

## L10013 ANNUAL REPORT GROUNDWATER EXTRACTION LICENCE

Document No: NRE-0000-H-RPT-N-0039 Rev 1.0

Project Name: Nolans Rare Earths

Reporting Period: 01 July 2024 to 30 June 2025

## REVISION HISTORY

02/09/2025	Rev 1.0	Issue for Use to DLPE	G. Calderon Environmental Scientist	D. Jordan Manager Environment	T. van der Walt Chief Projects Officer
08/08/2025	Rev 0.0	Issue for Review	G. Calderon Environmental Scientist	Y. Smythe McGuinness S. Environmental Scientist	D. Jordan Manager Environment
Date	Revision	Description	Prepared	Reviewed	Approved

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**GROUNDWATER EXTRACTION LICENCE L10013 ANNUAL REPORT 2025**

**OPERATOR NAME:** ARAFURA RARE EARTHS LIMITED

**PROJECT NAME:** NOLANS RARE EARTHS

**GROUNDWATER EXTRACTION LICENCE:** L10013

**REPORTING PERIOD:** 01 JULY 2024 TO 30 JUNE 2025

**DISTRIBUTION:** DEPARTMENT OF LANDS, PLANNING AND ENVIRONMENT

The annual report must be endorsed by a senior representative of the company who has the appropriate level of delegation.

**Declaration of Accuracy**

I Tommie van der Walt, Chief Projects Officer, declare that to the best of my knowledge the information contained in this Annual Report is true and correct and all operational activities undertaken during the reporting period were in accordance with the water licence L10013, and in accordance with all the relevant Local, Northern Territory and Commonwealth Government legislation.

Signed:



Full name:

Tommie van der Walt

Position:

Chief Projects Officer

Organisation:

Arafura Rare Earths Limited

Date:

2<sup>nd</sup> September 2025

### 1.0 INTRODUCTION

Arafura Nolans Project Pty Ltd was granted Groundwater Extraction Licence (GWEL) L10013 on 20 March 2023 for the purpose of beneficial use of mining activity for the Nolans Project (the Project). This licence was subsequently amended on 8 August 2023. This licence permits the extraction of 4800 ML/year from the Reaphook Palaeovalley Aquifer, for use on NT Portion 703 Aileron. The preparation of this annual report is in accordance with Condition 4.10 of L10013, as below.

#### *Condition 3.10 of L10013*

*The licence holder must submit to the department an annual compliance report on or before 30 September of each year of this licence. The annual report must:*

- a) detail compliance with the conditions of this licence in the previous financial year;*
- b) identify exceedances of trigger values in the licence documents and actions taken in response; and*
- c) detail any changes to triggers values in the licence documents.*

### 1.1 Project and Operator Details

Arafura Nolans Project Pty Ltd and Arafura Rare Earths Ltd (ARU) are considered together within this document as the owner and operator of the Nolans Rare Earths Project (collectively referred to as the Company, the Operator, or Arafura). Arafura is an Australian mineral exploration and development company focusing on Neodymium and Praseodymium (NdPr) rare earths, and the Nolans Rare Earths Project is their flagship Project. Arafura is headquartered in Perth, Western Australia and was listed on the Australian Stock Exchange, ASX:ARU in 2003. A summary of the Project and Operator details are presented in Table 1—1 below. The Project will encompass a rare earths mine, process plant (comprising beneficiation, extraction and separation plants) and related infrastructure to be constructed and located at the Nolans site. The Nolans site is located 135 km northwest of Alice Springs, and approximately 10 km west of the Aileron Roadhouse in the Northern Territory (NT).

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**Table 1—1 Project and Operator Details**

Operator Details	
<b>Groundwater Extraction Licence</b>	L10013
<b>Project Name</b>	Nolans Rare Earths
<b>Approval Holder</b>	Arafura Nolans Project Pty Ltd
<b>Approval Holder and Operator Details</b>	<p><i>Previous Company Name:</i> Arafura Resources Limited  <i>Current Company Name:</i> Arafura Rare Earths Ltd  ACN 080 933 455 – ABN 22 080 933 455</p> <p><i>Subsidiary Company:</i> Arafura Nolans Project Pty Ltd  ACN 118 158 900 – ABN 88 118 158 900</p> <p><i>Head Office:</i>  Address: Level 6, 432 Murray St Perth WA 6000  PO Box: 5773 St Georges Terrace Perth WA 6831  Phone: +61 8 6370 2800  Email: arafura@arultd.com</p>
<b>Location of the Project</b>	135 km northwest of Alice Springs, Northern Territory

### 2.0 ACTIVITY SUMMARY

Construction activities at the Project site commenced with early construction works on 27 February 2023 and continued until mid-October 2023, when operations were temporarily suspended. Works have not recommenced since that time; hence no construction or other work activities were carried out at the Project site during the reporting period.

Since mid-October 2023, onsite activities have focused on continuing to collect baseline monitoring data to meet the environmental requirements outlined in the approved management plans, as well as site security and maintenance activities. Hence no water extraction occurred during the reporting period.

