Permit

Environmental Protection Act 1994

Environmental authority: P-EA-100724442

This environmental authority is issued by the administering authority under Chapter 5 of the Environmental Protection Act 1994.

Environmental authority number: P-EA-100724442

Environmental authority takes effect on 1 July 2025. This is the take effect date.

The first annual fee is payable within 20 business days of the take effect date.

The anniversary date of this environmental authority is the same day each year as the take effect date. The payment of the annual fee will be due each year on this day.

Transfers of this environmental authority are not authorised.

Environmental authority holder(s)

Name(s)	Registered address
AIC JERICHO PTY LTD	Unit 3, 130 Hay St SUBIACO WA 6008

Environmentally relevant activity and location details

Environmentally relevant activity/activities	Location(s)
Schedule 3: 16 Mining Gold Ore, Schedule 3: ERA 17 Mining Copper Ore	Mining lease (ML)100348

Additional information for applicants

Environmentally relevant activities

The description of any environmentally relevant activity (ERA) for which an environmental authority (EA) is issued is a restatement of the ERA as defined by legislation at the time the EA is issued. Where there is any inconsistency between that description of an ERA and the conditions stated by an EA as to the scale, intensity or manner of carrying out an ERA, the conditions prevail to the extent of the inconsistency.

An EA authorises the carrying out of an ERA and does not authorise any environmental harm unless a condition stated by the EA specifically authorises environmental harm.

A person carrying out an ERA must also be a registered suitable operator under the *Environmental Protection Act 1994* (EP Act).

Queensland Government

Mobile and temporary activities

If you operate a mobile and temporary environmentally relevant activity (ERA), other than regulated waste transport, you are required to maintain a work diary. You must:

- use the approved form for a work diary (ESR/2015/1696);
- keep the work diary records for 2 years after the last entry;
- inform the administering authority within 7 days of the work diary being lost or stolen;
- record the information required in the work diary for each location within 1 day of leaving the location.

Contaminated land

It is a requirement of the EP Act that an owner or occupier of land give written notice to the administering authority if they become aware of the following:

- the presence of, or happening of an event involving, a hazardous contaminant on the land that is causing, or is reasonably likely to cause, serious or material environmental harm (notice must be given within 24 hours); or
- if the land is contaminated land – a change in the condition of the land that is causing, or is reasonably likely to cause, serious or material environmental harm (notice must be given within 24 hours); or
- a notifiable activity (as defined in Schedule 3) having been carried out, or is being carried out, on the land (notice must be given within 20 business days).

For further information, including the form for giving written notice, refer to the Queensland Government website www.qld.gov.au, using the search term ‘duty to notify’.

Take effect

Please note that, in accordance with section 200 of the EP Act, an EA has effect:

a) if the authority is for a prescribed ERA and it states that it takes effect on the day nominated by the holder of the authority in a written notice given to the administering authority – on the nominated day; or

b) if the authority states a day or an event for it to take effect – on the stated day or when the stated event happens; or

c) otherwise – on the day the authority is issued.

However, if the EA is authorising an activity that requires an additional authorisation (a relevant tenure for a resource activity, a development permit under the *Planning Act 2016* or an SDA Approval under the *State Development and Public Works Organisation Act 1971*), this EA will not take effect until the additional authorisation has taken effect.

If this EA takes effect when the additional authorisation takes effect, you must provide the administering authority written notice within 5 business days of receiving notification of the related additional authorisation taking effect.

The anniversary day of this environmental authority is the same day each year as the effective date. The payment of the annual fee will be due each year on this day. An annual return will be due each year on 01 April.

If you have incorrectly claimed that an additional authorisation is not required, carrying out the ERA without the

additional authorisation is not legal and could result in your prosecution for providing false or misleading information or operating without a valid environmental authority.

T.Gibbs	1 July 2025
Signature	Date

Teale Gibbs
Department of the Environment, Tourism, Science and Innovation
Delegate of the administering authority
Environmental Protection Act 1994

Enquiries:
Minerals Business Centre
Department of the Environment, Tourism, Science and Innovation
PO Box 7230, CAIRNS QLD 4870
Phone: 07 4222 5352
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Obligations under the *Environmental Protection Act 1994*

In addition to the requirements found in the conditions of this environmental authority, the holder must also meet their obligations under the EP Act, and the regulations made under the EP Act. For example, the holder must comply with the following provisions of the Act:

- general environmental duty (section 319)
- duty to notify environmental harm (section 320-320G)
- offence of causing serious or material environmental harm (sections 437-439)
- offence of causing environmental nuisance (section 440)
- offence of depositing prescribed water contaminants in waters and related matters (section 440ZG)
- offence to place contaminant where environmental harm or nuisance may be caused (section 443)

Other permits required

This permit only provides an approval under the *Environmental Protection Act 1994*. In order to lawfully operate you may also require permits / approvals from your local government authority, other business units within the department and other State Government agencies prior to commencing any activity at the site. For example, this may include permits / approvals with your local Council (for planning approval), the Department of Transport and Main Roads (to access State controlled roads), the Department of Resources (to clear vegetation), and the Department of Agriculture and Fisheries (to clear marine plants or to obtain a quarry material allocation).

