Approval

Wiluna Uranium Project, WA (EPBC No. 2009/5174)

This decision is made under sections 130(1) and 133 of the Environment Protection and Biodiversity Conservation Act 1999.

Proposed action

<table>
<thead>
<tr>
<th>person to whom the approval is granted</th>
<th>Toro Energy Limited</th>
</tr>
</thead>
<tbody>
<tr>
<td>proponent’s ACN</td>
<td>ACN: 117 127 590;</td>
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<td>ABN: 48 117 127 590</td>
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<tr>
<td>proposed action</td>
<td>To develop a uranium mine comprising of two open-pits and associated processing plant and infrastructure, 30 km south and southeast of Wiluna, WA (see EPBC Act referral 2009/5174).</td>
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Approval decision

<table>
<thead>
<tr>
<th>Controlling Provision</th>
<th>Decision</th>
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<tbody>
<tr>
<td>Nuclear actions (sections 21 &amp; 22A)</td>
<td>Approved</td>
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</table>

conditions of approval

This approval is subject to the conditions specified below.

expiry date of approval

This approval has effect until 31 March 2043.

Decision-maker

<table>
<thead>
<tr>
<th>name and position</th>
<th>The Hon Tony Burke MP Minister for Sustainability, Environment, Water, Population and Communities</th>
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</thead>
<tbody>
<tr>
<td>signature</td>
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<tr>
<td>date of decision</td>
<td>2.4.13</td>
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Conditions attached to the approval.

Commencement and Completion

1. Within 10 business days after the commencement of the action, the person taking the action must advise the department in writing of the actual date of commencement.

2. If, at any time after five years from the date of this approval, the person taking the action has not commenced the action, then the person taking the action must not commence the action without the written agreement of the Minister.

Environment Management Plan

3. The person taking the action must develop, and submit to the Minister for approval, an Environment Management Plan (the plan'). The plan must specify:
   a. the proposed operations covered by the plan
   b. the environmental outcomes to be achieved, as specified in conditions 6 (radiation), 10 (groundwater) and 14 (surface water)
   c. Compliance criteria, to demonstrate compliance with the environmental outcomes specified in condition 6 (radiation), condition 11 (groundwater) and condition 15 (surface water). A failure to meet compliance criteria represents non-compliance with these conditions
   d. Trigger levels as specified in condition 12 (groundwater) and condition 15 (surface water). Trigger levels must provide an early warning that the compliance criteria identified in (c) may not be met. A failure to meet a trigger level does not represent non-compliance with these conditions but remedial action must be taken in response
   e. The plan must specify the remedial action which will be taken in relation to an exceedance of a trigger level, and the timeframe for a response
   f. Target criteria, as specified in condition 7 (radiation). A failure to meet a target criteria does not represent non-compliance with these conditions but the person taking the action must review practices if criteria are exceeded and endeavour to meet the target criteria
   g. the specific parameters to be measured and monitored in order to demonstrate achievement of the target criteria, trigger levels, compliance criteria and environmental outcomes.
   h. the locations at which monitoring will take place, or how these locations will be determined
   i. the frequency and timing of monitoring or how it will be determined
   j. the baseline or control data to be used or how it will be acquired. Baseline data must be collected at a resolution and over a time period so as to inform the selection of compliance criteria, trigger levels and target criteria
   k. information about the strategies and other measures the person taking the action will implement to achieve the compliance criteria and to investigate respond to and report any non-compliance with the compliance criteria, trigger levels or target criteria (without limiting the measures that may be implemented to those specified in the plan).

4. The plan must be submitted to the Minister for approval at least 3 months prior to commencement.
5. The action must not commence until the plan is approved. The approved plan must be implemented.

Note: If a condition of another approval held by the proponent requires submission of a plan that meets the requirements of condition 3, the proponent may simultaneously meet the relevant requirements of both conditions by submitting a single plan.

Radiation

6. The person taking the action must ensure exposure of members of the public and workers to radioactive releases from the action does not exceed relevant dose limits as described in the Code of Practice for Radiation Protection and Radioactive Waste Management in Mining and Mineral Processing (ARPANSA, 2005 or as amended); and is as low as reasonably achievable.

7. The plan required under condition 3 must include target criteria for radiation exposure in the form of a radiation dose constraint for members of the public and a reference level for impacts on non-human biota. Target criteria must reflect a level of impact that is as low as reasonably achievable for radiation exposure to members of the public, and must be minimised to the lowest reasonable levels for non-human biota, consistent with the following:
   a. The dose constraint must be no more than 300 micro-Sievert in a year unless otherwise agreed by the Minister.
   b. The reference level must be no greater than 10 micro-Grays per hour, except for bryophytes and lichens, unless otherwise agreed by the Minister.
   c. The reference level must be no greater than 35 micro-Grays per hour for bryophytes and lichens, unless otherwise agreed by the Minister.