Full construction and resumption of works on site is expected to proceed once the financing is secured, with the Final Investment Decision (FID) announced. Water abstraction under GWEL L10013 is expected to recommence at such time.

### 3.0 DESIGNATION OF COMPLIANCE

A compliance table outlining the compliance status with each of the conditions of GWEL L10013 is shown in Section 4.0, Table 4—1 below. Compliance during the reporting period with each approval condition has been assigned a status in accordance with the federal Department of Climate Change, Energy, the Environment and Water [Annual Compliance Report Guidelines](#) (2023), as shown in Table 3—1 below.

**Table 3—1 Designation of compliance**

Designation	Description
Compliant	Compliant with all requirements of the condition.
Partially Compliant	Compliant with some requirements of the condition.
Non-compliant	Non-compliant with the requirements of the condition.
Not Applicable	Requirements in the condition are outside of scope in the reporting period.



### 4.0 COMPLIANCE TABLE

The Compliance Table (Table 4—1) below provides a summary of Arafura's compliance with the conditions of GWEL L10013 during the reporting period from 1 July 2024 to 30 June 2025.

The 'Department' as defined within the GWEL L10013 refers to the NT water regulator, which changed from the Department of Environment, Parks and Water Security (DEPWS) to the Department of Land, Planning, and the Environment (DLPE) during the reporting period. As such, this is collectively referred to as the Department in this document.

## L10013 ANNUAL REPORT GROUNDWATER EXTRACTION LICENCE

**Table 4—1 Compliance with Conditions in Water Licence L10013 (issued on 8<sup>th</sup> August 2023)**

Condition	Condition	Compliance Status	Evidence/Comments																										
1. Water Extraction Conditions																													
1.1	<p>The licence holder must extract no more than the Entitlement specified in Column 2 of Table 1 for the period listed in Column 1 of Table 1 for the Groundwater Resource.</p> <p><i>Table 1. Total Maximum Water Entitlement per Period</i></p> <table><tr><th>Column 1</th><th>Column 2</th></tr><tr><th>Period</th><th>Entitlement</th></tr><tr><td>20-Mar-2023 to 30-Jun-2023</td><td>1433 ML</td></tr><tr><td>01-Jul-2023 to 30-Jun-2024</td><td>4800 ML</td></tr><tr><td>01-Jul-2024 to 30-Jun-2025</td><td>4800 ML</td></tr><tr><td>01-Jul-2025 to 30-Jun-2026</td><td>4800 ML</td></tr><tr><td>01-Jul-2026 to 30-Jun-2027</td><td>4800 ML</td></tr><tr><td>01-Jul-2027 to 30-Jun-2028</td><td>4800 ML</td></tr><tr><td>01-Jul-2028 to 30-Jun-2029</td><td>4800 ML</td></tr><tr><td>01-Jul-2029 to 30-Jun-2030</td><td>4800 ML</td></tr><tr><td>01-Jul-2030 to 30-Jun-2031</td><td>4800 ML</td></tr><tr><td>01-Jul-2031 to 30-Jun-2032</td><td>4800 ML</td></tr><tr><td>01-Jul-2032 to 19-Mar-2033</td><td>4600 ML</td></tr></table>	Column 1	Column 2	Period	Entitlement	20-Mar-2023 to 30-Jun-2023	1433 ML	01-Jul-2023 to 30-Jun-2024	4800 ML	01-Jul-2024 to 30-Jun-2025	4800 ML	01-Jul-2025 to 30-Jun-2026	4800 ML	01-Jul-2026 to 30-Jun-2027	4800 ML	01-Jul-2027 to 30-Jun-2028	4800 ML	01-Jul-2028 to 30-Jun-2029	4800 ML	01-Jul-2029 to 30-Jun-2030	4800 ML	01-Jul-2030 to 30-Jun-2031	4800 ML	01-Jul-2031 to 30-Jun-2032	4800 ML	01-Jul-2032 to 19-Mar-2033	4600 ML	Compliant	<p>No water was extracted during the reporting period.</p> <p>The water entitlement limits will be applied once recommencement of water extraction occurs.</p>
Column 1	Column 2																												
Period	Entitlement																												
20-Mar-2023 to 30-Jun-2023	1433 ML																												
01-Jul-2023 to 30-Jun-2024	4800 ML																												
01-Jul-2024 to 30-Jun-2025	4800 ML																												
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01-Jul-2031 to 30-Jun-2032	4800 ML																												
01-Jul-2032 to 19-Mar-2033	4600 ML																												
1.2	<p>The licence holder must ensure water extracted under this licence is not wasted. For the purpose of this condition water is wasted where, irrespective of intention:</p> <p>a) More water is used than is reasonably</p>	Compliant	<p>No water was extracted during the reporting period – hence no water was wasted under any of the conditions specified in items a) to c) of this condition.</p>																										

