



Government  
of South Australia

Department for  
Energy and Mining

28 November 2024

Mr Stephen Strubel  
Executive Director and Company Secretary  
ChemX Materials Limited  
Suite 1, 1 Tully Road  
EAST PERTH WA 6004

Stephen@chemxmaterials.com.au

Dear Mr Strubel,

**Approval Notification - Exploration Program for Environment Protection and Rehabilitation (EPEPR2024-043) EL6634**

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The program for EL6634, final version submitted on 22<sup>nd</sup> November 2024 to conduct Drilling to identify the presence of graphite at Balumbah prospect, has been approved in accordance with Section 70B(5) of the *Mining Act, 1971 (the Act)*.

You are reminded that:

1. You must at all times implement and comply with the approved EPEPR.
2. The approved EPEPR will be made publicly available on the Mining Register.
3. Exploration operations on “native title land” (as defined in the *Native Title (South Australia) Act, 1994*) must be conducted in accordance with Part 9B of the Act.
4. In accordance with Section 70C of the Act, the licensee must review the EPEPR on request of the Minister’s Delegate within a time specified in the request and submit the revised EPEPR for approval.
5. As the operator for the approved EPEPR you must take all reasonable and practical measures to avoid undue damage to the environment and meet all the approved outcomes (when measured against the approved criteria) listed within the EPEPR.
6. In accordance with regulation 78 of the *Mining Regulations 2020* and Terms of Reference 012 (TOR 012), the licensee must submit an Exploration Compliance Report to the Mineral Exploration Branch each year, within 60 days after the anniversary of the date the licence was granted, and 60 days after the expiry or surrender of the EL, or in accordance with joint reporting requirements agreed to with the Minister.
7. In accordance with regulation 16(4) of the *Mining Regulations 2020*, drillhole and geological samples must be kept in accordance with guidelines issued by the Department for the term of the relevant tenement and for 7 years after the expiry, surrender, cancellation or forfeiture of the tenement to which the sample relates. Furthermore, samples must be retained by the tenement holder, or provided to the Director, in accordance with those guidelines (unless the Minister has authorised, on application by the tenement holder in a manner and form set out in the guidelines, the destruction or disposal of the samples).
8. The EPEPR is approved for a period of twelve months from the date of this letter.

This approval does not constitute endorsement of the systems that you have in place to manage your exploration operations in compliance with the Act and licence conditions. In granting the approval, the EPEPR and your capacity to undertake the proposed activities have been considered. However, responsibility for compliance with the Act and the licence conditions, remains at all times with the licensee.

This approval relates only to the requirements of the Act. Other legislation relevant to this application includes the *South Australian Work Health and Safety Act, 2012* and Regulations. For example, Chapter 10 of the *Work Health and Safety Regulations, 2012* (SA) introduced new requirements for mine operators in South Australia. The new requirements include a notification for mining operations and the establishment of a Safety Management System. For further information on your responsibilities, including a guide to Chapter 10 and the Mine Operator Notification Form, contact SafeWork SA on 08 8303 0255 or via its website at [www.safework.sa.gov.au](http://www.safework.sa.gov.au).

The proposed program may be subject to the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act). Mineral exploration industry-specific information is contained in an appendix in the EPBC Matters of National Environmental Significance – Significant impact guidelines 1.1. This document is available on the Australian Government's Department for Agriculture, Water and the Environment website at <http://www.environment.gov.au/resource/significant-impact-guidelines-11-matters-national-environmental-significance>. For further information, contact the Department for Agriculture, Water and the Environment, or visit its website at [www.environment.gov.au/](http://www.environment.gov.au/).

Proposed changes to exploration operations stated in the approved EPEPR may require a *PEPR review* to be submitted for assessment. Where a *PEPR review* is required, implementation of the operational changes can only occur after the revised EPEPR is approved. Further information on when an exploration PEPR review is required can be found in Departmental guideline [MG22 Conducting mineral exploration](#).

If you require any further information, please contact Jason Perry on 8177 3413 or Simon Constable on 8429 2516 or email [DEM.exploration@sa.gov.au](mailto:DEM.exploration@sa.gov.au).

Yours sincerely



Simon Constable  
**GENERAL MANAGER MINERAL EXPLORATION  
REGULATION & COMPLIANCE**

In accordance with delegated  
Ministerial powers and functions

The Department's Regulatory Guidelines, Ministerial Determinations and Information Sheets are available at: [http://energymining.sa.gov.au/minerals/knowledge\\_centre](http://energymining.sa.gov.au/minerals/knowledge_centre)

CC: Wade Bollenhagen, Exploration Manager Pirie Resources Pty Ltd [wade@itechminerals.com.au](mailto:wade@itechminerals.com.au)

**APPLICATION**

Mining Act 1971 and Mining Regulations 2020



Government of South Australia

Department for Energy and Mining

**EXPLORATION PROGRAM FOR ENVIRONMENT PROTECTION AND REHABILITATION (PEPR)**

USE THIS TEMPLATE TO: Apply to conduct mineral exploration operations not covered by the Generic PEPR (Adopted Program) for a 12 month period of time on one or more exploration licences (ELs), retention leases (RLs) or mineral claims (MCs) in South Australia.

Refer to the Exploration PEPR Terms of Reference and [Minerals Regulatory Guidelines MG22](#) when completing this application. Further information on exploration requirements in South Australia is available on the Department for Energy and Mining (DEM) Minerals website [www.energymining.sa.gov.au](http://www.energymining.sa.gov.au).


**SECTION A – GENERAL DETAILS**

Operational approval period	<b>12-month approval period, with an additional 3 months to complete all rehabilitation</b>		
Tenement details	EL 6634		
Tenement holder(s) (for each tenement)	ChemX Materials Ltd		
Operating company	Pirie Resources Pty Ltd ( wholly owned subsidiary company of iTech Minerals Ltd) Level 3, 170 Greenhill Road, Parkside, SA 5063.		
Agency agreement (if applicable)	100% owned by ChemX Materials Ltd, where Pirie Resources Pty Ltd (has all rights to graphite).		
PEPR prepared by	Wade Bollenhagen Exploration Manager Pirie Resources Pty Ltd 0499774538		
Project supervisor/contact person(s)	Wade Bollenhagen Exploration Manager Pirie Resources Pty Ltd <a href="mailto:Wade@itechminerals.com.au">Wade@itechminerals.com.au</a> Level 3, 170 Greenhill Road, Parkside, SA 5063		
Project/prospect name	Balumbah Graphite		
Location details	South of Kimba, Eyre Peninsula		
Project description, commodity type and mineralisation model	Drilling to identify the presence of graphite at the Balumbah prospect		
Proposed project schedule	Start date	1/01/2025	End date 31/12/2025

**DECLARATION**

I, the tenement holder, declare under regulation 84 of the Mining Regulations 2020, that I have taken reasonable steps to review the information in this PEPR/ revised PEPR to ensure its accuracy.

Name	Michael Schwarz	Signature (digital allowed)	
Position	Managing Director - iTech Minerals Ltd	Date	14/11/2024

Name	Stephen Strubel	Signature (digital allowed)	
Position	Director / Company Secretary	Date	15 November 2024

Copy and paste the above table if there is more than 1 tenement holder.

*Note: An authorised representative from each tenement holder must sign the declaration (eg in accordance with the Corporations Act 2001).*

**SECTION B – PROGRAM PREPARATION AND ACCESS TO LAND**

**Work undertaken in preparing the proposal**

Summarise the research and fieldwork undertaken in preparing the proposal including:

- desktop reviews of existing information
- field visits for reconnaissance
- contractor consultation (i.e. equipment scale, type)
- other information used when planning the proposed program.

Follow up drilling of Regional Aerial EM from 2012 undertaken by Monax, whom drilled 3 holes to the south. Four distinct Em responses will be tested for graphite with the drilling of 23 RC holes. The same equipment and processes used in the drilling of the Lqacroma resource will be undertaken. Due to harvest the landowner has not yet signed the Waiver, this is anticipated to occur post harvest, no work will occur unless the Waiver is signed. The same bag farm will be used for storage of any prospective intervals.

**Consultation (r. 64)**

Using the table below, provide a summary of the individual or group of similarly affected persons and summarise the results of consultation that has been undertaken on the proposed operation. Types of interested or affected parties include residents, council, government agencies etc (exclude native title groups and defence owned or controlled lands – refer to relevant sections below).

Tenement	Stakeholder	Land tenure	Land use	Date and type of NOE served	Type of exempt land	Date waiver obtained	Date consultation/access agreement and/or permits signed/authorised	Stakeholder concerns raised and how addressed
6634	Mayfield	Freehold	Cropping	30/07/2024 ADV	Cropping			<i>Discussions commenced with landowner, however due to harvest no Waiver has been signed yet. No work will be undertaken until a Waiver is signed, this is anticipated to be undertaken post harvest.</i>
6478	Harradine R & L	Freehold	Cropping	28/04/2022 ADV	Cropping	17/09/2022	17/09/2022	None as this is the bag farm and is ongoing all the time as we are drilling under EPEPR2023-001.

If any individual or group of similar affected persons were not able to be consulted, what steps were taken to consult with them?

All land is free hold and cropped annually, the Native Title holders have not been notified.

Provide any additional relevant information.

Harradines are continually engaged regarding the bag farm, as such no new notifications have been issued.

**SECTION C – DESCRIPTION OF THE ENVIRONMENT**

Include a description of the features of the environment that are expected to be affected by the proposed operations. Each of the elements of the existing environment listed below must be described only to the extent that they may need to be considered in assessing the impacts that the proposed exploration operations are reasonably expected to have on the environment. If the element is not likely to be impacted by the operation, a statement to that effect must be included.

Where the terms and conditions of an RL include environmental outcomes, include any new baseline environmental data relevant to the control strategies or measurement criteria, and where changes to the environment are identified, provide an updated description of the environment to describe the changes.

**Proximity to infrastructure and housing**

Provide the following information:

- Settlements – indicate the name and distance of the nearest town, and residences within, or near the proposed exploration operations.
- Roads and tracks – indicate existing fence lines, roads and tracks, including those which are to be used in the exploration program.
- Other human infrastructure such as schools, hospitals, commercial or industrial sites, roads, sheds, bores, dams, ruins, pumps, scenic lookouts.
- Railway lines, transmission lines, gas and water pipelines, communication lines – e.g. fibre optic cables etc., if these may be impacted by the exploration operations.

Provide this information on a locality plan/map.

The planned holes are shown in blue, there are planned holes near one dam (blue) near the proposed holes on Mayfields . The historical (MOX) holes are shown as yellow



**Land use and tenure**

Using the table below, select the land tenure and land use that the proposed exploration activities will occur in. Include additional information where prompted.

## Exploration PEPR application – 12-month period

Land tenure/type	Applicable	Land use	Applicable
Freehold	<input checked="" type="checkbox"/>	Grazing	<input type="checkbox"/>
Pastoral lease	<input type="checkbox"/>	Cultivated land	<input checked="" type="checkbox"/>
Perpetual lease	<input type="checkbox"/>	Residential	<input type="checkbox"/>
Crown land	<input type="checkbox"/>	Township	<input type="checkbox"/>
Mining reserve	<input type="checkbox"/>	Industrial	<input type="checkbox"/>
Aboriginal freehold/leasehold land (e.g. Anangu Pitjantjatjara Yankunytjatjara and Maralinga Tjarutja lands)	<input type="checkbox"/>	Tourism	<input type="checkbox"/>
Forestry reserve	<input type="checkbox"/>	Conservation	<input type="checkbox"/>
Marine parks	<input type="checkbox"/>	Defence activity	<input type="checkbox"/>
National parks, conservation parks, conservation reserves, regional reserves*	<input type="checkbox"/>	Road reserve	<input type="checkbox"/>
Adelaide Dolphin Sanctuary	<input type="checkbox"/>	Sites of scientific significance (geological monuments, fossil reserves etc.)	<input type="checkbox"/>
Murray Darling Basin	<input type="checkbox"/>	Orchard/vineyard	<input type="checkbox"/>
<If park/reserve is selected, please provide the name of the park>		*Native vegetation heritage agreements	<input type="checkbox"/>
Other*	<input type="checkbox"/>	<Provide the name of the area>	
<If other is selected, describe the land tenure here.>		*European heritage sites	<input type="checkbox"/>
		<Provide the name of the site>	
		*Other (e.g. historic mining)	
		<Provide the name of the site>	

\* Indicates more information required in field immediately below.

Describe any council policies (or out of council) or development plans that may impact the program area.

