

Northern Territory of Australia

LICENCE TO TAKE WATER

Section 60 of the Water Act 1992

Licence Details

Licence Number:	L10013
Licence Holder:	Arafura Nolans Project Pty Ltd (ACN 118 158 900)
Registered Address:	PO Box 5773, St Georges Tce Perth, WA, 6831
Commencement Date:	20 March 2023
Expiry Date:	19 March 2033
Water Resource:	Reaphook Palaeovalley Aquifer
Extraction Point(s):	RN019034, RN043563
Land on which the water is used:	ML32412 (NT Portion 703, 6300 Stuart Hwy, Anmatjere)
Licence Trading Allowed:	No
Beneficial use(s) for which water taken under this licence is used	
Mining activity	4800 ML per year
Total Maximum Water Entitlement:	4800 ML per year

These Licence Details form part of the conditions of the licence as specified below.

Preamble

Water extraction licences form part of an adaptive management framework for managing water resources in the Northern Territory.

Compliance and regulation of licences is undertaken in a transparent, timely, fair and respectful manner in accordance with natural justice principles and the Department's [Customer Service Charter](#).

Information about this licence

Notes

The Controller may amend, revoke, suspend or modify this licence at any time, in accordance with s 93 of the Act.

This licence does not guarantee that water will be available from the Water Resource specified in the Licence Details, at any given time.

This licence does not give the Licence Holder a right to access land for the purpose of extraction of water or use of water. It is the Licence Holder's responsibility to ensure they have the legal right to access the land from which water is taken and upon which water is used.

If a Water Allocation Plan applies to a Water Resource to which this licence relates, the licensed water entitlement may be traded in accordance with the requirements of that plan, the [Trading Licensed Water Entitlements Policy](#), and the trade agreement which is made between the buyer and the seller and approved by the Controller.

Renewal, amendment and surrender of this licence

To renew your licence, an [application to renew a licence form](#) must be submitted to water.regulation@nt.gov.au at least **6 months** prior to the Expiry Date specified in the Licence Details.

If no application is made to renew the licence, the licence will expire.

To amend the licence or a condition of the licence, the Licence Holder must complete an [application to amend a licence form](#) which can be submitted by email sent to water.regulation@nt.gov.au.

The Licence Holder may surrender this licence at any time by notifying the Department of its surrender by email sent to water.regulation@nt.gov.au.

Compliance

The Licence Holder must comply with the *Water Act 1992 (the Act)* the Water Regulations 1992 (**the Regulations**) and all other applicable laws. Strict penalties apply for non-compliance.

This licence to take water includes licence conditions which are outlined below. These conditions impose obligations on the Licence Holder, including the requirement to report meter readings to the department on a monthly or quarterly basis. Licence Holders must fulfil all of the duties and perform all of the obligations set out in the conditions of this licence.

Contravention of the licence conditions is an offence under the Act and may result in financial penalties and/or the suspension or revocation of this licence.

Please read the licence conditions carefully. If you have any questions, please contact the Water Resources Division by sending an email to water.regulation@nt.gov.au.

Authorised Officers

Authorised Officers have the power to enter land by appointment, or without notice if required, to ascertain whether a breach of the Act or a breach of a condition of this licence has occurred. It is an offence to obstruct or hinder an Authorised Officer acting in their official capacity under the Act.

Interpretation

Unless a contrary intention appears, words or terms used in the conditions of this licence have the same meaning as in the Act, including any regulations or policies made under the Act.

General Conditions

GC1	All notices, reports, documents or other correspondence required to be provided as a condition of this licence must be provided in electronic form by email to water.regulation@nt.gov.au , unless otherwise agreed with an Officer, or specified as a condition of this licence.
GC2	The Licence Holder must notify the Department within 10 business days of any change to the name or contact details of the Licence Holder.
GC3	If there is to be a transfer of the ownership of Land, or an interest in the Land, to which this licence relates, the Licence Holder must inform the Department as soon as practicable, and not later than 10 business days prior to the transfer occurring.
GC4	The Licence Holder must hold an authorised environmental (mining) licence in accordance with the <i>Environment Protection Act 2019</i> in order to extract water under this licence.
GC5	If an environmental (mining) licence associated with this licence is revoked, the Licence Holder must notify the Department within 24 hours.
GC6	This licence is in force from the Commencement Date, and until the Expiry Date, as specified in the Licence Details.