8. The management of radioactive substances and waste must be consistent with the Code of Practice for Radiation Protection and Radioactive Waste Management in Mining and Mineral Processing (ARPANSA, 2005 or as amended).

9. The transport of all radioactive material must be consistent with the Code of Practice for the Safe Transport of Radioactive Material (ARPANSA, 2008 or as amended).

Groundwater

10. The person taking the action must ensure the action does not result in any significant adverse impact on groundwater dependent flora and fauna.

11. The compliance criteria required under condition 3 must address groundwater quality and groundwater drawdown impacts.

12. The trigger levels required under condition 3 must detect any change in groundwater quality (including pH and uranium concentrations) which is beyond natural variation outside of the groundwater barrier of the open pits, or as otherwise agreed by the Minister.
13. Prior to any groundwater extraction outside of the mining lease, the person taking the action must develop a plan for extraction of groundwater outside of the mining lease. The plan addressing the outcome in condition 10 must be either:
   a. Submitted to the Minister for approval, or
   b. approved by the Western Australian Government and submitted to the Minister within 30 calendar days of it being approved.

The approved plan must be implemented.

**Surface Water**

14. The person taking the action must ensure the action does not result in a significant adverse impact on downstream environmental values.

15. The plan required under condition 3 must include compliance criteria and trigger levels developed in accordance with the Australian and New Zealand guidelines for fresh and marine water quality (ANZECC & ARMCANZ 2000, or as amended), or as otherwise agreed by the Minister.

16. Unless otherwise agreed by the Minister, the bunding around the pits must be designed to withstand a probable maximum flood.

**Mine closure**

17. The plan required under condition 3 must include a Mine Closure Plan. The Mine Closure Plan must:

   a. specify that the environmental outcome to be achieved indefinitely post mine closure is that the mining lease site is physically safe to members of the public and non-human biota, geo-technically stable and geo-chemically non-polluting

   b. include closure outcomes consistent with (a)

   c. include completion criteria that are clear, unambiguous and are specific to the achievement of the specified closure outcomes and which include:
      i. parameters to be measured and monitored
      ii. the locations where monitoring will take place, or how these locations will be determined
      iii. the measures for demonstrating achievement of the outcome, with consideration of monitoring and modelling undertaken in condition 3 and any inherent errors of measurement
      iv. the frequency and timing of monitoring, or how this will be determined
      v. identification of the background or control data to be used or how these will be acquired.

   d. contain a comprehensive and conservative safety assessment including modelling to determine the long-term risk to the public and the environment from the tailings storage facility, and demonstrate that closure outcomes can continue to be achieved.

   e. describe the measures the person taking the action will implement to:
      i. achieve the outcomes, and
      ii. investigate and respond to any potential or actual non-compliance with the completion criteria.

   f. describe the management systems that the person taking the action will use to demonstrate compliance with the completion criteria and reduce the risk of non-compliance

   g. address the potential for and impacts resulting from early, unplanned closure
h. demonstrate that all practical options for progressive rehabilitation have been addressed
i. propose on-ground progressive rehabilitation trials during operations that demonstrate the feasibility and improve the viability of the proposed rehabilitation strategies
j. include a schedule for the timing of progressive rehabilitation of the site.

18. Unless otherwise agreed by the Minister, the tailings storage facility must be designed, constructed and rehabilitated to meet the requirements of condition 17, and must include as a minimum:
   a. a cover of at least 2 metres thickness which is shown through appropriate modelling to retain its integrity over the long-term
   b. a radiation control layer that reduces the radon emanation at the surface of the radiation control layer to less than 25% of the rate of the exposed tailings surface
   c. a compacted clay liner of at least 300mm thickness with permeability of less than 1x10^{-6} metres/second.

19. Prior to commencement, the design of the tailings storage facility cover must be reviewed and endorsed as being consistent with conditions 17.a and 18 and current standards of best practice by an independent scientific expert who has been approved by the Minister.

20. The person taking the action must provide to the Minister, a copy of all the recommendations made by the independent scientific expert and an explanation of how these recommendations have, or will be, implemented, or an explanation of why the person taking the action does not propose to implement certain recommendations. This information must be provided to the Minister within one month of receiving advice from the independent scientific expert or within any timeframe recommended by the independent scientific expert, should this be less than one month.