Conditions of environmental authority

Location: Jericho Project, approximately 60 kilometres southeast of Cloncurry QLD 4824.

ML100348

This **Environmental Authority** incorporates the following schedules:

Schedule A – General

Schedule B - Air

Schedule C - Water

Schedule D - Waste

Schedule E – Noise and Vibration

Schedule F - Biodiversity

Schedule G - Definitions

Schedule H - Figures

Schedule A – General

(A1) This environmental authority authorises the activities listed in Schedule A Table A1 – Authorised activities to the extent that they are carried out in accordance with:

a) the activity's corresponding:

i) maximum disturbance size; and

ii) maximum scale; and

iii) location; and

b) *Schedule H Figure 1 – Project layout and location.*

Schedule A Table A1 – Authorised activities

Mine Domain	Mine Feature Name	Max. disturbance size (hectare)	Location GDA2020
Mining area	Infrastructure (vent shaft compounds, access tracks, stock fence and power corridor)	12.09	Refer to Schedule H – Figure 1 Project layout and location
	Underground Mine Supporting Infrastructure (vent shafts JS1 to JS7)	0.07	
Exploration	Exploration Disturbance (drill pads, boreholes, access tracks)	18.4	
Ancillary Infrastructure	Groundwater Monitoring Boreholes	0.02	
TOTAL		**30.58**	

(A2) All reasonable and practicable measures must be taken to prevent or minimise environmental harm caused, or likely to be caused, by the activities.

(A3) Unless specifically authorised by a condition of this environmental authority, this environmental authority does not authorise a relevant act which is:

a) an act that causes serious or material environmental harm or an environmental nuisance; or

b) an act that contravenes a noise standard; or

c) a deposit of a contaminant, or release of stormwater run-off, mentioned in section 440ZG of the *Environmental Protection Act 1994*.

Maintenance of Measures, Plant and Equipment

(A4) An appropriately qualified person must install, operate, calibrate, and maintain the plant and equipment required to carry out the activity (including monitoring devices) in a proper and effective manner.

(A5) No change, replacement or alteration of any measures, plant or equipment is permitted if the change, replacement or alteration increases, or is likely to increase, the risk of environmental harm.

(A6) Records of installation, calibration and maintenance carried out under condition A4 must be kept.

Monitoring and Sampling

(A7) All monitoring and sampling required by the conditions of this environmental authority must be carried out, interpreted, and recorded by an appropriately qualified person.

(A8) Unless otherwise authorised in writing by the administering authority, all laboratory analyses required under this environmental authority must be carried out by a laboratory that has National Association of Testing Authorities (NATA) accreditation for such analyses. The only exception to this condition is for in situ monitoring of pH, electronic conductivity and turbidity.

(A9) The holder of this environmental authority must upon request from the administering authority, supply monitoring records, plans and reports in the form and by the means requested by the administering authority within fourteen days.

Emergency Response / Contingency

(A10) An emergency response/contingency plan must be developed by 30 September 2025. The plan must be implemented to respond to emergency events and incidents.

(A11) The emergency response/contingency plan required under condition A10 must address the following matters as a minimum:

(a) Response procedures to be implemented to prevent or minimise the risk of environmental harm arising from incidents;

(b) Response procedures to minimise the extent and duration of environmental harm caused by an incident;

(c) The practices and procedures to be employed to restore the environment or mitigate any environmental harm caused;

(d) The resources to be used in response to an incident;

(e) Procedures to investigate the cause of any incidents, including releases, and where necessary, implement remedial actions to reduce the likelihood of recurrence of similar events;

(f) The provision and availability of documented procedures to staff attending any incident to enable them to effectively respond;

(g) Training of staff that will be called upon to respond to incidents to enable them to effectively respond;

(h) Timely and accurate reporting of the circumstance and nature of incidents to the administering authority in accordance with conditions of this Environmental Authority;

(i) Procedures for accessing monitoring points during incidents;

(j) Procedures to notify any potentially impacted stakeholder who may be affected by the event within 24 hours, with information to be provided at a minimum:

i. The location of the release;

ii. The date and time of the release;

iii. The estimated quantity and type of any substances (if available concentrations) involved in the incident;

iv. The potential impacts to environmental values caused by the release.