*There are none.*

Provide a description of any known plans for future land use changes by other parties.

*There are no known plans*

Provide any additional relevant information.

<Include text here.>

### Woomera Prohibited Area (WPA)

Will activities be conducted within the WPA	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	Do you have a resource exploration permit in place?	Yes <input type="checkbox"/>	No <input type="checkbox"/>
In which zone will activities be conducted?					
Does the Exploration Permit allow the operator to conduct exploration operations in the WPA?				Yes <input type="checkbox"/>	No <input type="checkbox"/>
What is the expiry date of the resource exploration permit?					
Identify closure periods that may impact on the exploration program.					
<Include text here.>					

### Other land owned or controlled by the Commonwealth Department of Defence

Lands in South Australia that are owned or controlled by the Commonwealth Department of Defence, which they manage either as a training or test area, include the Port Wakefield Proof and Experimental Establishment, Murray Bridge Training Area, and Cultana Training Area.

These lands remain to be mineral land under the Mining Act 1971 (SA) and can be accessed for mineral exploration and mining subject to certain restrictions and conditions under the Defence Act 1903 (Cth) and the Defence Regulation 2016 (Cth).

## Exploration PEPR application – 12-month period

Will operations be conducted within the Port Wakefield Proof and Experimental Establishment, Murray Bridge Training Area, or Cultana Training Area?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
<a href="#">&lt;If yes, indicate which area.&gt;</a>		
Do you have a Deed of Access with Defence?	Yes <input type="checkbox"/>	No <input type="checkbox"/>
What is the expiry date of the Deed of Access?		
Provide the date the Range Control Officer granted access permission to conduct the proposed exploration operations.		
Describe the results of consultation and how any concerns raised were addressed.		
<a href="#">&lt;Include text here.&gt;</a>		

### Native title

Using the table below, describe how you have complied with the requirements of Part 9B of the Mining Act for each tenement (for further information refer to [Minerals Regulatory Guidelines MG22](#)).

Native title			
Is the proposed area of exploration located on native title land?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> (If no, no further information in this section required.)		
Are there registered native title party/parties in the area of proposed exploration?	Yes <input type="checkbox"/> No <input type="checkbox"/>		If no, an Environment, Resources and Development (ERD) Court determination is required.
Have you negotiated a native title mining agreement?	Yes <input type="checkbox"/> No <input type="checkbox"/>	Is the agreement registered?*	<a href="#">&lt;List the tenements covered by the agreement&gt;</a>
Have you accepted an Indigenous land use agreement (ILUA)?	Yes <input type="checkbox"/> No <input type="checkbox"/>	Is the ILUA registered?*	<a href="#">&lt;List the tenements covered by the ILUA&gt;</a>
Have you obtained ERD Court determination?†	Yes <input type="checkbox"/> No <input type="checkbox"/>	Is the determination registered?*	<a href="#">&lt;List the tenements covered by the determination&gt;</a>

\* The registration date refers to the date the agreement, determination or ILUA was registered with DEM.

† An ERD Court determination cannot be conjunctive (i.e. cannot apply to subsequent licences).

Provide any additional relevant information.

[All proposed drill holes are on freehold land, where native title is extinguished.](#)

### Landform and topography

Describe the topography of the general area affected by the exploration program. Include the susceptibility to erosion and visual attributes (steep or undulating slopes, plains, rocky outcrops, dunes, salt pans, clay pans etc.).

[The areas for proposed drilling are cropped annually, as such the topographies are gently undulating, with variable amounts of transported sand cover.](#)

### Soil and surface cover

Describe soil types and soil surface cover - e.g. gibber, rocky - in the general area affected by the exploration program. Include details on the susceptibility to compaction, erosion, dust, runoff and any other soil characteristics – e.g. acid sulphate – that may require control strategies to reduce environmental impacts during operations or rehabilitation.

[The soils and surfaces are cropped annually, as such the paddocks will be ploughed after drilling in preparation for crops to be seeded. The areas drilled will be prepared for seeding and then be cropped in 2025. The RC rig and support truck have not created erosion, compaction and dust issues in the past when it has drilled holes under EPEPR2022-043. Similar outcomes are expected again. No control strategies are planned to be used apart from the conventional use of the cyclone and tarps over the ground with complete rehabilitation to the landowners satisfaction at the completion of drilling. Erosion can be a concern to trafficking over the ground due to the presence of gypsum, as the work is limited the expectation for erosion to be a problem is considered low. The presence of gypsum is considered low as it is known to exist in other locations within the district and its presence is apparent.](#)

## Exploration PEPR application – 12-month period

### Surface water

Will the proposed program interfere with surface water bodies and natural drainage (e.g. drainage lines, creeks, floodplains, wetlands)? If yes, describe the potential interference and surface water bodies and natural drainage on maps. If no, indicate why.	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
The activities will not create situations that will change the current landsurface in any way, there are no natural water bodies or any drainage lines present to interfere with.		
Is the program area located within water protection areas defined under the <i>River Murray Act 2003</i> ? If yes, provide the name(s).	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
<If yes, provide the name(s)>		
Is the program area located within any prescribed watercourses or prescribed surface water areas under the <i>Landscape South Australia Act 2019</i> ? If yes, provide the name(s).	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
<If yes, provide the name(s)>		

### Groundwater

Is groundwater likely to be intersected when conducting the exploration program? If yes, use the table below to describe the expected groundwater (hydrogeological) conditions, and identify groundwater aquifers in the exploration area(s) that may be affected. Indicate the approximate depth of drillholes in each area. Copy and paste a new table for each area where different groundwater conditions are expected. If no, provide evidence or any supporting information demonstrating this.	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
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#### Description of the locality/area where different groundwater conditions may be encountered

Water may be encountered in the form of an unconfined fractured aquifer in the Paleoproterozoic rocks (Cook Gap Schist), hence the need for the sumps. It is not known at what depth this may occur. The holes are planned to be over +150m deep, water will more than likely be intersected at some point. From Water connect, there is no indication of water table down to a depth of 118m, it will be surprising that water would not be intersected before this depth

Detail	Unit No	Obs No	Obs Network	Permit No	Date Drilled	Max Depth (m)	Latest Depth (m)	SWL (m)	SWL Date	SWL Status	Yield (L/sec)	Yield Date	TDS (mg/L)	TDS Date	Salinity Status	Purpose	Aquifer	Status
Details 6131-1451					17/07/2012	72.00	72.00											
Details 6131-1452					18/07/2012	96.00	96.00											
Details 6131-1453					19/07/2012	100.00	100.00											
Details 6131-1454					19/07/2012	118.00	118.00											
Details 6131-1455					20/07/2012	43.00	43.00											
Details 6131-1456					21/07/2012	72.00	72.00											
Details 6131-1457					21/07/2012	66.00	66.00											
Details 6131-1458					22/07/2012	57.00	57.00											
Details 6131-1459					23/07/2012	50.00	50.00											
Details 6131-1460					24/07/2012	50.00	50.00											

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Formation age and/or stratigraphic unit	Stratigraphic intervals (depth range) (m)	Aquifer formation name	Aquifer interval/thickness (from-to) (m)	Type of aquifer(s) intersected (e.g. unconfined, confined, artesian)	Provide aquifer salinity, depth to water level and any other relevant comments
Cook Gap Schist	5-200m	None		Unconfined fractured system	Obswell doesn't report anything meaningful

Provide the environmental value of each aquifer present determined according to the current Environment Protection (Water Quality) Policy.

No aquifer is known to be present, as such no details can be provided. The historical TDS in these types of rocks typically has very high salinity in the ground water, which indicates it has no environmental value as it exceeds 13,000mg/L.

Provide a description of the existence, location and value of all Groundwater Dependent Ecosystems (GDEs) within and immediately surrounding the project area.

See attachment at the end of this Application. Mallee woodlands and Melalleuca woodlands dominate the GDE's

Is the proposed program located within a prescribed wells area or prescribed water resource area? If yes, provide the name of the area.	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
<i>&lt;Insert the name of the area&gt;</i>		

Provide any additional information, if required.

*<Include text here.>*

### Native vegetation

Will you be working within areas of native vegetation? If yes, provide the following information: <ul style="list-style-type: none"> <li>description of the formation and structure of vegetation in the area (e.g. woodland, shrubland, grassland)</li> <li>list of the dominant species.</li> </ul> If no, indicate why you will not be working within areas of native vegetation?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
<i>All drilling will be performed in paddocks that are cropped annually, hence the need for a waiver.</i>		

### Significant habitats and flora

If you are working within areas of native vegetation, use the table below to list any significant habitats and any rare or endangered flora species located or reported to have been in the area that may be impacted by the proposed program. Include known sightings of listed species on a locality plan/map.

Species/habitat	Common name	NPW Act rating*	EPBC Act rating†
<i>&lt;Species/habitat&gt;</i>	<i>&lt;Common name&gt;</i>	<i>&lt;NPW Act rating&gt;</i>	<i>&lt;EPBC Act rating&gt;</i>
			<i>&lt;Tab to add rows.&gt;</i>

\* National Parks and Wildlife Act 1972 (NPW Act) conservation status includes extinct, endangered, vulnerable, threatened and rare.

† Environment Protection and Biodiversity Conservation Act 1999 (Cth) (EPBC Act) listings include extinct, extinct in the wild, critically endangered, endangered, vulnerable and conservation dependent.

### Weeds and pathogens

Provide information of the extent the area is affected or potentially affected by weeds and pathogens (e.g. phytophthora; buffel grass *Cenchrus ciliaris*).

From Nature Maps there are no indications of significant weeds or pathogenes (ie phytophthora; buffel grass *Cenchrus ciliaris*)

## Exploration PEPR application – 12-month period

The landowners have not indicated that there are any weeds on their properties, we will be cleaning tyre and vehicles of seeds and vegetation to minimise any introduction of weeds to the properties.

### Fauna

Describe the native and feral fauna that may be present in the application area, including feral species.

Fauna are listed in each of the Protected Matters reports generated for the area (these are attached to the end of this application). Common fauna are grey kangaroos and varieties of reptiles, feral species are dominated by rabbits with lesser cats. As the drill program is being undertaken in paddocks that are ploughed each year, there is minimal threat to native fauna.

### Significant fauna

Where possible, using the table below, list any rare or endangered fauna species located or reported to have been in the area that may be impacted by the proposed program. Include known sightings of listed species on a locality plan/map.

Species	Common name	NPW Act rating	EPBC Act rating
<Species>	<Common name>	<NPW Act rating>	<EPBC Act rating>
			<Tab to add rows.>

Note: NPW Act conservation status includes extinct, endangered, vulnerable, threatened and rare.  
 EPBC Act listings include extinct, extinct in the wild, critically endangered, endangered, vulnerable and conservation dependent.

### Environmentally sensitive locations

Are there any environmentally sensitive locations within or close to the proposed exploration area (e.g. areas having particular ecological, cultural, scientific, aesthetic or conservation value)? If yes, provide a description of identified environmentally sensitive location(s). Mark these areas on a locality plan to identify any areas of conflict so that access roads or other activities can be planned and located effectively.	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
Are you likely to impact on the environmentally sensitive area? If yes, detail the likely effects the proposed program may have.	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
<If yes, include text>		
Include a statement concerning whether or not an Aboriginal heritage survey has been conducted by the proponent and if so, the results of the survey.		
All drilling is on freehold land that is cropped annually, no heritage surveys have been undertaken.		

Exploration PEPR application – 12-month period

**SECTION D – DESCRIPTION OF PROPOSED EXPLORATION OPERATIONS**

Each of the elements listed below must be described only to the extent that they apply to the proposed exploration program.

**Equipment and personnel requirements**

Using the table below, describe the equipment, size and composition of field crews, and proposed working hours/days required to conduct the proposed program.

Type of personnel	Number	Name of contractor company (if applicable)	
Geologists	1	Staff	
Land access/environmental			
Field assistants/technicians			
Drilling crew	3	Lehmann	
Site preparation and rehabilitation	2	Local landowners	
Other (provide details)		<Include name and contact details here.>	
Shifts worked per day	Hours worked per day	Days worked per week	
1	12	7	
Equipment type	Owner/operator	Description/capacity	Activity/purpose
Truck Mounted RC	Lehmann	6 wheel drive truck with RC and compressor mounted	To drill RC holes
Support Truck	Lehmann	6 wheel drive	Holds rods and water.

Provide any additional information, if required.