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Condition	Condition	Compliance Status	Evidence/Comments
	<p>necessary for the immediate purpose for which water is taken, including used for irrigation;</p> <p>b) An unnecessary or excessive flow or flood of water is allowed to occur; or</p> <p>c) Water is taken without adequate control or supervision of its taking.</p>		
1.3	The licence holder may only extract water under this licence from a bore listed on this licence.	Compliant	No water was extracted during the reporting period. Upon the recommencement of construction activities, water will be extracted only from the production bores listed in this licence.
1.4	The licence holder must maintain the bores used for extracting water under this licence in accordance with the National Uniform Drillers Licensing Committee 'Minimum Construction Requirement for Water Bores in Australia' as amended.	Compliant	Production bores under the water licence, are maintained in accordance with the National Uniform Drillers Licensing Committee ' <i>Minimum Construction Requirement for Water Bores in Australia</i> ', as outlined in this condition.
1.5	The licence holder may only extract water under this licence for use on a property listed on this licence.	Compliant	No water was extracted during the reporting period. Upon the recommencement of construction activities, water use will occur within the NT Portion 703 (6300 Stuart Highway Anmatjere), as outlined in the licence.

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Condition	Condition	Compliance Status	Evidence/Comments
<b>2. Water Metering and Reporting Conditions</b>			
2.1	Extraction from the listed groundwater resource must be recorded by a meter or meters supplied, installed and maintained by the licence holder in accordance with the Northern Territory Non-Urban Water Metering Code of Practice for Water Extraction Licence, as amended from time to time.	Compliant	<p>Flow meters installed in 2023 remain in place at both production bores; however, flow meter readings have not been possible since pumping operations ceased in October 2023.</p> <p>It was noted during the compliance site inspection conducted by the Department in June 2025 that modification to the pumping infrastructure would be required prior to recommencement of water abstraction. This is to remove taps installed prior to the meters.</p> <p>The flow meters will be maintained prior to the recommencement of water extraction, including the required modifications outlined above, and flow meter readings will be recorded accordingly.</p>
2.2	Within two (2) weeks of 30 September, December, March and June of each year, and within two weeks of the expiry date, the licence holder must supply the Controller with a record of water extraction, reported by calendar month, from each of the listed bores.	Compliant	<p>Flow meter readings from production bores listed in this licence (RN019034, RN043563) are reported quarterly by Arafura via the <a href="#">My Meter App</a>, as outlined in this condition.</p> <p>Reporting was completed on the following dates:</p> <ul style="list-style-type: none"> <li>• 01 July 2024</li> <li>• 01 October 2024</li> <li>• 06 January 2025</li> <li>• 01 April 2025.</li> </ul> <p>In both cases, the flow meter readings reflect the last readings taken before pumping operations ceased in October 2023. Upon recommencement of water abstraction, flow meter readings will be verified and updated if necessary.</p>

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Condition	Condition	Compliance Status	Evidence/Comments
<b>3. Special Conditions</b>			
3.1	<p>Where a condition of this licence requires a program, plan, report or other document to be approved by the Controller, the licence holder must:</p> <ul style="list-style-type: none"> <li>a) seek approval of the document, via email to <a href="mailto:water.regulation@nt.gov.au">water.regulation@nt.gov.au</a>; and</li> <li>b) the document must be peer reviewed by a suitable qualified professional, unless otherwise agreed in writing by the Controller.</li> </ul>	Compliant	<p>The Adaptive Management Plan and Monitoring Program required under Condition 3.5 and Condition 3.6 respectively, were submitted to the Department in August 2024 for approval by the Controller. Submission was made via email as outlined in item a). Both plans were peer reviewed before submission by a third party as outlined in item b).</p> <p>Both plans were still under assessment by the Department at the time this report was prepared.</p>
3.2	<p>A document submitted under condition 3.1 may be returned by an authorised officer or the Controller to the licence holder for amendment. The licence holder shall resubmit the document to the Controller within the timeframe specified in writing by the Controller or authorised officer.</p>	Compliant	<p>No amendment request to the plans submitted for approval under Condition 3.1, as detailed above, was received from an authorised officer or the Controller during the reporting period.</p> <p>Any amendment request received from the Department will be addressed, and the revised document(s) will be resubmitted within the required timeframe as outlined in this condition.</p>
3.3	<p>The licence holder must <b>undertake the minimum monitoring</b> requirements specified in <b>Schedule 2</b> and <b>Schedule 3 and Schedule 4</b> in accordance with monitoring commencement timing specified in the schedules.</p>	Compliant	<p>Ongoing groundwater monitoring to meet minimum requirements in Schedule 2, Schedule 3, and Schedule 4 of the water licence L10013 continued during the reporting period.</p> <p>In accordance with Schedule 2, groundwater levels are recorded by loggers at daily intervals, at all of the bores listed (RN019035, RN043611, RN043613, RN043580), except monitoring bore RN019017, which is blocked. This</p>