Notification of Emergencies, Incidents and Exceptions

(A12) The environmental authority holder must notify the administering authority by telephone, email or facsimile as soon as practicable but within twenty-four (24) hours, after becoming aware of any emergency or incident which results in the release of contaminants not in accordance, or reasonably expected to be not in accordance, with the conditions of this approval.

(A13) The notification in condition A12 must include, but not be limited to, the following:

(a) The environmental authority number and name of the holder;

(b) The name and telephone number of the designated contact person;

(c) The location of the emergency or incident;

(d) The date and time of the incident;

(e) The time the environmental authority holder became aware of the incident;

(f) The estimated quantity and type of substances involved in the incident;

(g) The actual or potential cause of the incident;

(h) A description of the nature and effects of the incident including environmental risks, any risks to public health or livestock;

(i) Any sampling conducted or proposed, relevant to the emergency or incident;

(j) Immediate actions taken to prevent or mitigate any further environmental harm caused by the release; and

(k) What notification of persons who may be affected by the event has occurred/is being undertaken.

(A14) Within fourteen (14) days or another nominated time agreed to by the administering authority, following the initial notification of an emergency or incident, further written advice must be provided to the administering authority, including the following:

(a) Results and interpretation of any samples taken and analysed;

(b) Outcomes of actions taken at the time to prevent or minimise unlawful environmental harm; and

(c) Proposed actions to prevent a recurrence of the emergency or incident.

(A15) The environmental authority holder must notify any potentially impacted stakeholder by telephone, email or facsimile within 12 hours after becoming aware of any emergency or incident that has the potential to impact on environmental values or breaches any condition of this environmental authority concerning releases of contaminants to the environment.

(A16) The notification in condition A15 must include the following:

(a) The location of the release;

(b) The date and time of the release;

(c) The estimated quantity and type of any substances involved in the incident;

(d) The potential impacts to environmental values caused by the release; and

(e) Where there is potential impact on livestock or human health, precautionary measures that should be taken.

(A17) The environmental authority holder must notify the administering authority by telephone, email or facsimile as soon as practicable but within forty-eight (48) hours, after becoming aware of any monitoring result that demonstrates an exceedance of any approval limit.

Contravention of conditions

(A18) Unless specifically authorised by a condition of this environmental authority, details of any contravention of a condition of this environmental authority must: be

(a) reported to the administering authority within 24 hours of becoming aware of the contravention; and

(b) include the nature and circumstances of the contravention and any immediate actions taken.

(A19) As soon as reasonably practicable but no later than 20 business days of a report made under condition A18 (or a longer period agreed to in writing by the administering authority), an investigation must be undertaken to determine:
(a) the potential circumstances and actions that may have contributed to the contravention; and
(b) reasonable and practicable measures that will be implemented to address the cause of the contravention to prevent future contraventions of this nature.

(A20) As soon as reasonably practicable but no later than 20 business days of investigating a contravention under condition A19 (or a longer period agreed to in writing by the administering authority), the reasonable and practicable measures identified in the investigation must be implemented.

(A21) The outcome of the investigation carried out under condition A19 and the reasonable and practicable measures implemented under condition A20 must be recorded.

Complaints

(A22) The following details must be recorded for all complaints received and provided to the administering authority upon request:

(a) date and time the complaint was received; and
(b) if authorised by the person making the complaint, their name and contact details; and
(c) nature and details of the complaint.

(A23) As soon as reasonably practicable but no later than 5 business days of receiving a complaint (or a longer period agreed to in writing by the administering authority), an investigation must be undertaken to determine:

(a) the potential circumstances and actions on site that may have contributed to the basis of the complaint; and
(b) reasonable and practicable measures that will be implemented to address the complaint.

(A24) As soon as reasonably practicable but no later than 5 business days of investigating a complaint under condition A23 (or a longer period agreed to in writing by the administering authority), the reasonable and practicable measures identified in the investigation must be implemented.

(A25) The outcome of the investigation carried out under condition A23 and the reasonable and practicable measures implemented under condition A24 must be recorded.

(A26) The environmental authority holder must establish, promote and maintain easily accessible lines of communication between residents, stakeholders and landowners reasonably expected to be affected by

the activities to ensure that social and cultural heritage impacts are identified and managed. This must include but not be limited to the following:

(a) Organise regular meetings with all relevant stakeholders at intervals of not less than six (6) months;
(b) Alternate frequencies requested by relevant stakeholders; or

(c) The establishment of a consultative committee with representation for all relevant stakeholders that meets at regular intervals as determined by the committee.