**Low impact exploration activities**

Will low impact exploration operations be conducted that are not covered by the <a href="#">Generic program for environment protection and rehabilitation – low impact mineral exploration in South Australia</a> , (generic PEPR)? If yes, describe each type of low impact operations proposed.	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>

**Drilling activities**

Will exploration drilling activities be conducted? If yes, fill out the below table	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
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Tenement	Drilling type	Maximum number of drillholes	Maximum drillhole depth (m)	Maximum number of sumps required at each site	Maximum size of sumps (length x depth x width) (m <sup>3</sup> )	Average size of each drill pad* (m <sup>2</sup> ) (no excavation required)	Number of sites requiring pad excavation	Average volume (m <sup>3</sup> ) of material to be excavated (excluding sumps)
6634	RC	23	200	2	5 x 6x 2	50	0	0
<b>TOTAL</b>		<b>23</b>	<b>4,600</b>	<b>46</b>	<b>2,760</b>	<b>1,150</b>	<b>0</b>	<b>0</b>

Total number of drillholes (add each row to calculate the total).	Total metres proposed (maximum number of holes x average depth for each row, then add each row to calculate the total).	Total number of sumps (maximum number of sumps x drillsites for each row, then add each row to calculate the total).	Total volume of sumps (maximum size of sumps x number of sumps for each row, then add each row to calculate the total).	Total area of disturbance (number of holes x average size for each row, then add each row to calculate the total).	Total number of pads requiring excavation (add each row to calculate the total).	Total volume of material to be excavated (number of sites requiring excavation x average volume for each row, then add each row to calculate the total).
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\* The footprint includes all areas of disturbance associated with the drillsite.

## Exploration PEPR application – 12-month period

### Drillsite preparation

If exploration drilling activities are proposed, describe the methods used to prepare sites, including vegetation clearance requirements, site levelling and digging of sumps.

Apart from the digging of sumps, which will include the topsoil separation at the time of digging, no other preparation is required for drilling, the holes are drilled in open paddocks that are cropped annually..The use of tarpaulins under the drill mast and under the cyclone to capture the excess drill material will be used. This excess material will then be placed back down the hole at the completion of drilling and the hole rehabilitated.

Sumps will be dug in a manner where the topsoils is removed and placed to the side of the sump, the sump is dug with a loader so one side is gentle sloping with a highwall on the other, once the sump is drained the material is placed back into the sump in reverse order with the topsoil placed on last.

### Drillhole construction and decommissioning

Have the personnel responsible for implementing the proposed program read and understood the Earth Resources Information Sheet M21, <a href="#">Mineral exploration drillholes – general specifications for construction and backfilling?</a>	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Describe how drillholes will be constructed, including the casing material to be used, depth of casing, if the casing will be cemented, cementing intervals and the class of driller that will install the casing.		
The RC holes are open and will need to be cased down to a point where there is firm ground, so that if water is intersected the casing is not blown out and we lose the hole. The depth of casing required is unknown and may vary from hole to hole due to the weathering of the rocks and transported cover. Depths of 12-18m may be required to get a control on the collar.		
When describing drillhole decommissioning requirements, include the materials to be used, stratigraphic intervals where cement plugs will be placed, if the casing will be removed and when decommissioning will occur after drilling is completed.		
Again no confined aquifers will be intersected, the holes and rocks are open to the atmosphere and require no special de-commissioning (as required in confined aquifer environments). When rehabilitated, a casing cutter is used to cut the casing off below the surface of tynes and the hole back filled to the surface and plugged. If there is insufficient material from the drill spoil material then material from the sump will be used for back filling.		

Where confined or artesian conditions are expected, include a schematic diagram demonstrating how drillholes will be constructed and decommissioned

### Costeans and bulk sample disposal pits

Will costeans/bulk sample disposal pits be required for the proposed program? If yes, fill out the table below.	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
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Tenement	Number of costeans/pits	Size of costean (length x width) (m <sup>2</sup> )	Average depth (m)	Volume excavated (m <sup>3</sup> )	Total volume excavated (m <sup>3</sup> ) (number of costeans/pits x volume)	Total area of disturbance* (length x width) (m <sup>2</sup> )
6478	3	5 x 5	2	50	100	25
						<Tab to add rows.>
<b>TOTAL</b>	<b>3</b>	<b>25</b>	<b>2</b>	<b>50</b>	<b>150</b>	<b>75</b>

Total number of costeans/pits (add each row to calculate the total).

Total volume of material to be excavated (add each row to calculate the total)

Total area of disturbance (number of costeans/pits x area of disturbance for each row, then add each row to calculate the total).

\*Includes storage of excavated material at the site (e.g. topsoil and subsoil segregation).

### Costeans and bulk sample disposal pit preparation

If costeans/bulk sample disposal pits are required, describe site preparation methods, vegetation clearance, and safety and maintenance requirements.

At the bag farm, once the green bags are no longer required three bulk pits will be dug (as the sample material is weathered clays and not toxic). The plastic bags will be torn open, the sample material then will be disposed of in the pit, the landowner will then cover the pit over with the loader and smoothed off for cropping.

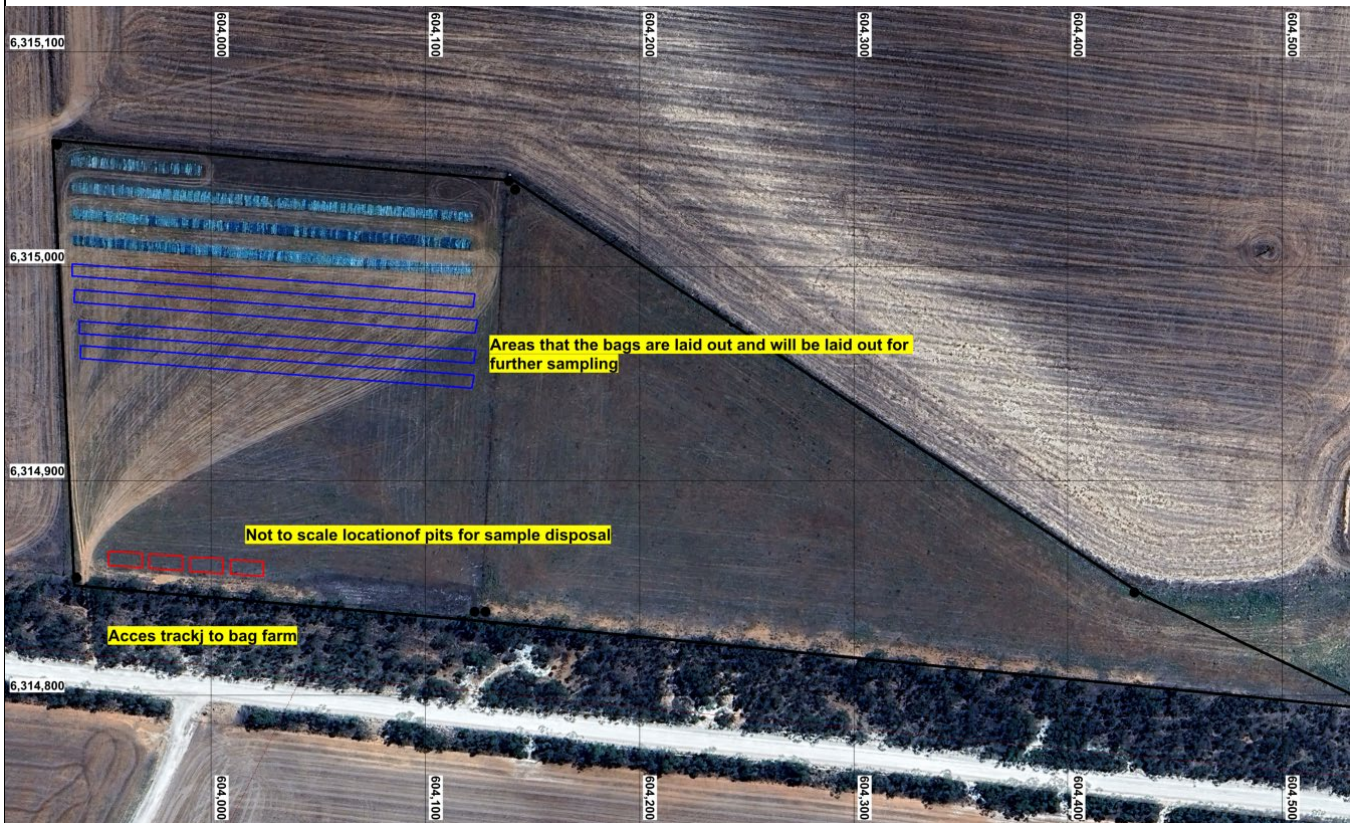
The plastic will be disposed of at the local council waste facility the green plastic bags can endure 12 months in the weather without degradation.

**Sample management**

Describe the size of samples collected (including drilling samples and bulk sampling), collection methods, materials used when collecting the sample, sample disposal methods (including removal of sample bags), safety management and any other sample management requirements at the exploration site (e.g. tarps or matting used to contain cuttings). Include requirements for on-site geological sample management (splitting of archive samples, bag farms, core processing and storage).

The drill rig is set up over a tarp to catch excess drill material, similarly the cyclone is too. Samples will be collected through the cyclone, where a bulk sample is created and a single metre split is separated. The smaller sample is placed inside the green plastic bag, once drilling is completed the plastic bags will be removed from site to a temporary site (Harradines), see below and the attachment at the end for co-ordinates and location.

The bag farm at Harradines is organised so that there are 2 entrances to the area and drill hole samples will be placed in rows with a peg.




Once the drill program is completed the sample intervals will be geologically logged, chip trayed and samples removed for assaying. Sampling for metallurgical work will be undertaken at this time, the company is anticipating completing sampling, monitoring and removing the bags within the 12 month approval period.

The green plastic bags will be removed and no remnants will remain. The remnant material will be disposed of in a pit, no toxic material is anticipated to be present ( ie radioactive or fibrous minerals)

The site will be rehabilitated according to the government guidelines..

**Access routes to work areas**

Will existing tracks require upgrading and/or maintenance? If yes, detail the work required to upgrade/maintain existing tracks.	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
<If yes, include text here.>		
Will access be required across adjoining tenements? If yes, detail the method(s) for gaining access, and if an agreement is in place with all stakeholders. Include the total area of disturbance required (i.e. length (km) and width (m) of tracks) and provide on a locality map.	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
Gazzetted roads provide access throughout the area.		
Will access off existing tracks be required? If yes, detail the method(s) for gaining access and if vegetation clearance is required. Include the total area of disturbance (includes drill traverses and seismic lines) required off existing tracks (i.e. length (km) and width (m) of new tracks).	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Access will be along fenceline - pastoral tracks and open ground, no new tracks will be established as the ground will be ploughed during the seeding process in 2025. The drill holes will be on lines, as such the vehicles will drive in and out along the same rack, the vehicles will use fenceline tracks and gates for paddock access. Roughly a total of 7km of tracks (4m wide) across open annually ploughed paddocks will be created, then ploughed in April 2025. As the ground will be quite sandy after a dry year, some modification to the access track may be required to minimise erosion.		
		

Indicate planned access routes on a locality plan and distinguish between existing and proposed new access tracks and drill lines (including fence lines).

**Campsites, storage and equipment laydown areas**

Using the tables below, provide a description of campsites and/or laydown areas required. Indicate the campsite and laydown area on a locality plan.

## Exploration PEPR application – 12-month period

Campsite details		
Indicate where staff and contractors will be accommodated during the exploration program.		
In hotels.		
What is the maximum number of personnel requiring accommodation?	4	
Is a campsite required to be established? If no, no further information is required.	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
Provide a description and justification of the camp location (e.g. previously cleared areas etc.), and any other relevant information.		
<Include text here.>		
What will be the total area (ha) of the campsite(s)?	ha	
What will be the total area (ha) of vegetation clearance for the campsite?	ha	
If vegetation clearance is required, describe the methods used to prepare the site.		
<Include text here.>		
Will any excavations be required?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
If yes, describe the purpose of the excavation and the maximum volume (m <sup>3</sup> ) of material to be excavated.		
<Include text here.>		
Are the proposed ablution facilities endorsed/approved for use by the Department of Health or local council, where applicable? If no, indicate why.	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
<Include text here.>		
Proposed infrastructure (includes caravans, tents, offices, hydrocarbon and water storage requirements etc)	Quantity	Description/capacity
<Tab to add rows.>		

Laydown area details		
Will laydown areas be required? If no, no further information is required.	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
Will the laydown area(s) be located at the same location as the campsite? If no, has the location(s) been discussed with the landowner?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
What will be the maximum area (ha) required for the laydown area(s)?		
What will be the total area (ha) of vegetation clearance for the site?		
If vegetation clearance is required, describe the methods used to prepare the site.		
<Include text here.>		
Will any excavations be required? If yes, describe the purpose of the excavation and volume (m <sup>3</sup> ) of material to be excavated.	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
<Include text here.>		
Proposed infrastructure (includes hydrocarbon and water storage requirements)	Quantity	Description/capacity
<Tab to add rows.>		
Provide a description and justification of the location (e.g. previously cleared areas), and any other relevant information if required.		