21. Unless otherwise agreed by the Minister, the endorsed tailings storage facility design must be implemented.

Review of plan

22. The Environment Management Plan required under condition 3 must be reviewed at least every three years from the date of its first approval, or as otherwise specified in writing by the Minister. A report on the review must be provided to the Minister addressing:
   a. the effectiveness of the Environment Management Plan over the preceding period
   b. how the Environment Management Plan meets world’s best practice or how the plan has been amended to meet world’s best practice.
   c. the monitoring results over the preceding three years and the extent to which compliance criteria, trigger levels, target criteria, and completion criteria have been met
   d. whether the compliance criteria and/or completion criteria should be revised to improve measurement of the achievement of the outcomes referred to in condition 3 and condition 17, taking into account the latest scientific information
   e. whether the trigger levels can be revised to provide a better early warning of potential non-compliance.
f. whether **target criteria** should be changed to reflect a level of impact for **members of the public** that is as low as reasonably achievable and for **non-human biota** that is minimised to the lowest reasonable levels

g. opportunities for improved monitoring methods

h. the outcome of risk assessments undertaken over the preceding three years

i. the person taking the action’s response to the review, including any revisions to the plan the person taking the action proposes to make

j. the information on which the review was based

k. the expertise used in undertaking the review

l. any other findings and recommendations from the review.

23. The **Minister** may require the person taking the action to have the report independently reviewed and the results provided to the **Minister**. The financial cost of the review will be borne by the person taking the action.

**Rehabilitation bond**

24. On request by the **Minister**, the person taking the action must provide details of the financial arrangements required by the Western Australian Government for ensuring adequate rehabilitation of the action. The person taking the action must comply with the request within 20 business days.

25. The person taking the action must enter into a financial arrangement which assures the full cost of rehabilitation will be met. This can be achieved by:

   a. entering into a bond, financial guarantee or similar arrangement (in these conditions ‘a bond’), or contributing to a fund, with the Western Australian Government and/or

   b. entering into a bond with the **Minister** for any additional amount required in order to meet this condition, should the **Minister** determine the arrangement with the Western Australian Government does not adequately cover the full cost of rehabilitation.

26. In providing for or varying a bond amount in accordance with these conditions, the **Minister** may require the person taking the action to obtain written quotes for the cost of the rehabilitation liability under the mine closure plan from a third party approved by the **Minister**.

27. The person taking the action must meet all the charges and costs in obtaining and maintaining the bond.

**Indigenous heritage**

28. The person taking the action must submit evidence that **Indigenous persons with rights or interests** in the project area have been adequately consulted, to the **Minister** prior to **commencement**. This may take the form of an Indigenous Land Use Agreement under the **Native Title Act 1993**.
29. The person taking the action must submit a Cultural Heritage Management Plan, which is consistent with the outcomes of the consultation at condition 28, to the Minister for approval. The Cultural Heritage Management Plan must contain:
   a. Evidence that indigenous cultural heritage surveys have been undertaken for the project area
   b. Management measures to avoid or minimise impact to indigenous cultural heritage values.

30. The Cultural Heritage Management Plan must be submitted to the Minister for approval at least 3 months prior to commencement, unless otherwise agreed in writing by the Minister. The action must not commence until the Cultural Heritage Management Plan is approved. The approved plan must be implemented.

Note: If a condition of another approval held by the proponent requires submission of a plan that meets the requirements of condition 29, the proponent may simultaneously meet the relevant requirements of both conditions by submitting a single plan.

Request for variation of plan by proponent

31. If the person taking the action wishes to carry out any activity otherwise than in accordance with the plans as specified in the conditions, the person taking the action must submit to the department for the Minister's written approval a revised version of that plan. The varied activity shall not commence until the Minister has approved the revised plan in writing. The Minister will not approve a revised plan unless the revised plan would result in an equivalent or improved environmental outcome over time. If the Minister approves the revised plan, that plan must be implemented in place of the plan originally approved.

Revisions to plan by the Minister

32. If the Minister believes it is necessary or convenient for the better protection of the environment to do so, the Minister may request that the person taking the action make specified revisions to the plans specified in the conditions and submit the revised plan for the Minister's written approval. The person taking the action must comply with any such request. The revised approved plan must be implemented. Unless the Minister has approved the revised plan, then the person taking the action must continue to implement the plan most recently approved, as specified in the conditions.

Publication of plans

33. Unless otherwise agreed to in writing by the Minister, the person taking the action must publish the plans referred to in these conditions of approval on their website. The plans must be published on the website within 1 month of being approved and remain on the website for the duration of the action.