Water Extraction Conditions

WEC1	The Licence Holder must only take water from the Water Resource specified in the Licence Details.
WEC2	The Licence Holder may only extract water under this licence for use on Land specified in the Licence Details.
WEC3	The Licence Holder must only extract water from Extraction Point(s) specified in the Licence Details.
WEC4	The Licence Holder must maintain any bore and backflow prevention device associated with the Extraction Point(s) specified in the Licence Details, in accordance with the <i>Minimum Construction Requirements for Water Bores in Australia</i> .
WEC5	The Licence Holder must maintain a contemporaneous written record of all maintenance activities undertaken on any bores and backflow prevention devices. These records must be maintained for the duration of the licence, and three years following its expiry. The records must be made available to the Controller or an Authorised Officer on request.

- WEC6 The Licence Holder must not in any year of this Licence (which year commences on 1 July and ends 30 June) extract more than the Extraction Limit (and for any part of a year must not extract more than a pro rata amount) as shown in the Table below.

Period	Entitlement
20 March 2023 – 30 June 2023	1433 ML
1 July 2023 – 30 June 2024	4800 ML
1 July 2024 – 30 June 2025	4800 ML
1 July 2025 – 30 June 2026	4800 ML
1 July 2026 – 30 June 2027	4800 ML
1 July 2027 – 30 June 2028	4800 ML
1 July 2028 – 30 June 2029	4800 ML
1 July 2029 – 30 June 2030	4800 ML
1 July 2030 – 30 June 2031	4800 ML
1 July 2031 – 30 June 2032	4800 ML
1 July 2032 – 19 March 2033	3445 ML

The **Extraction Limit** is the Total Maximum Water Entitlement specified in the Licence Details, or, where the Controller has determined an Annual Announced Allocation, the Total Maximum Water Entitlement multiplied by the percentage stated in the Annual Announced Allocation.

- WEC7 The Licence Holder must not extract more than 30% of the Extraction Limit in any one calendar month, without the prior written approval of the Controller.
- WEC8 The Licence Holder must extract at least 90% of the Extraction Limit in at least one year (which year commences on 1 July and ends 30 June of any three consecutive years for the duration of the licence).
- WEC9 If the Licence Holder does not extract the minimum required by WEC8, the Licence Holder must notify the Department the reasons why and provide a projection of water requirements for the remaining term of the licence.

Water Use Conditions

- WUC1 The Licence Holder may only use water extracted under this licence on the Land specified in the Licence Details.
- WUC2 The Licence Holder may only use water for the beneficial use(s) specified in the Licence Details.

Metering Conditions

- MC1 The Licence Holder must, at each Extraction Point specified in the Licence Details, and prior to any extraction occurring under the licence, install and maintain a meter that complies with the *Northern Territory Non-Urban Water Metering Code of Practice for Water Extraction Licences*.
- MC2 All water extracted under this licence must be measured by such a water meter.

- MC3 The Licence Holder must notify the Department of a water meter being installed or replaced within 10 business days of that occurring. The notification must contain:
- (a) photographs of the meter being replaced and the meter being installed, including a photograph of the serial number and a photograph of the replacement meter and all replacement pipework within 10 metres of the Extraction Point (which is to be photographed while visible); and,
 - (b) where a water meter has been replaced, the final meter reading and a photograph of the reading on the replaced meter.
- MC4 The Licence Holder must maintain records of the manufacturer's specifications of any water meter installed and maintained, as well as contemporaneous written records of any maintenance undertaken of a water meter. These records must be maintained for the duration of the licence, and three years following its expiry. These records must be provided to the Controller or an Authorised Officer upon their request.
- MC5 The Licence Holder must not tamper with, or permit any other person to tamper with, any installed water meter.
- MC6 The Licence Holder must ensure that each installed water meter is in a condition that it can be conveniently read or examined at any time.
- MC7 The Licence Holder must ensure that each installed water meter is safely accessible at all times, and is free from overgrown vegetation or any potential hazards.

Monitoring and Reporting Conditions

- MRC1 Within 14 days following the end of each **quarter**, the Licence Holder must supply the Controller with meter readings from each Extraction Point listed in the Licence Details.