### Other exploration methods and/or ancillary operations

Are any other proposed exploration methods (e.g. seismic) and/or ancillary exploration operations required?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
If yes, describe the activity(s), site preparation, vegetation clearance, and safety and maintenance requirements.		
<If yes, include text here.>		

## Exploration PEPR application – 12-month period

### Water supply and management

Will camp and/or drilling water be required? If yes, describe how and where water will be sourced for drilling, track maintenance and camping purposes (e.g. groundwater, surface water, mains). Provide details on the volume of water required and how wastewater or runoff water will be managed.	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Sourced from the Kimba standpipe if required.		
Will surface water and/or mineral drillholes be used as a water source/supply? If yes, indicate if a licence for water extraction/usage is required (refer to relevant Natural Resources Management water allocation plan available on the Department for Environment and Water (DEW) website. If a licence is required and has been obtained please attach a copy. Where a licence has not been obtained, include a statement confirming that a licence will be obtained before the extraction and/or usage of water.	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
<Include text here.>		

### Groundwater and drilling investigation activities

Will any water bores be required and/or water investigation activities (e.g. pump testing, water monitoring sites, water storage, turkey nests/dams) be conducted? If yes, describe the water drilling and investigation activities, including site preparation, vegetation clearance, and safety and maintenance requirements.	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
<If yes, include text here.>		
Indicate if well permits have been obtained and whether or not a water extraction licence is required in accordance with the Landscape South Australia Act 2019. If yes, attach a copy of the permit(s)/licences. If no, provide a statement confirming that permits/licences will be obtained prior to commencement of water investigation activities.	Yes <input type="checkbox"/>	No <input type="checkbox"/>
<Include text here.>		

### Water affecting activities

Will any water affecting activities, other than drilling a water well, be undertaken (refer to s. 127 of the Landscape South Australia Act 2019)? If yes, attach a copy of the permit. If a permit has not been obtained, provide a statement confirming that a water affecting activity permit(s) will be obtained and provide a description of the site preparation, vegetation clearance, and safety and maintenance requirements.	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
<If yes, include text here.>		

### Management of hazardous materials

Will activities be conducted in areas of known uranium and thorium mineralisation? If yes, attach a Radiation Management Plan and confirmation of endorsement of the plan by the Environment Protection Authority South Australia (EPA).	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
Will any other hazardous material be encountered when exploring in the area? If yes, list the types of hazardous materials and provide a management plan on how these materials will be managed.	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
<If yes, include text here.>		

### Rehabilitation

Detail all the activities and strategies relating to the remediation of impacts associated with the proposed exploration operations.  Completion of rehabilitation must be achieved within 3 months after the expiry of this PEPR.  All holes will be rehabilitated at the end of the drilling of the hole, all rubbish will be disposed of at approved council facilities, all sample bags and material will be removed from site. Holes will have any remnant drill material poured back down them to the surface and the holes plugged 1m below the surface. The sites will be ploughed for cropping by the end of April 2025, this has been discussed with the landowners, as long as the holes are plugged below the depth of the tynes (> 1m).  State the estimated budget required to rehabilitate impacted sites. <b>\$45,000, this will be undertaken during the drill program</b>
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## Exploration PEPR application – 12-month period

### Vegetation Clearance

Will any area of cleared native vegetation be unrehabilitated after the authorised period?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
If yes, provide a description of the vegetation present in the application area, the extent of the proposed vegetation clearance and the likelihood of the presence of threatened flora. Provide this information on a map.		
<Include text here.>		
State the estimated quantum of significant environmental benefit (SEB) to be gained in exchange for the proposed native vegetation clearance and describe how the SEB will be provided.		
<Include text here.>		

### SECTION E – LEASE CONDITIONS

#### Retention leases

Where the retention lease includes specific conditions that are not environmental outcomes, demonstrate where these have been addressed in the PEPR (if relevant) or demonstrate how otherwise they have or will be complied with.

<Include text here.>
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**SECTION F – MANAGEMENT OF ENVIRONMENTAL IMPACTS**

Use the table below (instructions provided) to identify all of the potential environmental, social and economic impact events that are likely to occur as a result of the proposed exploration operations, how each of the identified impacts will be managed, and the residual risk, i.e. the level of risk remaining after implementing control and management strategies. Identified potential impact events should be developed based on the aspects of the environment that may be impacted on and the proposed operational details. Potential impact events must have corresponding outcomes and measurement criteria.

Where the terms and conditions of an RL include environmental outcomes, list them (where different) in the table below and complete all sections (ie receptor, potential impacts, control strategies, risk assessment and measurement criteria).

**Environmental management – potential impacts/events, outcomes, measurable criteria and monitoring plan**

			Likelihood of consequence (LH)				
			1	2	3	4	5
			Rare	Unlikely	Possible	Likely	Almost certain
Severity of consequence (CQ)	A	Insignificant	Low	Low	Low	Low	Low
	B	Minor	Low	Low	Moderate	Moderate	Moderate
	C	Moderate	Moderate	Moderate	High	High	High
	D	Major	High	High	Extreme	Extreme	Extreme
	E	Catastrophic	High	Extreme	Extreme	Extreme	Extreme

**How to fill out the table**

- Based on the description of the environment and exploration operations, indicate which potential impacts are applicable to the proposed program. Note that some potential impacts are applicable to all programs.
- For each applicable potential impact (and corresponding receptor), describe control strategies that will reduce the risk of the potential impact to an acceptable level, and achieve the corresponding environmental outcomes.
- Conduct an impact assessment to determine if the control strategies address the potential impact (i.e. reduce the risk to an acceptable level). Indicate where there is uncertainty pertaining to the likely effectiveness of the control strategies. Where the risk is not considered low, provide justification that the risk is acceptable, or consider additional strategies to reduce the risk to an acceptable level.
- For each applicable potential impact, the corresponding outcome and outcome measurement criteria are required.
- Based on the description of the environment and proposed exploration activities, determine if any other potential impacts are applicable. For each new potential impact, describe proposed control and rehabilitation strategies, conduct an impact assessment, and develop corresponding outcomes and outcome measurement criteria.

Use the above matrix to conduct an impact assessment for each potential impact.

Impact assessment							Outcomes	Outcome measurement criteria (inc. monitoring plan)
Receptor	Potential impacts	Is the potential impact applicable (Yes/No)	Control strategies	Risk assessment				
Lists are not exhaustive.	Lists are not exhaustive.	Some potential impacts are applicable to all programs.	Indicate where there is uncertainty pertaining to the likely effectiveness of the control strategies. Where the risk is not considered low, provide justification that the risk is acceptable, or consider additional strategies to reduce the risk to an acceptable level. – refer to <a href="#">Minerals Regulatory Guidelines MG22</a> for more information.	LH	CQ	Risk		
Stakeholders: <ul style="list-style-type: none"> <li>freehold land owners</li> <li>perpetual lease holders</li> <li>pastoral lease holders</li> <li>Aboriginal land (Anangu Pitjantjatjara Yankunytjatjara and Maralinga Tjarutja lands)</li> <li>Department of Defence</li> <li>state government departments.</li> <li>local government (councils)</li> <li>federal government</li> <li>native title parties.</li> </ul>	Interference to: <ul style="list-style-type: none"> <li>existing or permissible land use (includes loss of income, noise, dust, light and other emissions).</li> <li>buildings, structures, existing tracks or other infrastructure.</li> <li>aesthetic values of an area.</li> </ul> Noncompliance with legislative requirements.	Yes (Applicable to all programs.)	Individual landowners (Freehold) manage the land where the drilling is proposed, they are communicated with by letter, phone and email at all times regarding our activities, an agreement (Waiver) has been entered into with them, as the ground is cropping ground and exempt . We will comply will all directions agreed upon, which is in writing. The use of vehicles across cropping land does disturb the soils, by limiting the paths and frequency of the vehicles the damage can be minimised. At each of the drill sites a tarpaulin is laid down around the drill collar as well as under the cyclone/splitter to contain the excess drill material for disposal down the hole after drilling.	4	A	low	<b>Stakeholders are fully informed and satisfied with the proposed methods used to conduct exploration activities on their land, and all prescribed forms are served and agreements obtained in accordance with the Mining Act.</b>	Provide the information requested within the 'Complaints' section of the annual exploration compliance report demonstrating that all reasonable complaints from stakeholders are resolved to the satisfaction of both parties prior to and ongoing during the course of exploration program, without the involvement of DEM.  Provide the information requested within the 'Landowner details and liaison' section of the annual exploration compliance report demonstrating that prescribed forms were served and agreements obtained in accordance with the Mining Act prior to the commencement of exploration activities.
Stakeholder: DEW	Interference to: <ul style="list-style-type: none"> <li>existing or permissible land use.</li> <li>buildings, structures, existing tracks or other infrastructure.</li> <li>aesthetic values of an area.</li> </ul> Noncompliance with legislative requirements.	NO (Applicable to programs located adjacent to or within parks and reserves.)					<b>For activities located within or adjacent to regional reserves, national, conservation and marine parks only:</b> <ul style="list-style-type: none"> <li>no unauthorised interference with park management activities.</li> </ul>	Provide confirmation that: <ul style="list-style-type: none"> <li>Park access notification forms were submitted to DEW and DEM at least 10 days prior to entry into regional reserves, national, conservation and marine parks, or</li> <li>Program notifications for PEPRs approved for an ongoing period of time, were submitted to DEW and the DEM at least 21 days prior to entry into regional reserves, national, conservation and marine parks.</li> </ul>