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Condition	Condition	Compliance Status	Evidence/Comments
			<p>monitoring commenced in May 2023 and has been ongoing to date.</p> <p>In accordance with Schedule 3, groundwater levels are recorded by loggers at daily intervals, at all of the bores listed (RN043581, RN18869, RN043582, RN043583). This monitoring commenced in May 2023, and it has been ongoing to date.</p> <p>No water quality monitoring was undertaken from the production bores listed in L10013 (RN019034, RN043563), as required in Schedule 3, as both bores remained non-operational during the reporting period. Water sampling is currently taken quarterly in the neighbouring monitoring bore RN019027, situated approximately 22 m &amp; 267 m from RN019034 &amp; RN043563, respectively.</p>
3.4	<p>Until an adaptive management plan is approved under condition 3.5, if the <b>limits in Schedule 2 or Schedule 3 are exceeded</b> at any time the licence holder must:</p> <ul style="list-style-type: none"> <li>a) Cease to take water under this licence;</li> <li>b) Submit a record of water extraction from each of the listed bores to the Controller within 24 hours of limit exceedance being identified; and</li> <li>c) Provide a report of non-compliance to the Controller of Water Resources in accordance with condition 3.9.</li> </ul> <p>For the sake of clarity, alternative adaptive</p>	Compliant	<p>The Adaptive Management Plan was under assessment by the Department at the time of writing this report, and hence not yet approved. Additionally, no water was extracted during the reporting period.</p> <p>Arafura has undertaken the minimum monitoring requirements specified in Schedules 2 and 3. Data obtained from the dataloggers is regularly analysed to assess variations in water levels across all bores, identify any potential exceedances of trigger values during this stage, and investigate possible causes. No exceedances of the trigger values were observed during the reporting period.</p> <p>As previously communicated to the Department, the monitoring requirements could not be fulfilled for one of the monitoring bores listed in Schedules 2, for the reasons shown in Table 4—2 below.</p>



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Condition	Condition	Compliance Status	Evidence/Comments									
	management measures for Schedule 2 and 3 limits may be developed by the licence holder for approval by the Controller. An approved adaptive management plan supersedes condition 3.4		<table><tr><th colspan="3">Table 4—2 Monitoring bores where monitoring requirements are not met</th></tr><tr><th>Monitoring bore identification</th><th>Schedule</th><th>Reason</th></tr><tr><td>RN019017 (Borefield E)</td><td>2</td><td>Monitoring could not be conducted as the bore is blocked. An alternative bore has been identified and included in the amendment of the water licence for approval.</td></tr></table>	Table 4—2 Monitoring bores where monitoring requirements are not met			Monitoring bore identification	Schedule	Reason	RN019017 (Borefield E)	2	Monitoring could not be conducted as the bore is blocked. An alternative bore has been identified and included in the amendment of the water licence for approval.
Table 4—2 Monitoring bores where monitoring requirements are not met												
Monitoring bore identification	Schedule	Reason										
RN019017 (Borefield E)	2	Monitoring could not be conducted as the bore is blocked. An alternative bore has been identified and included in the amendment of the water licence for approval.										
3.5	<p>Within <b>1 year</b> of commencement of extraction, the licence holder must develop and submit for approval by the Controller, an <b>adaptive management plan</b>. The adaptive management plan must:</p> <p><u>Objectives</u></p> <p>a) Include clear, measurable objectives which can be used to demonstrate that:</p> <p>i. Impact of groundwater level decline will not exceed rates or levels which may impact culturally significant groundwater dependent ecosystems at Day Creek.</p> <p>ii. Impact of groundwater level decline will not adversely affect groundwater dependent ecosystems at an ecologically</p>	Compliant	<p>Licensed extraction commenced on 8<sup>th</sup> August 2023. The Nolans Reaphook Palaeovalley Adaptive Management Plan was submitted as required to DLPE (previously DEPWS) on 8<sup>th</sup> August 2024 and is currently under assessment. The Adaptive Management Plan was developed by GHD with inputs from CDM Smith, both of whom are qualified consultants, in accordance with the NT EPA Guidance on Adaptive Management (EPA, 2018). This development included stakeholder consultation, which was conducted during June 2024, as detailed further in the Adaptive Management Plan (GHD, 2024f). The Adaptive Management Plan was peer reviewed by EMM Consulting prior to submission.</p> <p>The Adaptive Management Plan was developed to include the objectives; outcomes of stakeholder consultation; limits and triggers; management actions; and mechanisms for continuous improvement, as specified in this condition, to meet the requirements a) – o) of this condition. The plan will be implemented following the Controller's approval as specified by requirement p) of this condition.</p>									

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Condition	Condition	Compliance Status	Evidence/Comments
	<p>significant scale in the local region.</p> <p>iii. Rights of groundwater users to access groundwater for the beneficial use of rural stock and domestic will not be adversely affected by groundwater level decline.</p> <p>iv. Access to groundwater at Laramba community borefield and Alyuen outstation will not be adversely affected by groundwater level decline or decline in groundwater quality as a result of extraction.</p> <p>v. The ability of the resource to support key Aboriginal cultural values is not adversely impacted by the licensed extraction.</p> <p><u>Stakeholder consultation</u></p> <p>b) Be developed in consultation with local Aboriginal people identified with the Central Land Council in regards to <b>Objectives (a)(i) and (a)(v)</b>;</p> <p>c) Be developed in consultation with land holders in regards to <b>Objective (a)(iii)</b>;</p> <p>d) Be developed in consultation with Power and Water Corporation and Alyuen Aboriginal Corporation in regards to <b>Objective (a)(iv)</b>;</p>		