Special Conditions

- SC1 Where a condition of this licence requires a program, plan, report or other document to be approved by the Controller, the licence holder must:
- a. seek approval of the document, via email to water.regulation@nt.gov.au; and
 - b. the document must be peer reviewed by a suitably qualified professional, unless otherwise agreed in writing by the Controller.
- SC2 A document submitted under condition SC1 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.
- SC3 The licence holder must **undertake the minimum monitoring** requirements specified in **Schedule 2** and **Schedule 3 and Schedule 4**, in accordance with monitoring commencement timing specified in the schedules.
- SC4 The approved adaptive management plan must:
- Objectives**
- a. Include clear, measurable objectives which can be used to demonstrate that:
 - i. impact of groundwater level decline will not exceed rates or levels which may impact culturally significant groundwater dependant ecosystems at Day Creek.
 - ii. impact on groundwater level decline will not adversely affect groundwater dependant ecosystems at an ecologically significant scale in the local region.
 - 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.

- iv. access to groundwater at the Laramba community bore field and Alyuen outstation will not be adversely affected by groundwater level decline or decline in groundwater quality as a result of extraction.
- v. The ability of the resource to support key Aboriginal cultural values is not adversely impacted by the licensed extraction.

Stakeholder consultation

- b. be developed in consultation with local Aboriginal people identified with the Central Land Council in regards to Objective (a)(i) and (a)(v);
- c. be developed in consultation with land holders in regards to Objective (a)(iii);
- d. be developed in consultation with Power and Water Corporation and Alyuen Aboriginal Corporation in regards to Objective (a)(iv);

Limits and triggers

- e. incorporate limits specified in Schedule 3 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 Objectives (a)(i) and (a)(ii);
- g. incorporate trigger values based on the findings of the hydro-census which can be used to implement adaptive management actions to achieve Objective (a)(iii).
- h. Incorporate trigger values based which can be used to implement adaptive management actions to achieve Objective (a)(iv);
- i. Incorporate trigger values which can be used to implement adaptive management actions to achieve Objective (a)(v);

Management Actions

- j. define management actions that are capable of being implemented in response to the triggers and limits developed under parts SC4(b) through SC4(f), to achieve the objectives;
- k. Establish timeframes for the implementation of the actions;
- l. Establish who in the licence holder's organisation makes the decision to implement management actions, and the evidence on which such decisions will be made;

Continuous improvement

- m. incorporate a feedback system to ensure appropriate actions are initiated when triggered, and impacts do not exceed those presented in the **assessed groundwater model**;
- n. Include a review process to ensure management actions are updated as knowledge improves;
- o. Include a process to integrate information obtained through the completion of Condition SC11 – groundwater dependant ecosystem verification and Condition SC12 – groundwater model verification and improvement; and

Implementation

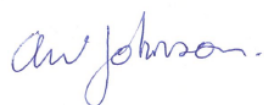
- p. be implemented immediately following the Controller's approval.

SC5 The approved **monitoring program** must:

- a. be prepared by a suitably qualified professional;
- b. include the minimum monitoring measures specified in Schedule 3;
- c. include the minimum groundwater quality monitoring measures specified in Schedule 4;

- d. include monitoring measures suitable to identify an exceedance of any trigger value or limit in the adaptive management plan;
 - e. specify the parameters, methodology and frequency for each monitoring measure;
 - f. include a review process to ensure continuous improvement of the monitoring program; and
 - g. be implemented immediately following the Controller's approval.
- SC6 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). The proposed revisions:
 - a. must be prepared by a suitably 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.
- SC7 The licence holder must report adaptive management actions undertaken, 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.
- SC8 The licence holder must within 48 hours notify the department in writing on becoming aware of non-compliance (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 associated with the non-compliance;
 - b. identify the steps that have or will be taken to minimise the impacts of the non-compliance; and
 - c. identify the steps that have or will be taken to prevent a reoccurrence or minimise the risk of further non-compliance.
- SC9 The licence holder must submit to the department an annual compliance report on or before the 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 trigger values in the licence documents.
- SC10 The licence holder must publish on a website which is publicly available:
 - a. a copy of this licence;
 - b. the approved adaptive management plan
 - c. the approved monitoring program
 - d. details of non-compliance reported in accordance with Condition SC8
 - e. copies of annual reports prepared in accordance with Condition SC9
 - f. other documents related to this licence, or the activities conducted under it, as directed by the Controller