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Impact assessment							Outcomes	Outcome measurement criteria (inc. monitoring plan)
Receptor <small>Lists are not exhaustive.</small>	Potential impacts <small>Lists are not exhaustive.</small>	Is the potential impact applicable (Yes/No) <small>Some potential impacts are applicable to all programs.</small>	Control strategies <small>Indicate where there is uncertainty pertaining to the likely effectiveness of the control strategies. Where the risk is not considered low, provide justification that the risk is acceptable, or consider additional strategies to reduce the risk to an acceptable level. – refer to <a href="#">Minerals Regulatory Guidelines MG22</a> for more information.</small>	Risk assessment <small>LH = likelihood of consequence CQ = severity of consequence</small>				
				LH	CQ	Risk		
Flora and fauna and their habitats; includes Commonwealth and state scheduled species.	Loss/modification of native vegetation and associated habitats through the clearance of vegetation.	NO (Applicable to exploration programs located within or impacting on native vegetation.)	No clearing of vegetation is being proposed.				<b>No permanent loss/modification of native flora and fauna populations and their habitats through:</b> <ul style="list-style-type: none"> <li>clearance</li> <li>fire</li> <li>other</li> </ul> <b>unless prior approval under the relevant legislation is obtained.</b>	Maintain before, during and after photographic evidence of all exploration sites (e.g. drillsites, new track exit/entry points off existing tracks, costeans, campsites) demonstrating that: <ul style="list-style-type: none"> <li>The area and method of disturbance is consistent with that described in the PEPR.</li> <li>No uncontrolled fires* occurred as a result of exploration activities.</li> </ul> Representative photos to be included within the annual exploration compliance report.
All flora and fauna, especially listed species.	Loss/modification of the environment (biological, social and economic) through the introduction of weeds and pathogens.	Yes (Applicable to all programs.)	The vehicles tyres will be cleaned with a wire brush to minimise the potential for introducing weeds into the drill area. The vehicles will be inspected for vegetation and seed matter that can be cleaned off to minimise the potential to transport weeds into drill areas.  <b>According to Protected matter and Nature Maps there are no significant weeds in the area, hence the chance to distribute them is considered low.</b>	3	A	Low	<b>No introduction of new species of weeds and plant pathogens, nor increase in abundance of existing weeds species.</b>	Provide a statement within the 'Compliance with approved programs' section of the annual exploration compliance report, confirming that: <ul style="list-style-type: none"> <li>Vehicle logs were kept during the exploration program, demonstrating that all vehicles are clean and free of plant and mud material prior to entering properties* within the tenement areas, unless otherwise agreed to with the relevant landowners.</li> <li>Photographic evidence before and during exploration operations and after rehabilitation of disturbed sites was captured, demonstrating that no new weeds and plant pathogens were introduced, nor an increase in abundance of existing weeds recorded.</li> </ul>
All fauna	Entrapment of fauna through open drillholes and excavations.	yes (Applicable to exploration programs that involve drilling and/or require excavations.)	No fauna traps will be created through activities, ie all holes are plugged immediately after drilling is completed. All sumps will be secured off with fencing to prevent animals entering them. There is no other open excavation caused by this drill program apart from a drill hole and sump.	B	2	Low	<b>No fauna traps created as a result of exploration activities.</b>	Maintain before, during and after photographic evidence of all drillholes and/or excavations demonstrating that: <ul style="list-style-type: none"> <li>All drillholes were permanently or temporarily capped/plugged immediately upon completion.</li> <li>No fauna and livestock became trapped in drillholes and/or excavations throughout the duration of the program.</li> <li>All rehabilitation was completed within 3 months of expiry of the PEPR approval (for PEPRs approved for a period of 12 months), or 3 months after the expiry of a program notification (for PEPRs approved for an ongoing period), unless otherwise authorised.</li> </ul> Representative photos are to be included within the annual exploration compliance report.  Provide the information requested within the 'Rehabilitation' section of the annual exploration compliance report.
Aboriginal heritage sites	Disturbance to Aboriginal heritage.	Yes (Applicable to all programs.)	All holes are to be drilled in <b>annually ploughed and cropped paddocks</b> . No holes are positioned near river systems, all holes are being drilled in areas cropped annually. Searches have been undertaken and no heritage sites have been identified in the proposed drill area.	2	B	low	<b>No disturbance to Aboriginal artefacts or sites of significance unless prior approval under the relevant legislation is obtained.</b>	Maintain a database and provide a statement within the 'Compliance with approved programs' section of the annual exploration compliance report demonstrating that: <ul style="list-style-type: none"> <li>Heritage sites were not impacted during the conduct of the exploration program, unless prior approval was obtained under the appropriate legislation.</li> <li>Work ceased on discovery of a significant site and recommenced only after authorisation.</li> <li>Aboriginal heritage sites identified during the exploration program were appropriately recorded and reported to authorities, if not previously known.</li> </ul>
European heritage sites and sites of scientific and environmental significance	Disturbance to European heritage sites and sites of scientific and environmental significance (e.g. geological monuments, fossil reserves).	No (Applicable to exploration programs located close to or within European heritage sites and sites of scientific and environmental significance.)	No significant European sites nearby to area of proposed drilling.				<b>No disturbance to European heritage sites and to sites of scientific and environmental significance unless prior approval under the relevant legislation is obtained.</b>	Demonstrate no impact to heritage sites and sites of scientific and environmental significance by: <ul style="list-style-type: none"> <li>Maintaining evidence, including detailed maps showing sites compared to the location of exploration activities, and photographic evidence of sites before and after the conduct of the exploration program.</li> <li>Providing a statement within the annual exploration compliance report confirming sites were not impacted during the conduct of the exploration program.</li> </ul>

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Impact assessment							Outcomes	Outcome measurement criteria (inc. monitoring plan)
Receptor <small>Lists are not exhaustive.</small>	Potential impacts <small>Lists are not exhaustive.</small>	Is the potential impact applicable (Yes/No) <small>Some potential impacts are applicable to all programs.</small>	Control strategies <small>Indicate where there is uncertainty pertaining to the likely effectiveness of the control strategies. Where the risk is not considered low, provide justification that the risk is acceptable, or consider additional strategies to reduce the risk to an acceptable level. – refer to <a href="#">Minerals Regulatory Guidelines MG22</a> for more information.</small>	Risk assessment <small>LH = likelihood of consequence CQ = severity of consequence</small>				
				LH	CQ	Risk		
Soil/vegetation/fauna	Soil/vegetation contamination (e.g. hydrocarbons, rubbish, drill samples/cuttings, ablutions, other sources).	Yes (Applicable to all programs.)	All sites are cleared of rubbish, spill kits are available. All personnel will undergo site specific induction to address the waste management for the program. All drill waste will be removed from the site and disposed of at a local waste disposal facility (As has been done on previous drill programs). Drill spoil material will be returned down the drill hole. Tarpaulins will be used around the drill site to capture spilt drill cuttings to minimise the impact of excess drill material.	2	A	Low	<b>No contamination of soil and vegetation as a result of exploration activities.</b>	Demonstrate that all domestic or industrial waste (includes general rubbish and hydrocarbons) is disposed of in accordance with the <i>Environment Protection Act 1993</i> within 3 months of the expiry of the PEPR approval (for PEPRs approved for a period of 12 months), or 3 months after the expiry of a program notification (for PEPRs approved for an ongoing period), and that all fuel and chemicals are stored in accordance with EPA requirements, by providing: <ul style="list-style-type: none"> <li>The name, location and contact details of the authorised waste disposal facility.</li> <li>A statement within the 'Compliance with approved programs' section of the annual exploration compliance report confirming domestic and industrial waste was removed from all exploration sites and disposed of at an authorised waste disposal facility.</li> <li>Photographic evidence within the annual exploration compliance report demonstrating that all fuel and chemical storage facilities were managed in accordance with EPA requirements.</li> </ul> <p>Maintain photographs of all exploration sites and provide representative photos within the annual exploration compliance report demonstrating that drill cuttings are:</p> <ul style="list-style-type: none"> <li>removed from site and disposed of at a licensed facility</li> <li>buried under a minimum of 30 cm of soil, or in accordance with EPA guideline, <a href="#">Radiation protection guidelines on mining in South Australia: mineral exploration</a>, available on the EPA website, or</li> <li>backfilled down the drillhole, within 3 months of the expiry of the PEPR approval (for PEPRs approved for a period of 12 months), or 3 months after the expiry of a program notification (for PEPRs approved for an ongoing period), unless otherwise authorised.</li> </ul> <p>Provide the information requested within the 'Rehabilitation' section of the annual exploration compliance report.</p>
Soil	Disturbance to the soil profile and topography, and accelerated soil erosion caused by exploration activities (e.g. construction of sumps, new tracks and drill pads; ground compaction at laydown areas and camps).	Yes (Applicable to all programs.)	Compaction and erosion are the most significant concern from traffic on the ground, however sand is the dominant material on the surface and compaction is considered low. Erosion is a potential and restricted vehicle movements are planned to assist with the traffic as a mechanism to reduce the creation of erosion. All drill areas will be ploughed in April- May 2025 in preparation for cropping this year.  The current proposal is of limited scale and the impact on topsoil is conceived to be minimal.	3	A	low	<b>Where soil disturbance occurs as a result of exploration activities, ensure that:</b> <ul style="list-style-type: none"> <li>topsoil quality and quantity is maintained</li> <li>the soil profile and topography is reinstated to original conditions</li> <li>there is no accelerated soil erosion.</li> </ul>	Maintain before, during and after photographic evidence of all excavations, drillsites, camps, laydown areas and new tracks demonstrating that: <ul style="list-style-type: none"> <li>The soil profile and topography is reinstated to original conditions and is consistent with natural surroundings within 3 months of the expiry of the PEPR approval (for PEPRs approved for a period of 12 months), or 3 months after the expiry of a program notification (for PEPRs approved for an ongoing period), unless otherwise authorised.</li> <li>Where required, sufficient topsoil is removed (depending on soil profile), stored separately from subsoil and reinstated (in the correct order) within 3 months of the expiry of the PEPR approval (for PEPRs approved for a period of 12 months), or 3 months after the expiry of a program notification (for PEPRs approved for an ongoing period), unless otherwise authorised.</li> <li>There are no signs of accelerated soil erosion during and post rehabilitation of disturbed sites.</li> </ul> <p>Representative photos to be included within the annual exploration compliance report.</p> <p>Provide the information requested within the 'Rehabilitation' section of the annual exploration compliance report.</p>
Surface water	Alteration to surface water – interference to surface drainage.	No (Applicable to exploration programs that are likely to impact on surface drainage channels.)	The activities proposed will have negligible effect on the surface drainage, no changes to the land surface apart from creating sumps is occurring.  All drill areas will be ploughed in April- May 2025 in preparation for cropping next year.				<b>No permanent modification to hydrological features caused by exploration activities without obtaining a water affecting permit from the relevant Landscape Board (under Landscapes Act SA 2019).</b>	Provide before, during and after photographic evidence within the annual exploration compliance report demonstrating that original drainage contours (watercourses and lakes) are consistent with the natural relief post rehabilitation within 3 months of the expiry of the PEPR approval (for PEPRs approved for a period of 12 months), or 3 months after the expiry of a program notification (for PEPRs approved for an ongoing period).  Alternatively, provide copies of water affecting permits within the annual exploration compliance report.

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Impact assessment							Outcomes	Outcome measurement criteria (inc. monitoring plan)
Receptor	Potential impacts	Is the potential impact applicable (Yes/No)	Control strategies	Risk assessment				
Lists are not exhaustive.	Lists are not exhaustive.	Some potential impacts are applicable to all programs.	Indicate where there is uncertainty pertaining to the likely effectiveness of the control strategies. Where the risk is not considered low, provide justification that the risk is acceptable, or consider additional strategies to reduce the risk to an acceptable level. – refer to <a href="#">Minerals Regulatory Guidelines MG22</a> for more information.	LH = likelihood of consequence CQ = severity of consequence	LH	CQ		
Groundwater/aquifer	Groundwater contamination: <ul style="list-style-type: none"> <li>contamination of aquifers through entry of pollutants from the surface</li> <li>interconnection between aquifers</li> <li>degradation of natural hydrostatic conditions (maintain pre-drilling pressures).</li> </ul>	Yes (Applicable to all exploration programs that may intersect groundwater.)	The ground may host open (unconfined) aquifers. Any aquifer present will be connected as they are exposed to the atmosphere (unconfined) No pollutants will be introduced through drilling. The hole is sealed at the surface due to the collaring of the hole, which stops the introduction of any other substance (apart from drilling fluids) into the hole. All holes will be rehabilitated in a manner whereby drill cuttings will be returned down the hole to the surface and the hole capped.	B	2	Low	<b>Drillholes restored to controlling geological conditions that existed before the hole was drilled or, where it is intended to re-enter the hole, the hole must be completed with casing of adequate strength and the casing cemented so that all aquifers are isolated to prevent the movement of any fluids behind the casing.</b>	Maintain evidence demonstrating that drillholes are decommissioned in accordance with Earth Resources Information Sheet M21, <a href="#">Mineral exploration drillholes – general specifications for construction and backfilling</a> , and/or specific conditions from DEW (Groundwater) within 3 months of the expiry of the PEPR approval (for PEPRs approved for a period of 12 months), or 3 months after the expiry of a program notification (for PEPRs approved for an ongoing period), unless otherwise authorised.  Provide the information requested within the 'Groundwater' section of the annual exploration compliance report.
Soil/vegetation/fauna	Discharge of groundwater into the surrounding environment.	Yes (Applicable to all exploration programs that may intersect groundwater or where activities require the discharge of groundwater into the surrounding environment.)	No discharge of ground water onto the surface or into watercourses will occur, sumps will created to prevent and control this.	B	2	Low	<b>No discharge of groundwater outside of the exploration site (e.g. drillsite) into the surrounding environment and no discharge of water into a watercourse, unless prior approval under the relevant legislation is obtained.</b>	Maintain photographic evidence of all drillsites demonstrating that groundwater was not discharged into the surrounding environment, unless water affecting activity permits were obtained allowing the discharge of groundwater into watercourses and/or lakes.  Representative photos and water affecting activity permits (where applicable) to be included within the annual exploration compliance report.
Groundwater users	Interference to existing water users when extracting water from existing dams, water bores or mineral drillholes.	No (Applicable to all exploration programs that may require the use of water from existing dams, water bores or mineral drillholes.)	No water is required from bore or dams, as such no interference to them will occur.				<b>No public nuisance impacts resulting from the extraction of water for exploration purposes, unless prior approval under the relevant legislation is obtained.</b>	Provide the information requested within the 'Complaints' section of the annual exploration compliance report demonstrating that all reasonable complaints from stakeholders were resolved to the satisfaction of both parties, prior to and ongoing during the course of the exploration program without the involvement of DEM.  Where permits are required for the extraction and/or usage of groundwater, provide copies of the licence or permit within the annual exploration compliance report.
Soil/vegetation/fauna	Degradation of rehabilitated access tracks caused by third party access (includes previously closed and rehabilitated access tracks).	No (Applicable to exploration programs that create new access tracks.)	All drill holes are drilled on private land where there is no public access, all holes will be drilled in paddocks between the cropping cycle. No new access tracks will be created. Afterwhich the ground will be ploughed for seeding and cropping in 2025.				<b>Rehabilitated access tracks remain permanently closed, unless prior approval under the relevant legislation is obtained.</b>	Maintain before and after photographic evidence demonstrating that all tracks are closed and rehabilitated within 3 months of the expiry of the PEPR approval (for PEPRs approved for a period of 12 months), or 3 months after the expiry of a program notification (for PEPRs approved for an ongoing period), unless otherwise authorised.  Representative photos are to be included within the annual exploration compliance report.  Provide the information requested within the 'Rehabilitation' section of the annual exploration compliance report.
Community/landowners	Damage to infrastructure and loss of income through fire.	Yes (Applicable to all programs.)	No uncontrolled fires will occur, the vegetation is very sparse and the timing should be before extreme fire days. Fire extinguishers and suppression equipment is kept on the drill rig and light vehicles. If 'extreme' days are announced then drilling will cease to minimise the the potential for fire. The company notes the change in extreme fire day classification being brought in.	1	B	low	<b>No loss of infrastructure or income through fire as a result of exploration activities.</b>	Provide a statement within the 'Compliance with approved programs' section of the annual exploration compliance report confirming that no uncontrolled fires* occurred.  Alternatively, provide a report on the independent investigation of all uncontrolled fires* demonstrating that the licensee could not have reasonably prevented the fire through the implementation of precautionary measures.
General public	Injury or death to members of the public as a result of exploration activities.	Yes (Applicable to all programs.)	NO access to the work areas for public, the areas being drilled are on private land behind closed gates. There will be no access to the drill rig for anyone apart form the drill crew. Gates will be left as instructed by the landowner.  Site and drill inductions are undertaken for any individual arriving at the site, prior to gaining access to the drill rig. Landowners will be aware of our presence.	2	B	low	<b>No accidents involving the public that could have been reasonably prevented by the licensee.</b>	Provide a statement within the 'Compliance with approved programs' section of the annual exploration compliance report confirming no accidents occurred involving the public during and after the exploration program.  If an accident involving the public did occur, provide a copy of the independent investigation report within the annual exploration compliance report demonstrating that the licensee could not have reasonably prevented the accident through the implementation of precautionary measures.

