from time to time.

vv. **Website** means a set of related web pages located under a single domain name attributed to the approval holder and available to the public.
The Western Atriplex yeelirrie population is the western genotype of Atriplex yeelirrie. Currently the only known population of this species is located within the development envelope and defined in Attachment E as WP01 – WP06.