- SC11 The licence holder must undertake **groundwater dependent ecosystem (GDE) verification**, including:
- a. Undertake a baseline assessment of groundwater dependent ecosystem using remote sensing techniques consistent with *Information Guidelines Explanatory Note: Assessing Groundwater Dependent Ecosystems 2019*.
 - b. Quantify the spatial extent of groundwater dependent ecosystems at vegetation community level.
 - c. Quantify the proportion of groundwater dependent ecosystems determined under SC11(b) which is anticipated to be impacted by drawdown in the life of mine using the assessed groundwater model, or a model updated in accordance with condition SC12 (Model improvement).
 - d. Provide a report to the Controller for approval which:
 - i. documents the assessment under parts a., b. and c. of this condition;
 - ii. documents any updates to the adaptive management plan to mitigate impact to GDEs; and
 - iii. verifies that impact to groundwater dependent ecosystems at an ecologically significant scale as a result of drawdown will be avoided.
- SC12 Model improvement and verification the licence holder must within two years of continuous extraction undertake a program of improvement, and verification of the assessed groundwater model, which:
- 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;
 - b. includes a predictive uncertainty analysis;
 - c. sets aquifer investigation and modelling goals based on reducing predictive uncertainty;
 - d. includes obtaining site specific aquifer data, in accordance with goals set under SC12(c);
 - e. updates the model, based on data obtained through SC12(c);
 - f. includes assessment of the updated model with respect to Class 2 requirements of a groundwater model in the Australian Groundwater Modelling Guidelines (Barnett et al, 2012), and the goals set in part SC12(c); and
 - g. concludes with a detailed model report consistent with the Australian Groundwater Modelling Guidelines (Barnett et al, 2012), outlining:
 - i. the program undertaken;
 - 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;
 - iii. comparison of the magnitude and extent of the predicted drawdown in the updated model and **assessed groundwater model**, demonstrating that impacts will not be of greater magnitude or extent than that in the **assessed groundwater model**; and
 - iv. any revision to the pumping regime or bore field design which will be implemented to achieve SC12(g)(iii).



Andrew Johnson
Controller of Water Resources

Date: 18 September 2025

This licence should be interpreted in accordance with the *Interpretation Act 1978* (NT)

Term	Definition
Act	the <i>Water Act 1992</i> (NT)
Annual Announced Allocation	the percentage determined and announced by the Controller before 1 May by which the Total Maximum Water Entitlement available under a licence is reduced for the forthcoming year
Assessed Groundwater Model	scenario Nolans503 presented in 2021 Groundwater Modelling Reaphook Palaeovalley, Nolan's Project Arafura Resources Pty Ltd, Prepared by GHD (dated 9 January 2023, Revision 2.1)
Authorised Officer	a person appointed under section 21 of the Act as an Authorised Officer for the purposes of the Act
Borefield	bores listed on this licence in the mineral titles described in Table 2
Controller	the Controller of Water Resources, appointed under section 18 of the Act, including a delegate of the Controller
Department	the Department of Lands, Planning and Environment, or any future department or agency that has the responsibilities for administering the functions in the Act relating to the licensing and regulation of water resources
Environmental (mining) licence	a mining management plan forming part of a deemed mining licence as defined in section 303 of the <i>Environment Protection Act 2019</i>
Extraction Limit	the Total Maximum Water Entitlement specified in the Licence Details, or, where the Controller has determined an Annual Announced Allocation, the Total Maximum Water Entitlement multiplied by the percentage stated in the Annual Announced Allocation
Hydro-census	Nolans Hydro-census, prepared by GHD, 10 May 2023
Land	the Land from which the water is taken and on which the water is used as listed under the Licence Details
Licence Details	the information in the table on the front page of this document
Officer	a staff member of the Water Regulation Branch of the Water Regulation Division, or of any future branch or business unit that has the responsibilities for the administrative and regulatory functions of the Act
Period	a period of time specified in Condition WEC6.
Rate of groundwater level decline	the rate of change in groundwater level at any time during the term of the licence.
Regulations	the Water Regulations 1992 (NT)
Quarter	means the financial year quarters: 30 September, 31 December, 31 March and 30 June
Water Allocation Plan	a Water Allocation Plan declared in accordance with section 22B of the <i>Water Act 1992</i>
Water Resource	the Water Resource listed under the Licence Details