Exploration PEPR application – 12-month period

Impact assessment						Outcomes	Outcome measurement criteria (inc. monitoring plan)	
Receptor Lists are not exhaustive.	Potential impacts Lists are not exhaustive.	Is the potential impact applicable (Yes/No) Some potential impacts are applicable to all programs.	Control strategies Indicate where there is uncertainty pertaining to the likely effectiveness of the control strategies. Where the risk is not considered low, provide justification that the risk is acceptable, or consider additional strategies to reduce the risk to an acceptable level. – refer to <a href="#">Minerals Regulatory Guidelines MG22</a> for more information.	Risk assessment LH = likelihood of consequence CQ = severity of consequence				
				LH	CQ			Risk
General public, employees, contractors and the environment	Contamination of the environment when exploring for known uranium and thorium deposits.  Public and employee/contractor exposure to low level radiation.	No (Applicable to exploration programs located within known uranium or thorium deposits.)	No radioactive minerals are present in the area.				<p><b>No increase in background radiation levels, and employee/contractor exposure levels during the exploration program are within safe limits.</b></p> <p>Maintain a database and provide a statement within the 'Compliance with approved programs' section of the annual exploration compliance report demonstrating that:</p> <ul style="list-style-type: none"> <li>Radiation levels post exploration and rehabilitation are consistent with pre-existing background levels.</li> <li>Employee and contractors exposure levels were within safe limits during the exploration program.</li> </ul>	
Other (if applicable)								

\* Uncontrolled fires = fires that escape outside of the work area (e.g. drillsite).

† Properties = freehold (cropping and grazing land); perpetual/pastoral lease land; council land; regional reserves; national, conservation and marine parks; Aboriginal land; Commonwealth land etc.

**SECTION G - OPERATOR CAPABILITY**

Provide information demonstrating that the tenement holder and operator (where applicable) has the capability to conduct the program in a manner that consistently ensures ongoing achievement of the environmental outcomes. This may be demonstrated within the PEPR by providing an overview of the following:

- Manuals or standard operating procedures that outline the safe and environmentally sound operation of all critical operations associated with the exploration program that ensure compliance with the PEPR.
- Systems in place to monitor, audit and assess compliance against the criteria approved in the PEPR.
- Systems in place to identify and report any noncompliance with regulatory requirements or relevant environmental outcomes (e.g. measures in place to report incidents in accordance with regulation 79(3)).
- Practices and procedures in place to provide appropriate communication of regulatory requirements to employees and contractors (e.g. induction programs).
- Practices and procedures in place to respond to, and communicate with landowners and external parties on the proposed program and compliance matters (e.g. complaints)

All personnel are required to undertake the iTech site Induction, which outlines the requirements of the personnel and the stanrd operating procedures that they must follow during the program.

- As the manager of the program and the person responsible for the compiling and submitting the Environmental Compliance Report, I continually asses and monitor the compliance against the criteria approved in the EPEPR.
- Itech has a number of forms for which reporting of incidents in accordance with regulation 79(3), that may occur in the field, additionally as the manager I continually monitor the program after the field work has ceased and rehabilitation is complete.
- iTech has an induction program that all site personnel must complete.
- As the manager of the program I maintain communication with the preperty managers at all time throughout the program, this is continued until rehabilitation and compensation is completed, as the company wants to ensure that it can be welcome to come back again to undertake exploration programs.

History of successfully completing PEPR's should also be considered as well as the successful completion of drilling.

Recent non compliances with the EPEPR's by drilling holes deeper than we expected (due to success) will be avoided in the future by proposing much greater depths of final holes, the hole depths proposed are at 200m, far beyond the drill string available. Non compliance with drilling additional holes has been addressed through internal processes restricting the work to less than what is requested in the EPEPR. The board approves a budget for drilling, in the application phase more holes than the budget permits are applied for, as such not even the MD can approve then approve the drilling of more holes than the EPEPR has requested. For example, the budget for this EPEPR only permits the drilling of 10 holes.

As such there will be no more compliance issues in regards to drilling more holes and exceeding depths.

**SECTION H –ADDITIONAL INFORMATION**

List any other supporting information and/or documents submitted with the application, including land access approvals/permits required to conduct the proposed exploration program.

All land is exempt as it is annually cropped as such any image shown is showing land that is exempt from the Act as it is used for cropping purposes and requires a signed Waiver for access. All images below are in relation to exempt land.

**SECTION I – PHOTOS**

Include photographs in this section:

- that have been obtained during site visits
- that help describe relevant environmental and operational aspects in the PEPR.

*To insert photos, copy and paste the photo into the template below. Resize photos to fit page width. Ensure that all information about each photo is completed and refer to the photo number in the relevant section of the PEPR.*

Site identification	Date taken	Photo number & PEPR section reference	Easting (GDA94)	Northing (GDA94)	Zone	Details and Comments
	25-10-2023		619623	6322800	53	Example of type of landuse



Exploration PEPR application – 12-month period

Site identification	Date taken	Photo number & PEPR section reference	Easting (GDA94)	Northing (GDA94)	Zone	Details and Comments
	24/10/2023		619727	6318600	53	Example of land use



## Exploration PEPR application – 12-month period

Site identification	Date taken	Photo number & PEPR section reference	Easting (GDA94)	Northing (GDA94)	Zone	Details and Comments
	24-10-2023		619583	6139800	53	Example of remnant vegetation



### SECTION J – MAPS

Provide a map(s) showing the following information that is located adjacent to or within the proposed area of operations, where applicable:

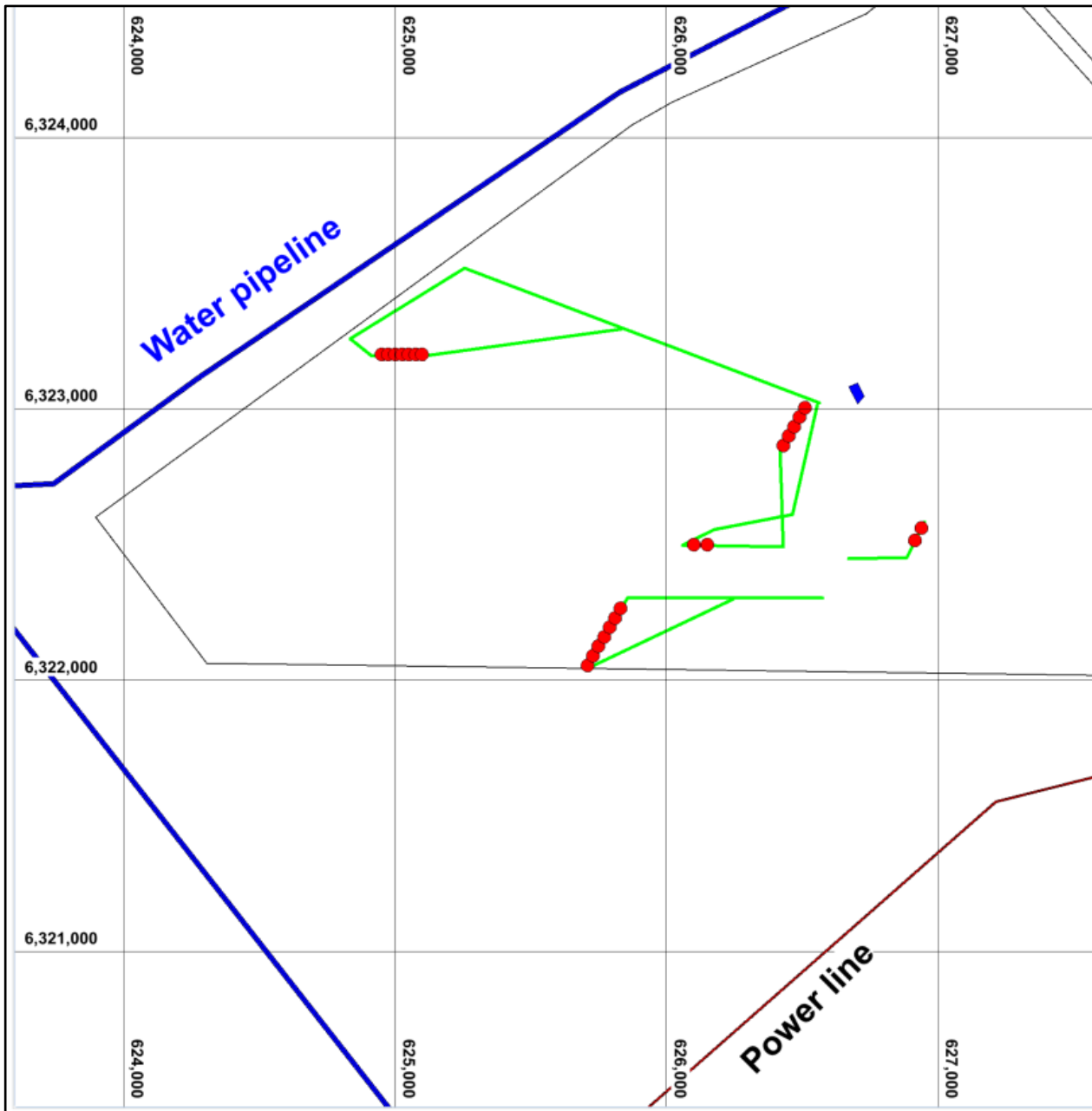
- tenement boundaries,
- cadastral information,
- existing surface contours,
- existing vegetation,
- location of the proposed exploration operations (includes drillholes, existing and new access tracks, drill traverses, campsites, laydown areas and other applicable information) and/or the target exploration area(s),
- location of existing ephemeral and permanent rivers, creeks, swamps, streams or watercourses and water management structures,
- location of towns, houses and homesteads, existing roads, rails, fences, transmission lines, buildings, dams and pipelines
- known sightings of listed species,
- location and extent of all environmentally sensitive areas,
- any relevant land use types (e.g. parks and reserves, Aboriginal freehold land, Woomera Prohibited Area).

All maps and sections must conform to the standards outlined in the Exploration PEPR Terms of Reference.