Third-party Auditing

(A27) The holder of this environmental authority must nominate an appropriate third-party auditor to audit compliance with the conditions of this environmental authority within one (1) year of the commencement of this authority, and then at regular intervals not exceeding three (3) years.

(A28) The third-party auditor must certify the independent findings of the audit in the report.

(A29) The financial costs of the third-party audit are the responsibility of the holder.

(A30) The holder must promptly act upon any recommendations arising from the audit by:

(a) Investigating any non-compliance issues identified; and

(b) Promptly implementing measures or taking necessary action to ensure compliance with the requirements of this environmental authority.

(A31) Within three (3) months of completing the audit, the holder must provide a written report to the administering authority addressing the:

(a) Actions taken by the holder to ensure compliance with this environmental authority; and

(b) Actions taken to prevent a recurrence of any non-compliance issues identified.

Environmental risk management procedures

(A32) Written procedures must be developed and implemented by an appropriately qualified person that ensure:

(a) all potential risks to the environment from the carrying out of the activity are identified and assessed, including:

i) during routine operations; and

ii) outside routine operations (e.g., maintenance, start up and shut down); and

iii) during preparation, rehabilitation, and closure; and

iv) in an emergency (e.g., fire, flood or other natural disaster); and

(b) for each potential risk identified, any necessary measures to prevent or minimise the potential for environmental harm are implemented; and

(c) staff understand their obligations under this environmental authority and the *Environmental Protection Act 1994*; and

(d) environmental risk management procedures are continually reviewed and improved, based on a reasonable risk-management approach.

Record Keeping

(A33) Unless otherwise specified by a condition of this environmental authority, records must be:

(a) kept for the period outlined in Schedule A Table A2 – Record keeping requirements; and

(b) provided to the administering authority upon request and in the format requested.

Schedule A Table A2 – Record keeping requirements

Description of records	Retention requirement
Monitoring Results	Retain for 7 years
All other records	Retain for 7 years

Exploration

(A34) Conditions of approval for this environmental authority are the eligibility criteria and standard conditions contained within the attached document entitled Eligibility criteria and standard conditions for exploration and mineral development projects – Version 2 (ESR/2016/1985) (

(A35) All reasonable steps must be taken to ensure the activity complies with the eligibility criteria and standard conditions.

(A36) Notwithstanding standard condition A13 of the Eligibility criteria and standard conditions for exploration and mineral development projects – Version 2, the holder of the environmental authority is authorised to carry out exploration up to 50 metres from, but not within the ESA, identified as endangered remnant regional ecosystem, provided that no environmental harm occurs.

Chemical Storage

(A37) Chemicals and fuels in containers of greater than 15 litres must be stored within a secondary containment system.

Light Emission

(A38) In the event of a complaint which, after investigation, is considered to be non-vexatious and non-frivolous in the opinion of an authorised officer under the *Environmental Protection Act 1994*, and concerns light from any mining activity that is causing a nuisance at a sensitive place, the administering authority may request the holder to take appropriate action to mitigate the nuisance. The environmental authority holder must take appropriate action (e.g., by screening or directing the light away from residences or public roads) within any reasonable time set by the administering authority.

Transition to New Standards

(A39) Where a condition requires compliance with a standard published externally to this environmental authority and the standard is amended or changed subsequent to the issue of this environmental authority, then the environmental authority holder must:

(a) Until compliance with the amended or changed standard can be achieved, continue to remain in compliance with the standard that was current immediately prior to the relevant amendment or change; and

(b) Comply with the amended or changed standard within 2 years, unless a different period is specified in the amended standard or relevant legislation.

Definitions

(A40) Words and phrases used throughout the environmental authority are defined in Schedule G- Definitions. Where a definition for a term used in the environmental authority is sought and the term is not defined within the environmental authority, the definitions in the *Environmental Protection Act 1994*, its Regulations and Environmental Protection Policies must be used.

END OF CONDITIONS FOR SCHEDULE A

Schedule B – Air

General

(B1) This environmental authority does not authorise odours or airborne contaminants generated by the activity to cause a relevant act at a sensitive place or commercial place.

Dust Nuisance

(B2) When requested by the administering authority, dust and particulate monitoring must be undertaken within a reasonable and practicable timeframe nominated by the administering authority to investigate any complaint (which is neither frivolous nor vexatious nor based on mistaken belief in the opinion of the authorised officer) of environmental nuisance at any sensitive or commercial place, and the results must be notified within 14 days to the administering authority following completion of monitoring. Monitoring must be carried out at a place(s) relevant to the potentially affected dust sensitive place.