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Condition	Condition	Compliance Status	Evidence/Comments
	<u>Limits and triggers</u> e) Incorporate limits specified in <b>Schedule 3</b> which can be used to implement adaptive management actions; f) Incorporate quantitative vegetation community scale trigger values which can be used to implement adaptive management actions to achieve <b>Objectives (a)(i) and (a)(ii)</b> ; g) Incorporate trigger values based in the findings of the <b>hydro-census</b> which can be used to implement adaptive management actions to achieve <b>Objective (a)(iii)</b> ; h) Incorporate trigger values based which can be used to implement adaptive management actions to achieve <b>Objective (a)(iv)</b> ; i) Incorporate trigger which can be used to implement adaptive management actions to achieve <b>Objective (a)(iv)</b> ; <u>Management actions</u> j) Define management actions that are capable of being implemented in response to the trigger and limits developed under parts 3.5(b) through 3.5(f), to achieve the objectives; k) Establish timeframes for implementation of		

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Condition	Condition	Compliance Status	Evidence/Comments
	<p>this actions;</p> <p>l) Establish who in the licence holder's organisation makes the decision to implement management actions, and the evidence on which such decision will be made;</p> <p><u>Continuous improvement</u></p> <p>m) Incorporate the feedback system to ensure appropriate actions are initiated when triggered, and impacts do not exceed those presented in the <b>assessed groundwater model</b>;</p> <p>n) Include a process to ensure management actions are updated as knowledge improves;</p> <p>o) Include a process to integrate information obtained through the completion of Condition 3.14 – groundwater dependent ecosystems verification and Condition 3.15 – groundwater model verification and improvement; and</p> <p><u>Implementation</u></p> <p>p) Be implemented immediately following the Controller's approval.</p>		
3.6	<p>Within <b>1 year</b> of commencement of extraction, the licence holder must develop and submit for approval by the Controller a <b>monitoring</b></p>	Compliant	<p>Licence extraction commenced on 8<sup>th</sup> August 2023. The Nolans Borefield Monitoring Program was submitted to DLPE (previously DEPWS) for approval on 8<sup>th</sup> August 2024 together with the Adaptive Management Plan as described</p>

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Condition	Condition	Compliance Status	Evidence/Comments
	<p><b>program</b> to support the adaptive management plan. The monitoring program must:</p> <ul style="list-style-type: none"> <li>a) Be prepared by a suitable qualified professional;</li> <li>b) Include the minimum monitoring measures specified in <b>Schedule 3</b>;</li> <li>c) Include the minimum groundwater quality monitoring measures specified in <b>Schedule 4</b>;</li> <li>d) Include monitoring measures suitable to identify an exceedance of any trigger value or limit in the adaptive management plan;</li> <li>e) Specify the parameters, methodology and frequency for each monitoring measure;</li> <li>f) Include a review process to ensure continuous improvement of the monitoring program; and</li> <li>g) Be implemented immediately following the Controller's approval.</li> </ul>		<p>under Condition 3.5 above. This document is currently under assessment by the Department at the time of writing this report. The Monitoring Program was developed by a suitably qualified professional, GHD, in accordance with requirements a) of this condition. The Monitoring Program was peer reviewed by EMM Consulting prior to submission.</p> <p>The Monitoring Program was developed to support the Adaptive Management Plan, and to meet the requirements b) to f) of this condition. The program will be implemented following the Controller's approval as specified by requirement g) of this condition.</p>
3.7	<p>The licence holder must seek approval on revisions to the adaptive management plan or monitoring program from the Controller, prior to implementing (other than typographical changes or revisions to formatting or referencing).</p> <p>The proposed revisions:</p>	Compliant	<p>Once approved, Arafura will seek approval by the Controller of any revisions of the Adaptive Management Plan and/or Monitoring Program prior to implementation, and in accordance with requirements a) to c) of this condition.</p>

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Condition	Condition	Compliance Status	Evidence/Comments
	a) Must be prepared by a suitable qualified professional; b) Include a tabulated summary of amendments; c) May be returned by the Controller or an authorised officer to the licence holder for amendment and the licence holder shall resubmit the document to the Controller within the timeframe specified in writing.		
3.8	The licence holder must <b>report adaptive management action undertaken</b> , in writing to the Controller, within 10 business days after the action has been undertaken. The report must outline: a) What triggered the requirement to undertake the action. b) The action taken; and c) The expected outcome from the action.	Compliant	No adaptive management actions were undertaken as the Adaptive Management Plan was still under assessment. Additionally, no water was extracted during the reporting period. Arafura will report to the Department (the Controller) any adaptive management actions undertaken, in accordance with requirements (a) to (c) of this condition, and within the timeframe specified. Management actions are to be taken in response to exceedance of monitoring triggers and limits, in accordance with the adaptive management approach outlined in the Adaptive Management Plan (GHD, 2024f).
3.9	The licence holder must immediately <b>notify the department on becoming aware of non-compliance</b> (or suspected non-compliance) with any condition of this licence. A notification under this condition must: a) Contain particulars of the non-compliance, including the identified or potential impacts	Compliant	No non-compliances occurred during the reporting period.