Table 2 Borefield names and locations

Borefield name	Mineral Title	Approximate centre point (GDA 94, MGA Zone 53)
Borefield A	ML32413 (western portion)	288452.293, 7483577.505
Borefield B	ML32413 (eastern portion)	294428.43, 7482467.051
Borefield C	ML32412 (western portion)	296436.254, 7480779.141
Borefield D	ML32412 (eastern portion)	301243.575, 7479913.635
Borefield E	ML32411 (eastern portion)	310944.792, 7479395.123

Schedule 2: Minimum water level monitoring requirements

Monitoring Bore Identifications	Purpose	Monitoring commencement	Minimum monitoring requirements	Triggers
RN019035 (Located within 5km east of Borefield A)	Prevent groundwater dependent ecosystem impact prior to completion of condition SC10 – groundwater dependent ecosystem verification	Prior to commencement of extraction at Borefield A	Groundwater level recorded by loggers at daily intervals Data downloaded every 3 months	Rate of groundwater level decline exceeds 0.2 m per year
RN043611 (Located within 5km south of Borefield B)	Prevent groundwater dependent ecosystem impact prior to completion of condition SC10 – groundwater dependent ecosystem verification	Prior to commencement of extraction at Borefield B	Groundwater level recorded by loggers at daily intervals. Data downloaded every 3 months	Groundwater level decline exceeds a rate of 0.2 m per year
RN043613 (Located within 5km south of Borefield C)	Prevent groundwater dependent ecosystem impact prior to completion of condition SC10 – groundwater dependent ecosystem verification	Prior to commencement of extraction at Borefield C	Groundwater level recorded by loggers at daily intervals. Data downloaded every 3 months	Groundwater level decline exceeds a rate of 0.2 m per year
RN043580 (Located within 5km north of Borefield D)	Prevent groundwater dependent ecosystem impact prior to completion of condition SC10 – groundwater dependent ecosystem verification	Prior to commencement of extraction at Borefield D	Groundwater level recorded by loggers at daily intervals. Data downloaded every 3 months	Groundwater level decline exceeds a rate of 0.2 m per year
RN019017 (Located within 5 Km north of Borefield E)	Prevent groundwater dependent ecosystem impact prior to completion of condition SC10 – groundwater dependent ecosystem verification	Prior to commencement of extraction at Borefield E	Groundwater level recorded by loggers at daily intervals. Data downloaded every 3 months	Groundwater level decline exceeds a rate of 0.2 m per year

Schedule 3: Minimum water level monitoring requirements – Groundwater model verification

Monitoring Bore Identifications	Purpose	Monitoring commencement	Minimum monitoring requirements	Triggers
RN043581 (Located between Borefield A and the Laramba Borefield RN015890. Is within 2.5km of Borefield A)	Groundwater model verification	Prior to commencement of extraction under this licence	Groundwater level recorded by loggers at daily intervals. Data downloaded every 3 months	Groundwater level decline exceeds 0.5 metres in the term of the licence.
RN018869 (Located between Borefield E and Alyuen Outstation RN018976. Situated approximately 3km from Borefield E)	Groundwater model verification	Prior to commencement of extraction under this licence	Groundwater level recorded by loggers at daily intervals. Data downloaded every 3 months	Groundwater level decline exceeds 0.1 metres in the term of the licence.
RN043582 RN043583 (Groundwater dependent ecosystem monitoring location)	Groundwater model verification	Prior to commencement of extraction under this licence	Groundwater level recorded by loggers at daily intervals. Data downloaded every 3 months	Groundwater level decline exceeds 0.2 m per year Groundwater level decline exceeds 1.5 metres in the term of the licence.

Schedule 4: Minimum water quality monitoring requirements

Location	Monitoring parameters	Frequency
All bores from which water has been extracted under this licence in the preceding quarter.	Basic water quality: temperature, electrical conductivity and pH	Quarterly
	General parameters: alkalinity, total dissolved solids, sodium, potassium, calcium, magnesium, chloride and sulfate	Annually