(B3) The environmental authority holder shall ensure that all reasonable and feasible avoidance and mitigation measures are employed so that the dust and particulate matter emissions generated by the mining activities do not cause exceedances of the following levels when measured at any sensitive or commercial place:

(a) Dust deposition of 120 milligrams per square metre per day, averaged over 30 days, when monitored in accordance with the most recent version of Australian Standard AS3580.10.1 *Methods for sampling and analysis of ambient air – Determination of particulate matter – Deposited matter – Gravimetric method*.

(b) A concentration of particulate matter with an aerodynamic diameter of less than 10 micrometres (PM10) suspended in the atmosphere of 50 micrograms per cubic metre over a 24-hour averaging time, when monitored in accordance with the latest edition of the Australian Standard AS3580.9.6 *Methods for sampling and analysis of ambient air – Determination of suspended particulate matter – PM (sub) 10 high volume sampler with size-selective inlet – Gravimetric method*.

(c) A concentration of particulate matter with an aerodynamic diameter of less than 2.5 micrometres (PM2.5) suspended in the atmosphere of 25 micrograms per cubic metre over a 24-hour averaging time, when monitored in accordance with the most recent version of AS/NZS3580.9.10 *Methods for sampling and analysis of ambient air – Determination of suspended particulate matter – PM (sub)2.5(/sub) low volume sampler – Gravimetric method*.

(d) A concentration of particulate matter suspended in the atmosphere of 90 micrograms per cubic metre over a one (1) year averaging time, when monitored in accordance with the most recent version of AS/NZS3580.9.3:2003 *Methods for sampling and analysis of ambient air – Determination of suspended particulate matter – Total suspended particulate matter (TSP) – High volume sampler gravimetric method*.

(B4) If monitoring indicates the limits in condition B3 have been exceeded, the environmental authority holder must promptly implement dust abatement measures so that emissions of dust generated by the mining activities cease to exceed the limits in condition B3.

(B5) Air quality monitoring, including for dust and point source emissions from the activity, must be undertaken in accordance with the latest edition of:

a) the relevant Australian Standards; or

b) a method approved by any other Australian, European or North American jurisdiction/EPAs (if monitoring requirements are not described in the Australian Standards).

Odour Nuisance

(B6) The release of noxious or offensive odour(s) or any other noxious or offensive airborne contaminant(s) resulting from the mining activity must not cause an environmental nuisance at any sensitive or commercial place.

(B7) When requested by the administering authority, odour monitoring must be undertaken within a reasonable and practicable timeframe nominated by the administering authority to investigate any complaint (which is neither frivolous nor vexatious nor based on mistaken belief in the opinion of the authorised officer) of environmental nuisance at any sensitive or commercial place, and the results must be notified within 14 days to the administering authority following completion of monitoring.

(B8) If monitoring indicates condition B6 is not being met then the environmental authority holder must:

(a) address the complaint including the use of appropriate dispute resolution if required; or

(b) immediately implement odour abatement measures so that emissions of odour from the activity do not result in further environmental nuisance.

Meteorological Monitoring

(B9) By 30 September 2025 the environmental authority holder must establish and maintain a permanent meteorological station to continuously measure and record wind speed, wind direction, temperature, daily rainfall volume and rainfall intensity.

(B10) The permanent meteorological station must be installed in accordance with the latest edition of the Bureau of Meteorology guideline observation specifications No. 2013.1 Guidelines for the positioning and exposure of meteorological instruments and observing facilities.

(B11) The holder of this environmental authority must record, compile, evaluate and keep all monitoring records obtained from the permanent meteorological station.

END OF CONDITIONS FOR SCHEDULE B

Schedule C – Water

Release to waters

(C1) Contaminants that will, or have the potential to cause environmental harm, must not be released directly or indirectly to any waters except as permitted under the conditions of this environmental authority.

Stormwater, Sediment and Erosion Controls

(C2) Stormwater must be managed to:

a) prevent stormwater from being contaminated by the activity; or

b) direct stormwater that is contaminated by the activity to stormwater treatment and retention measures.

(C3) An Erosion and Sediment Control Plan must be developed by an appropriately qualified person and implemented for all stages of the mining activities on the site to minimise erosion and the release of sediment to receiving waters and contamination of storm water. A copy of the erosion and sediment control plan must be provided to the administering authority on request.