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Condition	Condition	Compliance Status	Evidence/Comments
	<p>associated with the non-compliance.</p> <p>b) Identify the steps that have or will be taken to minimise the impacts of the non-compliance; and</p> <p>c) Identify the steps that have or will be taken to prevent a reoccurrence or minimise the risk or further non-compliance.</p>		
3.10	<p>The licence holder must submit to the department an <b>annual compliance report</b> on or before <b>30 September</b> of each year of this licence. The annual report must:</p> <p>a) Detail compliance with the conditions of this licence in the previous financial year;</p> <p>b) Identify exceedances of trigger values in the licence documents and actions taken in response; and</p> <p>c) Detail any changes to trigger values in the licence documents.</p>	Compliant	<p>The preparation and submission of this annual report to DLPE prior to 30<sup>th</sup> September 2025 fulfills the requirements of this condition for the 2024-25 reporting period.</p> <p>In relation to item (a), this table provides details of compliance with the conditions of this licence in the previous financial year.</p> <p>In relation to item (b), no exceedances of the trigger values (limits) attributable to Arafura's extraction as stipulated in the schedules of the licence occurred during the reporting period.</p> <p>In relation to item (c), no changes to the trigger values (limits) specified in the schedules of the licence occurred during the reporting period.</p>
3.11	<p>The licence holder must <b>publish on a website</b> which is publicly available:</p> <p>a) A copy of this licence;</p> <p>b) The approved <b>adaptive management plan</b></p> <p>c) The <b>approved monitoring program</b></p> <p>d) Details of <b>non-compliance reported</b> in accordance with Condition 3.9</p>	Compliant	<p>Documents prepared to date have been published on the Arafura website which is publicly available, as follows:</p> <p>a) A copy of the water licence L10013 is available online on the Arafura website, available <a href="#">here</a></p> <p>b) The Adaptive Management Plan will be published on the Arafura website following approval by the Controller.</p> <p>c) The Monitoring Program will be published on the Arafura website</p>

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Condition	Condition	Compliance Status	Evidence/Comments
	e) Copies of <b>annual reports</b> prepared in accordance with Condition 3.10. f) Other documents related to this licence, or the activities conducted under it, as directed by the Controller.		following approval by the Controller. d) There were no non-compliances under this licence to date. e) A copy of the Annual Report 2023-24 prepared in accordance with Condition 3.10 is available on the Arafura website, <a href="#">here</a> . This annual report will be published in the same link following submission to the Controller. f) To date no other documents related to this licence, or activities conducted under it, have been directed to be published by the Controller under this licence.
3.12	The licence holder may only extract water under this licence for <b>Approved Mining Activities</b> .	Compliant	No water extraction occurred during the reporting period. Any extracted water will be used solely for approved mining activities.
3.13	If the mine management plan associated with the Approved Mining Activity is revoked or expires, the licence holder must inform the Controller in writing 7 days via email to <a href="mailto:water.regulation@nt.gov.au">water.regulation@nt.gov.au</a> .	Compliant	The Mine Management Plan, approved under Authorisation 1127-01, remains active. It is noted that the Mine Management Plan was amended during the reporting period, and the revised version (Rev 5.1) was under assessment by the Mining Division of the DLPE by the time of preparation of this report. Once approved, it will be published on the Arafura website and the Department notified.
3.14	The licence holder must undertake <b>groundwater dependent ecosystems (GDE) verification</b> , including: a) Undertake a baseline assessment of groundwater dependent ecosystem using remote sensing techniques consistent with <i>Information Guidelines Explanatory Note: Assessing Groundwater Dependent Ecosystems</i>	Compliant	Arafura has undertaken a number of studies to assess the presence and spatial extent of potential GDEs in the mine and borefield areas. The focus of mapping of potential GDEs has been within the area of predicted water drawdown, according to the current groundwater model as presented in the Water Abstraction Management Plan (GHD, 2023, 2024). Potential GDEs have been identified and mapped based on depth to groundwater and the presence of vegetation indicator species – as described in the Project's Environmental Impact Statement (GHD, 2017) and Water