Record-keeping

34. The person taking the action must maintain accurate records substantiating all activities associated with or relevant to the conditions of approval, including measures taken to implement the plan required by this approval, and make them available upon request to the department. Such records may be subject to audit by the department or an independent auditor in accordance with section 458 of the EPBC Act, or used to verify compliance with the conditions of approval. Summaries of audits will be posted on the department's website. The results of audits may also be publicised through the general media.
Reporting compliance

35. Within three months of every 12 month anniversary of the commencement of the action, the person taking the action must publish a report on their website addressing compliance with each of the conditions of this approval, including implementation of the plan as specified in the conditions. Documentary evidence providing proof of the date of publication and non-compliance with any of the conditions of this approval must be provided to the department at the same time as the compliance report is published.

Auditing

36. Upon the direction of the Minister, the person taking the action must ensure that an independent audit of compliance with the conditions of approval is conducted and a report submitted to the Minister. The independent auditor must be approved by the Minister prior to the commencement of the audit. Audit criteria must be agreed to by the Minister and the audit report must address the criteria to the satisfaction of the Minister.

Definitions

In these conditions, unless otherwise indicated:

ARPANSA is the Australian Radiation Protection and Nuclear Safety Agency.

As low as reasonably achievable has the meaning given in the Code of Practice for Radiation Protection and Radioactive Waste Management in Mining and Mineral Processing (ARPANSA 2005, or as amended).

Commencement means any preparatory works undertaken as part of the action including clearing of vegetation and use of heavy equipment for breaking ground for mining or infrastructure but does not include exploration activities and investigation works such as geotechnical test pits, drilling and soil sampling.

Compliance Criteria are measurable standards or specification of parameters that demonstrate achievement of a required outcome and must be complied with at all times during the period of this approval.

Completion Criteria are measurable standards or specification of parameters that demonstrate the success or otherwise of closure outcomes, and must be complied with in order to achieve closure of the site.

Closure Outcome is a description of the performance outcome, in terms of the extent of change to the environment determined acceptable for ensuring the mining lease site is physically safe to members of the public and non-human biota, geo-technically stable and geo-chemically non-polluting.

Department is the Australian Government Department administering the Environment Protection and Biodiversity Conservation Act 1999.

Dose Constraint has the meaning given in the Code of Practice for Radiation Protection and Radioactive Waste Management in Mining and Mineral Processing (ARPANSA 2005, or as amended). It should not be regarded as a limit.

Environmental outcome is a description of the performance goal, in terms of the extent of change in the environment, determined acceptable for protecting the environmental values.

Environmental values are the physical characteristics and qualities of the environment that contribute to biodiversity conservation, and the social, spiritual and economic health of individuals and society.
EPBC Act means the *Environment Protection and Biodiversity Conservation Act 1999.*

*Groundwater dependent flora and fauna* is the vegetation inferred to be groundwater dependant in Appendix E of the Environment Review and Management Programme and stygofauna and troglofauna found in the vicinity, including those identified in Appendix E of the Response to Submissions.

*Independent scientific expert* is a scientist with relevant qualifications and expertise who is not affiliated with the proponent or with other parties affiliated with the project.

*Indigenous heritage value* is as defined in Section 528 of the EPBC Act.

*Indigenous persons with rights or interests* is as defined in Section 253 of the *Native Title Act 1993.*

*Members of the Public* has the meaning given in IAEA Safety Glossary – Terminology used in nuclear safety and radiation protection (International Atomic Energy Agency 2007, or as amended).

*Non-human Biota* means plants and animals (other than humans).

*Reference Level* has the meaning given in IAEA Safety Glossary – Terminology used in nuclear safety and radiation protection (International Atomic Energy Agency 2007, or as amended). It should not be regarded as a limit.

*Mining lease* means mining tenements M53/224 and MLA53/1090 as granted by the Western Australian Government.

*Minister* is the Minister administering the *Environment Protection and Biodiversity Conservation Act 1999* and includes a delegate of the Minister.

*Significant adverse impact* is an impact which results in impairing the ability of a species or environmental value to recover.

*Trigger Levels* are measurable standards or specification of parameters that give an early warning that a control measure is failing and a required outcome is potentially at risk of not being achieved. Remedial action must be taken in response.

*Target Criteria* are measurable standards or specification of parameters that reflect a level of impact that is as low as reasonably achievable or minimised to the lowest reasonable levels for non-human biota. Practices must be reviewed if criteria are exceeded. Criteria refer only to those contributions to the total dose that result from human actions, and specifically exclude any contribution from the undisturbed natural radiation background.

*Workers* are those persons employed by the person taking the action or contracted to the person taking the action to undertake the action.

Any terms used in these conditions, that are not otherwise defined, will have the meaning given to them under the EPBC Act.

In these conditions, unless otherwise indicated, headings and notes are for convenient reference only, and do not affect the conditions to which they relate.