(C4) The Erosion and Sediment Control Plan must be managed in accordance with documented procedures, and provides for at least the following stormwater management functions:

(a) Prevent or minimise the contamination of stormwater;
(b) Diverting uncontaminated stormwater run-off around areas disturbed by mining activities or where contaminants or wastes are stored or handled;
(c) Contaminated stormwater runoff, incident rainfall and leachate is collected; and treated, reused, or released in accordance with the conditions of this environmental authority;
(d) Roofing or minimising the size of areas where contaminants or wastes are stored or handled;
(e) Using alternate materials and or processes (such as dry absorbents) to clean up spills that will minimise the generation of contaminated waters;
(f) Erosion and sediment control structures are placed to minimise erosion of disturbed areas and prevent the contamination of any waters;
(g) Procedures to ensure that erosion and sediment control structures are maintained and adequate storage is available in sediment dams in accordance with design criteria; and
(h) Training of staff that will be responsible for maintenance and operations of sediment and erosion control structures.

(C5) Erosion protection measures and sediment control measures must be implemented and maintained to minimise erosion and the release of sediment and contamination of storm water.

Receiving Environment Monitoring and Contaminant Trigger Levels

(C6) The quality of the receiving waters must be monitored at the locations and frequencies defined in Schedule C – Table C4 (Receiving Water Monitoring Locations and Frequency) and Schedule H – Figure 2 (Monitoring Sites for Surface Water) for the quality characteristics defined in Schedule C – Table C5 (Receiving Water Trigger Levels).

Schedule C – Table C4 (Receiving Water Monitoring Locations and Frequency)

Monitoring point	Easting (GDA2020) Zone 54	Northing (GDA2020) Zone 54	Monitoring frequency
Reference Sites[1]			**Surface Waters:** Weekly during each stream flow event
SC1A (Upstream)	491412	7679542	
SC1B (Upstream)	497000	7680210	
Downstream Impact Sites			

SC1 (downstream)	498026	7682008	

Schedule C – Table C5 (Receiving Water Trigger Levels)

Quality Characteristic	Receiving Water Quality Trigger Levels (mg/L unless stated otherwise)
Electrical conductivity	133µS/cm[2]
pH	6.9[2] (minimum) 8.3[2] (maximum)
Turbidity	15 NTU[5]
Sulphate as SO_4	6 [2]
Aluminium[1]	0.055 [3]
Arsenic[1]	0.003 [2]
Cadmium[1]	0.0001 [2]
Chromium[1]	0.001 [2]
Cobalt[1]	0.0014 [4]
Copper[1]	0.009 [2]
Lead[1]	0.001 [2]
Manganese[1]	1.9 [6]
Mercury (inorganic)[1]	0.00006 [6]
Nickel[1]	0.011 [2]
Selenium[1]	0.005 [6]
Zinc[1]	0.005 [2]
Fluoride	2 [7]
Hardness	For interpretation purposes only

Notes:

1. *All metals and metalloids must be measured as total (unfiltered) and dissolved (filtered). Trigger levels for metal/metalloids apply if dissolved results exceed trigger. Contaminant limits apply for metal/metalloids if total results exceed limits.*
2. *Site specific trigger value derived using reference data.*
3. *ANZECC (2000), Table 3.4.1 – aquatic ecosystems EV.*
4. *ANZECC online platform (accessed 2023).*
5. *ANZECC (2000), Table 3.3.5 – Tropical Australia upland & lowland rivers.*
6. *ANZECC (2000), 99% species protection.*
7. *ANZECC (2000), Table 4.3.2 – stock water EV.*

(C7) The release of contaminants to the receiving environment must not result in an exceedance of surface water stated in Schedule C – Table 5 (Receiving Water Trigger Levels) for each quality characteristic.

(C8) If quality characteristics of the receiving water at the downstream monitoring points exceed any of the surface water trigger levels specified in Schedule C – Table 5 (Receiving Water Trigger Levels), the environmental authority holder must compare the downstream results to the reference site results in the receiving waters and:

(a) where the downstream result is the same or a lower value than the reference site value for the quality characteristic during the same sampling event then no action is to be taken; or

(b) where the downstream results exceed the reference site, complete an investigation in accordance with the ANZECC & ARMCANZ 2000 methodology, into the potential for environmental harm and provide a written report to the administering authority within three (3) months, outlining:

i. Details of the investigations carried out; and
ii. Actions taken to prevent environmental harm.

Note: Where an exceedance of a trigger level has occurred and is being investigated, in accordance with C8(b) of this condition, no further reporting is required for subsequent trigger events for that quality characteristic.

Receiving Environment Monitoring Program (REMP)

(C9) The holder of this environmental authority must develop, document and implement a Receiving Environment Monitoring Program to monitor, identify and describe any adverse impacts to surface water environmental values, quality and flows, within 6 months of the effective date of this environmental authority.

For the purposes of the REMP, the receiving environment is the waters of Scrubby Creek and connected waterways within 10 km downstream of the release or further if an impact is detected beyond 10 km.