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	<p>2019.</p> <p>b) Quantify the spatial extent of groundwater dependent ecosystems at vegetation community level.</p> <p>c) Quantify the proportion of groundwater ecosystems determined under 3.14(b) which is anticipated to be impacted by drawdown in the life of mine using the <b>assessed groundwater model</b>, or a model updated in accordance with condition 3.15 (<b>Model improvement</b>).</p> <p>d) Provide a report to the Controller for approval which:</p> <ol style="list-style-type: none"> <li>Documents the assessment under parts (a), (b) and (c) of this condition;</li> <li>Documents any updates to the adaptive management plan to mitigate impact to GDEs; and</li> <li>Verifies that impact to groundwater dependent ecosystems at an ecologically significant scale as a result of drawdown will be avoided.</li> </ol>		<p>Abstraction Management Plan (GHD, 2023, 2024). This mapping was based on a number of inputs including mapping of depth to groundwater, field vegetation surveys of floristics and vegetation structural data within the area of predicted water drawdown, and use of remote imagery to assess vegetation boundaries more broadly. Surveying of vegetation across the depth to groundwater level gradient suggested that potential GDE indicator species are more likely to be present at a depth to groundwater below 15 m than above it. Areas were therefore mapped as potential GDEs if they had a depth to groundwater of <math>\leq 15\text{m}</math> and contained GDE indicator species.</p> <p><i>Corymbia opaca</i> and <i>Hakea divaricata</i> were identified through these studies as species more likely to indicate the presence of potential GDEs, with Schubert (2019) suggesting these correlate the most with depth to groundwater and less canopy stress after a prolonged dry period in 2018. A range of other species were also identified in previous studies and literature as potential GDE indicators including River Red Gums near Day Creek, <i>Eucalyptus</i> spp. mallees, and others (Schubert 2018; DWS 2016; Cook &amp; Eamus 2018; Cook <i>et al.</i> 2008).</p> <p>Building on these previous studies, a field-based vegetation monitoring program commenced during the previous reporting period (May 2024) which established twelve (12) vegetation monitoring sites which will be used to monitor vegetation health on a biannual basis. Vegetation monitoring sites were chosen according to the previous studies' predictions of where GDEs are likely to be within the landscape according to vegetation type and depth to groundwater; with sites chosen across the predicted drawdown area and with control sites. At each vegetation monitoring site, five (5) trees were chosen for ongoing monitoring. The tree species were chosen according to those expected to be more likely to access groundwater according to the previous studies - primarily <i>Corymbia opaca</i>. The initial vegetation monitoring report can be</p>

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			<p>provided on request.</p> <p>A remote sensing program to analyse vegetation health at a community scale was developed during the reporting period (with the first study completed in July 2024). This study meets the requirement at (a) for a baseline assessment of GDEs using remote sensing – and was undertaken in accordance with the <i>Information Guidelines Explanatory Note: Assessing Groundwater Dependent Ecosystems 2019</i> as specified. This report can be provided on request.</p> <p>The methodology for remote sensing will be further developed and implemented on an ongoing basis as the Project progresses. This provides an opportunity to better map and define vegetation characteristics - and potential GDEs - across the borefield area and monitor changes in vegetation health and 'greenness' across seasonal changes, and when water extraction recommences.</p> <p>Building on this initial remote sensing study, Arafura has been developing a drone imagery monitoring program during the reporting period, to further validate the presence and location of GDEs within the borefield; and to monitor change in vegetation over time. This program is still under development at the time of writing this report and will be reported to the Department once developed. The intent is for this drone monitoring program to provide a more accurate and efficient method for monitoring GDEs over time.</p> <p>These ongoing monitoring activities are defined within the Monitoring Program (GHD, 2024g) which was prepared in accordance with Condition 3.6 of this Licence. This ongoing monitoring program continues the process of GDE verification to meet requirements (b) and (c). Once sufficient information is available to verify and quantify GDEs, a report in accordance with requirement (d) will be developed and submitted to the Controller for approval.</p>



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Condition	Condition	Compliance Status	Evidence/Comments
3.15	<p><b>Model improvement and verification</b> the licence holder must, within <b>2 years</b> of commencement of the extraction, undertake a program of improvement, and verification of the <b>assessed groundwater model</b>, which:</p> <ul style="list-style-type: none"> <li>a) Provides for independent peer review, and integration of peer reviewer recommendations to the satisfaction of the peer reviewer, at each stage of the program;</li> <li>b) Includes a predictive uncertainty analysis;</li> <li>c) Sets aquifer investigation and modelling goals based on reducing predictive uncertainty;</li> <li>d) Includes obtaining site specific aquifer data, in accordance with goals set under 3.15(c);</li> <li>e) Updates the model, based on data obtained through 3.15(c);</li> <li>f) Includes assessment of the updated model with respect to Class 2 requirements of a groundwater model in the Australian Groundwater Modelling Guidelines (<i>Barnett et al, 2012</i>), and the goals set in part 3.15(c); and</li> <li>g) Concludes with a detailed model report consistent with the Australian Groundwater Modelling Guidelines (<i>Barnett et al, 2012</i>),</li> </ul>	Compliant	<p>Groundwater data and initial testing undertaken to date are being used to better understand and refine the current groundwater model. This is evidenced by the groundwater assessment reports (GHD, 2024a-2024e) and the Assessed Groundwater Model Report (GHD, 2024) produced by GHD during the previous reporting period. These reports can be provided on request.</p> <p>Sufficient data to undertake model verification and improvement as specified in this Condition will not however be available until more ongoing water extraction occurs. This Condition specifies this must be undertaken within two years of commencement of extraction. Although Arafura officially commenced licenced abstraction in August 2023, the amount of extraction was relatively small and of short duration (as detailed above within the comments against Condition 1.1). The data gained from those months of extraction (August to October 2023) therefore do not provide sufficient data to review the groundwater model in accordance with this Condition. Arafura has therefore requested DLPE (previously DEPWS) to review this condition, for the timeframe to begin from the date of recommencement of extraction. This will allow a more meaningful review of the groundwater model to be undertaken at that time, informed by actual drawdown data.</p>