- **Drill hole collars are listed below**

Hole ID	Easting	Northing
BL_PL_001	624950	6323200
BL_PL_002	624975	6323200
BL_PL_003	625000	6323200
BL_PL_004	625025	6323200
BL_PL_005	625050	6323200
BL_PL_006	625075	6323200
BL_PL_007	625100	6323200
BL_PL_008	626430	6322865
BL_PL_009	626450	6322900
BL_PL_010	626470	6322935
BL_PL_011	626490	6322970
BL_PL_012	626510	6323005
BL_PL_013	626915	6322515
BL_PL_014	626940	6322560
BL_PL_015	625710	6322055
BL_PL_016	625730	6322090
BL_PL_017	625750	6322125
BL_PL_018	625770	6322160
BL_PL_019	625790	6322195
BL_PL_020	625810	6322230
BL_PL_021	625830	6322265
BL_PL_022	626100	6322500
BL_PL_023	626150	6322500

Exploration PEPR application – 12-month period



Planned holes on EL6634 no VHA's exist, the planned holes are in red, property boundary in black. The blue marker indicates infrastructure, water pipeline is shown in blue (off property), power line in brown (off property), there are no railway lines in use in the district or any other infrastructure on the property

## SECTION K – PUBLIC RELEASE

PEPR documents will be registered on the mining register and publicly released in full without the need to request consent from the tenement holder(s). Ultimately, it is the applicant's responsibility to ensure that confidential, or commercially sensitive, information is not included within the PEPR application.

## SECTION L – SUBMISSION OF THE APPLICATION

An application for an Exploration PEPR or PEPR review, must be submitted in the following form, unless otherwise specified by the Director of Mines or an authorised officer:

- an electronic version of the PEPR must be submitted using the exploration PEPR template(s) provided on the DEM Minerals website,
- the electronic version must be submitted online through the DEM Minerals website using the exploration PEPR submission form,
- the electronic version must be submitted in one single Acrobat PDF file, and
- Microsoft Word-compatible files must be submitted if requested by the Director of Mines (or delegate), or other authorised officers.

Solomon Protected Matters 2024

**Australian Government**  
Department of Climate Change, Energy, the Environment and Water

### Protected Matters Search Tool

- Upload >
- Draw >
- My Features >
- Layers <
- Report >
- About >

**View layers** [X]

Select layers you want to see on the map.

- Protected Areas - Terrestrial [i]
- Protected Areas - Marine [i]
- Ramsar Wetlands [i]
- Nationally Important Wetlands [i]
- World Heritage Properties [i]
- National Heritage Places [i]
- Commonwealth Heritage Places [i]
- Property Boundaries
- Local Government Areas
- Natural Resource Management Regions [i]
- Marine Regions [i]
- Great Barrier Reef Marine Park [i]
- Australian Marine Parks [i]
- Commonwealth Marine Area [i]
- Key Ecological Features [i]
- Listed Critical Habitat [i]

**SHOW LAYERS LEGENDS**

**DESELECT 5 LAYERS**

267 m

Leaflet | Powered by Esri | Esri, HERE, Garmin, USGS, METI/NASA, Environmental Resources Information Network



Australian Government

Department of Climate Change, Energy,  
the Environment and Water

# EPBC Act Protected Matters Report

This report provides general guidance on matters of national environmental significance and other matters protected by the EPBC Act in the area you have selected. Please see the caveat for interpretation of information provided here.

Report created: 25-Oct-2024

[Summary](#)

[Details](#)

[Matters of NES](#)

[Other Matters Protected by the EPBC Act](#)

[Extra Information](#)

[Caveat](#)

[Acknowledgements](#)

# Summary

## Matters of National Environment Significance

This part of the report summarises the matters of national environmental significance that may occur in, or may relate to, the area you nominated. Further information is available in the detail part of the report, which can be accessed by scrolling or following the links below. If you are proposing to undertake an activity that may have a significant impact on one or more matters of national environmental significance then you should consider the [Administrative Guidelines on Significance](#).

<a href="#">World Heritage Properties:</a>	None
<a href="#">National Heritage Places:</a>	None
<a href="#">Wetlands of International Importance (Ramsar)</a>	None
<a href="#">Great Barrier Reef Marine Park:</a>	None
<a href="#">Commonwealth Marine Area:</a>	None
<a href="#">Listed Threatened Ecological Communities:</a>	None
<a href="#">Listed Threatened Species:</a>	18
<a href="#">Listed Migratory Species:</a>	9

## Other Matters Protected by the EPBC Act

This part of the report summarises other matters protected under the Act that may relate to the area you nominated. Approval may be required for a proposed activity that significantly affects the environment on Commonwealth land, when the action is outside the Commonwealth land, or the environment anywhere when the action is taken on Commonwealth land. Approval may also be required for the Commonwealth or Commonwealth agencies proposing to take an action that is likely to have a significant impact on the environment anywhere.

The EPBC Act protects the environment on Commonwealth land, the environment from the actions taken on Commonwealth land, and the environment from actions taken by Commonwealth agencies. As heritage values of a place are part of the 'environment', these aspects of the EPBC Act protect the Commonwealth Heritage values of a Commonwealth Heritage place. Information on the new heritage laws can be found at <https://www.dcceew.gov.au/parks-heritage/heritage>

A [permit](#) may be required for activities in or on a Commonwealth area that may affect a member of a listed threatened species or ecological community, a member of a listed migratory species, whales and other cetaceans, or a member of a listed marine species.

<a href="#">Commonwealth Lands:</a>	None
<a href="#">Commonwealth Heritage Places:</a>	None
<a href="#">Listed Marine Species:</a>	15
<a href="#">Whales and Other Cetaceans:</a>	None
<a href="#">Critical Habitats:</a>	None
<a href="#">Commonwealth Reserves Terrestrial:</a>	None
<a href="#">Australian Marine Parks:</a>	None
<a href="#">Habitat Critical to the Survival of Marine Turtles:</a>	None

## Extra Information

This part of the report provides information that may also be relevant to the area you have

<a href="#">State and Territory Reserves:</a>	None
<a href="#">Regional Forest Agreements:</a>	None
<a href="#">Nationally Important Wetlands:</a>	None
<a href="#">EPBC Act Referrals:</a>	3
<a href="#">Key Ecological Features (Marine):</a>	None
<a href="#">Biologically Important Areas:</a>	None
<a href="#">Bioregional Assessments:</a>	None
<a href="#">Geological and Bioregional Assessments:</a>	None

# Details

## Matters of National Environmental Significance

### Listed Threatened Species

[ [Resource Information](#) ]

Status of Conservation Dependent and Extinct are not MNES under the EPBC Act.  
Number is the current name ID.

Scientific Name

Threatened Category

Presence Text

#### BIRD

[Aphelocephala leucopsis](#)

Southern Whiteface [529]

Vulnerable

Species or species  
habitat likely to occur  
within area

[Calidris acuminata](#)

Sharp-tailed Sandpiper [874]

Vulnerable

Species or species  
habitat may occur  
within area

[Calidris ferruginea](#)

Curlew Sandpiper [856]

Critically Endangered

Species or species  
habitat may occur  
within area

[Falco hypoleucos](#)

Grey Falcon [929]

Vulnerable

Species or species  
habitat may occur  
within area

[Gallinago hardwickii](#)

Latham's Snipe, Japanese Snipe [863]

Vulnerable

Species or species  
habitat may occur  
within area

[Grantiella picta](#)

Painted Honeyeater [470]

Vulnerable

Species or species  
habitat may occur  
within area

[Leipoa ocellata](#)

Malleefowl [934]

Vulnerable

Species or species  
habitat likely to occur  
within area

[Neophema chrysostoma](#)

Blue-winged Parrot [726]

Vulnerable

Species or species  
habitat likely to occur  
within area

Scientific Name	Threatened Category	Presence Text
<a href="#">Pedionomus torquatus</a> Plains-wanderer [906]	Critically Endangered	Species or species habitat may occur within area
<a href="#">Rostratula australis</a> Australian Painted Snipe [77037]	Endangered	Species or species habitat may occur within area
<a href="#">Stagonopleura guttata</a> Diamond Firetail [59398]	Vulnerable	Species or species habitat likely to occur within area

## MAMMAL

<a href="#">Sminthopsis psammophila</a> Sandhill Dunnart [291]	Endangered	Species or species habitat likely to occur within area
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## PLANT

<a href="#">Acacia enterocarpa</a> Jumping-jack Wattle [17615]	Endangered	Species or species habitat may occur within area
<a href="#">Caladenia tensa</a> Greencomb Spider-orchid, Rigid Spider-orchid [24390]	Endangered	Species or species habitat likely to occur within area
<a href="#">Limosella granitica</a> Granite Mudwort [6704]	Vulnerable	Species or species habitat may occur within area
<a href="#">Pterostylis mirabilis</a> Nodding Rufoushood [86228]	Vulnerable	Species or species habitat likely to occur within area
<a href="#">Pterostylis xerophila</a> Desert Greenhood [7997]	Vulnerable	Species or species habitat may occur within area
<a href="#">Swainsona pyrophila</a> Yellow Swainson-pea [56344]	Vulnerable	Species or species habitat likely to occur within area

## Listed Migratory Species [\[ Resource Information \]](#)

Scientific Name	Threatened Category	Presence Text
Migratory Marine Birds		

Scientific Name	Threatened Category	Presence Text
<a href="#">Apus pacificus</a> Fork-tailed Swift [678]		Species or species habitat likely to occur within area
<b>Migratory Terrestrial Species</b>		
<a href="#">Motacilla cinerea</a> Grey Wagtail [642]		Species or species habitat may occur within area
<a href="#">Motacilla flava</a> Yellow Wagtail [644]		Species or species habitat may occur within area
<b>Migratory Wetlands Species</b>		
<a href="#">Actitis hypoleucos</a> Common Sandpiper [59309]		Species or species habitat may occur within area
<a href="#">Calidris acuminata</a> Sharp-tailed Sandpiper [874]	Vulnerable	Species or species habitat may occur within area
<a href="#">Calidris ferruginea</a> Curlew Sandpiper [856]	Critically Endangered	Species or species habitat may occur within area
<a href="#">Calidris melanotos</a> Pectoral Sandpiper [858]		Species or species habitat may occur within area
<a href="#">Charadrius veredus</a> Oriental Plover, Oriental Dotterel [882]		Species or species habitat may occur within area
<a href="#">Gallinago hardwickii</a> Latham's Snipe, Japanese Snipe [863]	Vulnerable	Species or species habitat may occur within area

## Other Matters Protected by the EPBC Act

Listed Marine Species		[ Resource Information ]
Scientific Name	Threatened Category	Presence Text
Bird		
<a href="#">Actitis hypoleucos</a> Common Sandpiper [59309]		Species or species habitat may occur within area
<a href="#">Apus pacificus</a> Fork-tailed Swift [678]		Species or species habitat likely to occur within area overfly marine area
<a href="#">Bubulcus ibis as Ardea ibis</a> Cattle Egret [66521]		Species or species habitat may occur within area overfly marine area
<a href="#">Calidris acuminata</a> Sharp-tailed Sandpiper [874]	Vulnerable	Species or species habitat may occur within area
<a href="#">Calidris ferruginea</a> Curlew Sandpiper [856]	Critically Endangered	Species or species habitat may occur within area overfly marine area
<a href="#">Calidris melanotos</a> Pectoral Sandpiper [858]		Species or species habitat may occur within area overfly marine area
<a href="#">Chalcites osculans as Chrysococcyx osculans</a> Black-eared Cuckoo [83425]		Species or species habitat likely to occur within area overfly marine area
<a href="#">Charadrius veredus</a> Oriental Plover, Oriental Dotterel [882]		Species or species habitat may occur within area overfly marine area

Scientific Name	Threatened Category	Presence Text
<a href="#">Gallinago hardwickii</a> Latham's Snipe, Japanese Snipe [863]	Vulnerable	Species or species habitat may occur within area overfly marine area
<a href="#">Haliaeetus leucogaster</a> White-bellied Sea-Eagle [943]		Species or species habitat may occur within area
<a href="#">Merops ornatus</a> Rainbow Bee-eater [670]		Species or species habitat may occur within area overfly marine area
<a href="#">Motacilla cinerea</a> Grey Wagtail [642]		Species or species habitat may occur within area overfly marine area
<a href="#">Motacilla flava</a> Yellow Wagtail [644]		Species or species habitat may occur within area overfly marine area
<a href="#">Neophema chrysostoma</a> Blue-winged Parrot [726]	Vulnerable	Species or species habitat likely to occur within area overfly marine area
<a href="#">Rostratula australis as Rostratula benghalensis (sensu lato)</a> Australian Painted Snipe [77037]	Endangered	Species or species habitat may occur within area overfly marine area

## Extra Information

EPBC Act Referrals			[ <a href="#">Resource Information</a> ]
Title of referral	Reference	Referral Outcome	Assessment Status
Not controlled action			
<a href="#">Improving rabbit biocontrol: releasing another strain of RHDV, sthrn two thirds of Australia</a>	2015/7522	Not Controlled Action	Completed
<a href="#">INDIGO Central Submarine Telecommunications Cable</a>	2017/8127	Not Controlled Action	Completed

Title of referral	Reference	Referral Outcome	Assessment Status
Not controlled action (particular manner)			
<a href="#">INDIGO Marine Cable Route Survey (INDIGO)</a>	2017/7996	Not Controlled Action (Particular Manner)	Post-Approval

# Caveat

## 1 PURPOSE

This report is designed to assist in identifying the location of matters of national environmental significance (MNES) and other matters protected by the Environment Protection and Biodiversity Conservation Act 1999 (Cth) (EPBC Act) which may be relevant in determining obligations and requirements under the EPBC Act.