(C10) A Receiving Environment Monitoring Program report, including all monitoring results and any interpretations or assumptions relied upon, must be prepared by an appropriately qualified person annually.

(C11) The REMP must address (but not necessarily be limited to) the following:

(a) Description of potentially affected receiving waters including key communities and reference water quality based on accurate and reliable monitoring data that takes into consideration any temporal variation (e.g. seasonality);

(b) Description of applicable environmental values and water quality objectives to be achieved, i.e., as scheduled pursuant to the Environmental Protection (Water) Policy;

(c) Any relevant reports prepared by other governmental or professional research organisations that relate to the receiving environment within which the REMP is proposed;

(d) Water quality targets within the receiving environment to be achieved and clarification of contaminant concentrations or levels indicating adverse environmental impacts during the REMP;

(e) Monitoring identify and describe any adverse environmental impacts to surface water environmental values, quality, and flows;

(f) Monitoring of stream flow and hydrology;

(g) Assess the receiving environment monitoring against Schedule C – Table C5 (Receiving Water Trigger) to assess the extent of the compliance of concentrations with water quality objectives;

(h) Apply procedures and/or guidelines from ANZG 2018 and other relevant standards and guideline documents.

(i) Monitoring of physical and chemical parameters that include dissolved oxygen saturation and temperature;

(j) Monitoring biological indicators (for macroinvertebrates in accordance with the administering authorities' monitoring and sampling manual (AusRivAs methodology) and metals/metalloids in sediments (in accordance with ANZECC & ARMCANZ 2000, BATLEY and/or the most recent version of AS5667.1 Guidance on Sampling of Bottom Sediments) for permanent, semi-permanent water holes and water storages;

(k) The locations of monitoring points (including the locations specified in Schedule C – Table C4 (Receiving Water Monitoring Locations and Frequency) which are reference/upstream and downstream impacted sites for each release point);

(l) The frequency or scheduling of sampling and analysis sufficient to determine water quality objectives and to derive site specific reference values within two (2) years (depending on wet season flows) in accordance with the Queensland Water Quality Guidelines. For ephemeral streams, this should include periods of flow irrespective of mine or other discharges;

(m) Specify sampling and analysis methods and quality assurance and control;

(n) Any historical data sets to be relied upon;

(o) Description of the statistical basis on which conclusions are drawn;

(p) Assess the long-term condition or state of surface waters, sediment, and aquatic ecosystem health;

(q) Include an assessment of the potential impacts of the activity and propose appropriate mitigation measures;

(r) Assess the status of and any change to aquatic ecosystem health including aquatic flora and fauna within and immediately surrounding the project area;

(s) Incorporate stream flow and hydrological information in the interpretations of water quality and biological data; and

(t) Any spatial and temporal controls to exclude potential confounding factors.

(C12) The following information must be recorded in relation to all surface water and biological monitoring required under the conditions of this environmental authority and submitted to the administering authority in the specified format with each annual return or upon request from the administering authority:

(a) the date on which the sample was taken; and

(b) the time at which the sample was taken; and

(c) the monitoring point at which the sample was taken; and

(d) the observed flow rate of the stream at which the sample was taken; and

(e) the results of all monitoring and details of any exceedances of the conditions of this environmental authority.

C13 No later than 31 March each year, water quality monitoring data required under condition C12 must be provided to the administering authority in the specified electronic format for the year prior (01 January to 31 December) on the Queensland government's Water Tracking and Electronic Reporting System (WaTERS), or more recent version of the system, where implemented for a site.

Runoff Control from Machinery Maintenance

(C14) The maintenance and cleaning of any vehicles, plant or equipment must not be carried out in areas from which contaminants can be released into any receiving waters.

(C15) Any spillage of wastes, contaminants or other materials must be cleaned up as quickly as practicable to minimise the release of wastes, contaminants or materials to any stormwater drainage system or receiving waters.

Groundwater

(C16) The holder of this environmental authority must not release contaminants to groundwater.

(C17) By 30 September 2026, an analysis of available resource drilling data necessary to investigate the intervals where the Jericho mine intersects the Gilbert River Formation must be conducted. The analysis must include, at a minimum:

i. information on presence/absence, depth, thickness and continuity of the Gilbert River Formation across Jericho mine, and

ii. confirmation of whether a monitoring bore could be effectively installed at a location above or adjacent to the underground workings.

(C18) If the Gilbert River Formation is confirmed to be present in accordance with the findings of condition C17, the monitoring network and groundwater quality limits must be updated in accordance with condition C24.