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	<p>outlining:</p> <ul style="list-style-type: none"> <li>i. The program undertaken;</li> <li>ii. Predicted drawdown impacts at five yearly intervals for the remainder of the life of mine – displayed as both drawdown contours and hydrographs at representative or sensitive locations;</li> <li>iii. Comparison of the magnitude and extent of the predicted drawdown in the updated model and <b>assessed groundwater model</b>, demonstrating that impacts will not be of greater magnitude or extent that in the <b>assessed groundwater model</b>; and</li> </ul> <p>Any revision to the pumping regime or borefield design which will be implemented to achieve 3.15(g)(iii).</p>		

## 5.0 ABBREVIATIONS AND DEFINITIONS

Abbreviation	Meaning
AMP	Adaptive Management Plan
Arafura	Arafura Rare Earths Limited (previously Arafura Resources Limited, also trading as Arafura Nolans Project Pty Ltd)
DCCEEW	Department of Climate Change, Energy, the Environment and Water
DLPE	Department of Lands, Planning and Environment (previously Department of Environment, Parks and Water Security)
EIS	Environmental Impact Statement
GDEs	Groundwater Dependent Ecosystems
GWEL	Groundwater Extraction Licence
Mining Authorisation	Mining Authorisation 1127-01
MMP	Mine Management Plan
NdPr	Neodymium and Praseodymium
NT	Northern Territory
PWC	Power and Water Corporation
RN	Registered Number
SWL	Standard Water Level
The Department	Department of Lands, Planning and Environment
The Licence	Groundwater Extraction Licence L10013
The Operator	Arafura Rare Earths Limited (previously Arafura Resources Limited, also trading as Arafura Nolans Project Pty Ltd)
The Project	Nolans Rare Earths Project
WAMP	Water Abstraction Management Plan

## 6.0 REFERENCES

Title
CDM Smith, 2024a. <i>Nolans Project: Groundwater Dependent Ecosystems Monitoring – Vegetation Survey May 2024</i> Rev 1. Prepared 2 August 2024. Ref. 1001586-01-R.
CDM Smith, 2024b. <i>Nolans Project Groundwater Dependent Ecosystems – Remote Sensing Monitoring</i> Rev 2. Prepared 2 August 2024. Ref. 1001586-02-R.
DCCEEW, 2023. <i>Annual Compliance Report Guidelines 2023</i> , Department of Climate Change, Energy, the Environment and Water, Australian Government. Available at: <a href="https://www.dcceew.gov.au/environment/epbc/publications/annual-compliance-report-guidelines">https://www.dcceew.gov.au/environment/epbc/publications/annual-compliance-report-guidelines</a>
EPA, 2018. <i>Guidance on Adaptive Management</i> Version 1.0, Northern Territory Environment Protection Authority. Prepared December 2018. Available at: <a href="https://ntepa.nt.gov.au/_data/assets/pdf_file/0003/622092/guideline_adaptive_management.pdf">https://ntepa.nt.gov.au/_data/assets/pdf_file/0003/622092/guideline_adaptive_management.pdf</a>
GHD, 2024a. <i>Nolans SWL Data Assessment - L10013 Groundwater Level Reporting</i> . Prepared 23 January 2024. Ref. 12629481.
GHD, 2024b. <i>Nolans SWL Data Assessment - L10013 Groundwater Level Reporting</i> Rev 0. 01. Prepared 1 February 2024. Ref. 12622417.
GHD, 2024c. <i>Nolans SWL Data Assessment - L10013 Groundwater Level Reporting April 2024</i> Update. Prepared 22 May 2024. Ref. 12622417.
GHD, 2024d. <i>Nolans SWL Data Assessment - L10013 Groundwater Level Reporting June 2024</i> Update. Prepared 11 July 2024. Ref. 12622417.
GHD, 2024e. <i>Nolans SWL Data Assessment - L10013 Groundwater Level Reporting July 2024</i> Update. Prepared 27 August 2024. Ref. 12622417.
GHD, 2024f. <i>Nolans Reaphook Palaeovalley Adaptive Management Plan</i> Rev 3. Prepared 2 August 2024. Ref. 12629481.
GHD, 2024g. <i>Nolans Borefield Monitoring Program</i> Rev 3. Prepared 6 August 2024. Ref. 12629481.
GHD, 2024h. <i>Nolans Reaphook Palaeovalley Assessed Groundwater Model</i> , Rev 0. Prepared 30 May 2024. Ref. 12629481.
GHD, 2023i. <i>Shallow Monitoring Bore Drilling Program Report</i> , Rev 0. Prepared 19 October 2023. Ref. 12587465.
GHD, 2023j. <i>BCD Production and Monitoring Bore Drilling, Test Pumping Analysis Report</i> , Rev 0. Prepared 20 October 2023. Ref. 12587465.