The report contains the mapped locations of:

- World and National Heritage properties;
- Wetlands of International and National Importance;
- Commonwealth and State/Territory reserves;
- distribution of listed threatened, migratory and marine species;
- listed threatened ecological communities; and
- other information that may be useful as an indicator of potential habitat value.

## 2 DISCLAIMER

This report is not intended to be exhaustive and should only be relied upon as a general guide as mapped data is not available for all species or ecological communities listed under the EPBC Act (see below). Persons seeking to use the information contained in this report to inform the referral of a proposed action under the EPBC Act should consider the limitations noted below and whether additional information is required to determine the existence and location of MNES and other protected matters.

Where data is available to inform the mapping of protected species, the presence type (e.g. known, likely or may occur) that can be determined from the data is indicated in general terms. It is the responsibility of any person using or relying on the information in this report to ensure that it is suitable for the circumstances of any proposed use. The Commonwealth cannot accept responsibility for the consequences of any use of the report or any part thereof. To the maximum extent allowed under governing law, the Commonwealth will not be liable for any loss or damage that may be occasioned directly or indirectly through the use of, or reliance on the contents of this report.

## 3 DATA SOURCES

### Threatened ecological communities

For threatened ecological communities where the distribution is well known, maps are generated based on information contained in recovery plans, State vegetation maps and remote sensing imagery and other sources. Where threatened ecological community distributions are less well known, existing vegetation maps and point location data are used to produce indicative distribution maps.

### Threatened, migratory and marine species

Threatened, migratory and marine species distributions have been discerned through a variety of methods. Where distributions are well known and if time permits, distributions are inferred from either thematic spatial data (i.e. vegetation, soils, geology, elevation, aspect, terrain, etc.) together with point locations and described habitat; or modelled (MAXENT or BIOCLIM habitat modelling) using point locations and environmental data layers.

Where little information is available for a species or large number of maps are required in a short time-frame, maps are derived either from 0.04 or 0.02 decimal degree cells; by an automated process using polygon capture techniques (static two kilometre grid cells, alpha-hull and convex hull); or captured manually or by using topographic features (national park boundaries, islands, etc.).

In the early stages of the distribution mapping process (1999-early 2000s) distributions were defined by degree blocks, 100K or 250K map sheets to rapidly create distribution maps. More detailed distribution mapping methods are used to update these distributions when time permits.

## 4 LIMITATIONS

The following species and ecological communities have not been mapped and do not appear in this report:

- threatened species listed as extinct or considered vagrants;
- some recently listed species and ecological communities;
- some listed migratory and listed marine species, which are not listed as threatened species; and
- migratory species that are very widespread, vagrant, or only occur in Australia in small numbers.

The following groups have been mapped, but may not cover the complete distribution of the species:

- listed migratory and/or listed marine seabirds, which are not listed as threatened, have only been mapped for recorded breeding sites; and
- seals which have only been mapped for breeding sites near the Australian continent

The breeding sites may be important for the protection of the Commonwealth Marine environment.

Refer to the metadata for the feature group (using the Resource Information link) for the currency of the information.

# Acknowledgements

This database has been compiled from a range of data sources. The department acknowledges the following custodians who have contributed valuable data and advice:

- [-Office of Environment and Heritage, New South Wales](#)
- [-Department of Environment and Primary Industries, Victoria](#)
- [-Department of Primary Industries, Parks, Water and Environment, Tasmania](#)
- [-Department of Environment, Water and Natural Resources, South Australia](#)
- [-Department of Land and Resource Management, Northern Territory](#)
- [-Department of Environmental and Heritage Protection, Queensland](#)
- [-Department of Parks and Wildlife, Western Australia](#)
- [-Environment and Planning Directorate, ACT](#)
- [-Birdlife Australia](#)
- [-Australian Bird and Bat Banding Scheme](#)
- [-Australian National Wildlife Collection](#)
- Natural history museums of Australia
- [-Museum Victoria](#)
- [-Australian Museum](#)
- [-South Australian Museum](#)
- [-Queensland Museum](#)
- [-Online Zoological Collections of Australian Museums](#)
- [-Queensland Herbarium](#)
- [-National Herbarium of NSW](#)
- [-Royal Botanic Gardens and National Herbarium of Victoria](#)
- [-Tasmanian Herbarium](#)
- [-State Herbarium of South Australia](#)
- [-Northern Territory Herbarium](#)
- [-Western Australian Herbarium](#)
- [-Australian National Herbarium, Canberra](#)
- [-University of New England](#)
- [-Ocean Biogeographic Information System](#)
- [-Australian Government, Department of Defence](#)
- [Forestry Corporation, NSW](#)
- [-Geoscience Australia](#)
- [-CSIRO](#)
- [-Australian Tropical Herbarium, Cairns](#)
- [-eBird Australia](#)
- [-Australian Government – Australian Antarctic Data Centre](#)
- [-Museum and Art Gallery of the Northern Territory](#)
- [-Australian Government National Environmental Science Program](#)
- [-Australian Institute of Marine Science](#)
- [-Reef Life Survey Australia](#)
- [-American Museum of Natural History](#)
- [-Queen Victoria Museum and Art Gallery, Inveresk, Tasmania](#)
- [-Tasmanian Museum and Art Gallery, Hobart, Tasmania](#)
- Other groups and individuals

The Department is extremely grateful to the many organisations and individuals who provided expert advice and information on numerous draft distributions.

Please feel free to provide feedback via the [Contact us](#) page.

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General Tools | **Select Tools** | Measure Tools | Draw Tools | Find Tools | Property Tools | Flora Tools | Fauna Tools

Point | Multi Point | Line | Polygon | Rectangle | Enable Add Results | Enable Subtract Results | Enable Buffering | Identifiable Layers

← State Rated Flora Sites (3) | ☰

📏 To learn what's there, click or tap and drag to draw a rectangle on the map. ✕

☆ Selected Feature Attributes > | ...

State Rated Flora Sites

Species: *Melaleuca oxiphylla*

Common Name: Pointed-leaf Honey-myrtle

Family Name: MYRTACEAE

Flora Code: AD156113

General Location: 4.4 km SSW of Solomon

State Rating: R

Sighting Date: 10/10/1994

(E=Endangered; V=Vulnerable; R=Rare; ssp=rated sub species)

☆ Selected Feature Attributes > | ...

State Rated Flora Sites

Species: *Olearia adenolasia*

Common Name: Musk Daisy-bush

Family Name: ASTERACEAE

Flora Code: AD98519233

General Location: 3.3 km SSE of Solomon

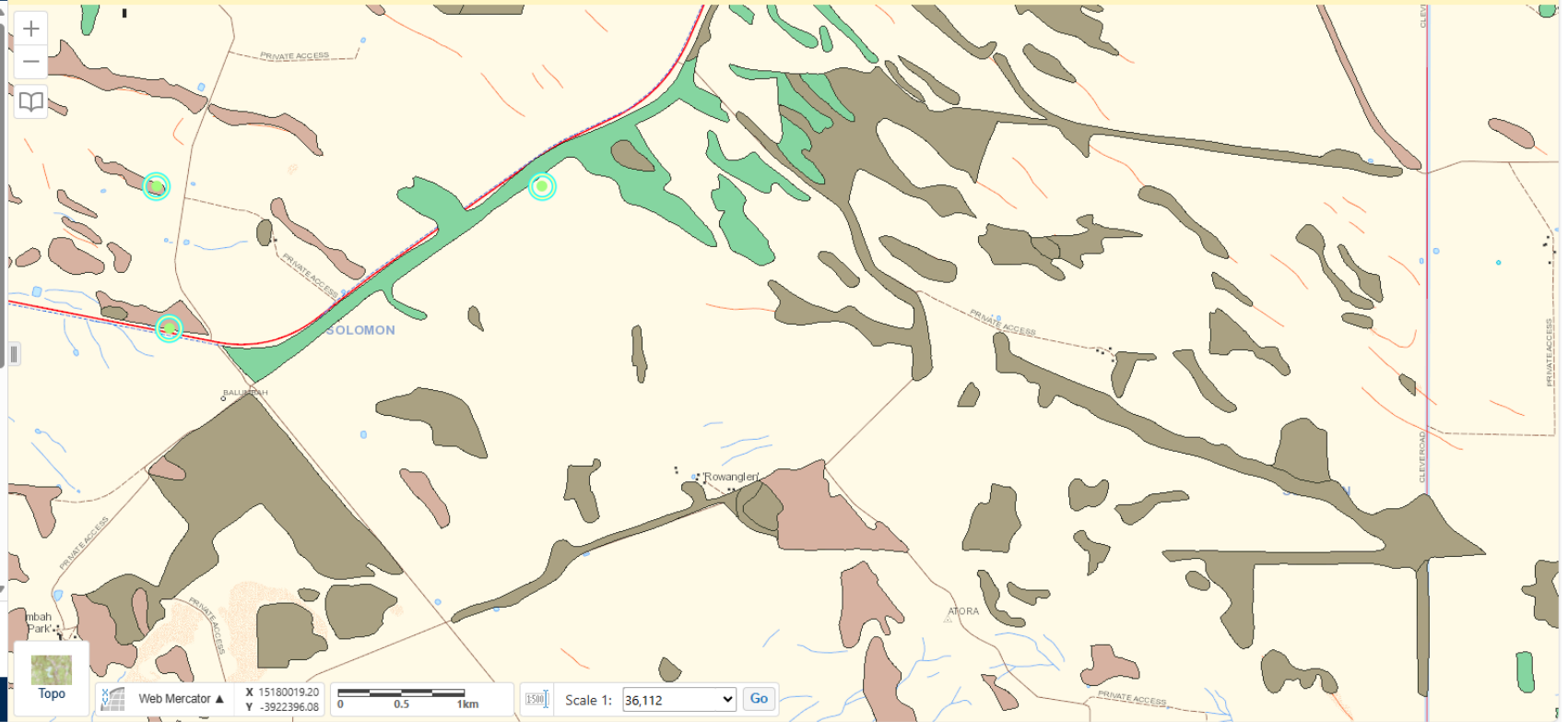
State Rating: R

Sighting Date: 11/12/1984

(E=Endangered; V=Vulnerable; R=Rare; ssp=rated sub species)

Displaying 1 - 3 (Total: 3)

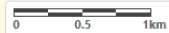
◀ Page 1 of 1 ▶▶



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Web Mercator X 15180019.20 Y -3922396.08



Scale 1: 36,112 Go

<b>Ecosystem type</b>	<b>Supplied ecosystem type</b>	<b>GDE Potential</b>	<b>IDE likelihood</b>	<b>River region</b>	<b>Groundwater management area</b>	<b>Aquifer Name</b>	<b>Aquifer Geology</b>	<b>Critical Groundwater Service</b>
Vegetation	Melaleuca shrubland >1m	Low potential GDE - from national assessment	10	SPENCER GULF				
Vegetation	Eucalyptus mallee forest and mallee woodland	Low potential GDE - from national assessment	10	SPENCER GULF				
Vegetation	Melaleuca shrubland >1m	Low potential GDE - from national assessment	3	SPENCER GULF				
Vegetation	Eucalyptus mallee forest and mallee woodland	Low potential GDE - from national assessment	10	SPENCER GULF				
Vegetation	Eucalyptus mallee forest and mallee woodland	Low potential GDE - from national assessment	10	SPENCER GULF				
Vegetation	Melaleuca shrubland >1m	Low potential GDE - from national assessment	3	SPENCER GULF				
Vegetation	Melaleuca shrubland >1m	Low potential GDE - from national assessment	10	SPENCER GULF				
Vegetation	Melaleuca shrubland >1m	Low potential GDE - from national assessment	10	SPENCER GULF				