(C19) If the Gilbert River Formation is determined to be absent, dry or unsaturated across the mining footprint, undertake the following:

(a) revise the conceptual hydrogeological model and the numerical groundwater model to reflect the confirmed absence or hydraulic insignificance of the Gilbert River Formation; and

(b) Submit the revised conceptual and numerical groundwater models to the administering authority with 6 months of completion.

(C20) Prior to the commencement of stope firing on the upper level of the southern side of Jericho mining area or by 01 July 2029, whichever is sooner a technical report must be prepared by an appropriately qualified person and submitted to the administering authority that includes:

(a) Revision of lateral boundaries of the groundwater numerical model to ensure predicted cumulative drawdown does not intersect the lateral boundaries,

(b) Verification of vertical hydraulic gradients between various hydrogeological formations,

(c) Uncertainty analysis of the groundwater numerical model,

(d) Discussion of vertical hydraulic connectivity and conductance between the Soldiers Cap Group and the Gilbert River Formation, including sensitivity analysis,

(e) Recalibration of the numerical groundwater model (utilising all existing Jericho groundwater monitoring bores and additional monitoring bore drilling where data gaps),

(f) Review of the findings of conditions C17 and C18 on how the thickness and extent of Gilbert River Formation is represented in the numerical groundwater model, the observed vertical drawdown in the Gilbert River Formation above the Jericho mine, and justification of the observed drawdown,

(g) Verification of the numerical groundwater model based on site-specific data collected to date, and

(h) Revision of impact predictions including worst case scenarios during operation and post closure, and

(i) Establishment of a trigger threshold for the drawdown impact, if the Gilbert River Formation confirmed to be present.

(C21) The updated and validated groundwater numerical model under Condition C20 must be peer-reviewed by an independent appropriately qualified person and submitted to the administering authority within six months of the completion.

(C22) The holder must implement and maintain a groundwater monitoring network capable of detecting changes in groundwater quality within all relevant hydrostratigraphic units across the tenures, including potential transition zones between the mine and the neighbouring operations.

(C23) An adequacy review of the groundwater monitoring network must be completed by an appropriately qualified person within 12 months of the operations' commencement. This review must:

(a) Identify spatial gaps or inconsistencies in bore coverage,

(b) Assess whether downgradient areas and potential preferential flow paths are adequately covered, and

(c) Recommend installation of additional monitoring bores, where required.

(C24) If the review under condition C18 or C23 requires a change to the groundwater network, within six months of the review and/or review recommendation, the holder must install the additional monitoring bores and update the monitoring network and relevant groundwater quality limits through lodgement of an amendment application pursuant to the *Environmental Protection Act 1994* to this

environmental authority.

(C25) Groundwater quality and level must be monitored at the locations and frequencies defined in Schedule C - Table C7 (Groundwater Monitoring Locations and Frequency) and Schedule H – Figure 3 (Monitoring Sites for Groundwater) for quality characteristics identified in Schedule C - Table C8 (Groundwater Quality Limits).

Schedule C – Table C7 (Groundwater Monitoring Locations and Frequency)

Monitoring point	Aquifer Formation Geologic unit	MGA Easting (GDA 2020) Zone 54	MGA Northing (GDA 2020) Zone 54	Top of casing (mAHD)	Groundwater level elevation (mAHD)	Surface RL (mAHD)	Depth (mBGL)	Monitoring frequency
23JEWB004	Tertiary sediments / Upper Wallumbilla Formation	497752	7679159	198.26	186.76	197.76	11	Quarterly
23JEWB005		497932	7679135	198.25	186.75	197.75	11	Quarterly
23JEWB006		497932	7679135	199.17	187.67	198.67	11	Quarterly
23JEWB001	Wallumbilla Formation	498519	7677908	198.01	155.51	197.51	42	Quarterly
23JEWB002		498450	7678751	199.16	133.66	198.66	65	Quarterly
23JEWB007		497757	7678674	198.16	132.66	197.66	65	Quarterly
23JEWB008		499380	7677480	195.7	148.2	195.2	47	Quarterly
23JEWB009		499345	7678510	197.75	152.25	197.25	45	Quarterly
24JEWB011		497871	7682201	183.71	128.21	183.21	55	Quarterly
24JEWB015		498548	7680131	196.41	128.91	195.91	67	Quarterly
24JEWB016		498533	7680766	193.24	123.74	192.74	69	Quarterly
23JEWB003	Gilbert River Formation	498722	7679592	199.27	103.82	198.82	95	Quarterly
23JEWB010	Soldiers Cap Group (Proterozoic metasediments)	499349	7680040	196.08	121.58	195.58	74	Quarterly

Schedule C - Table C8 (Groundwater Quality Limits)

Quality Characteristic[1]	Upper Wallumbilla Formation			Wallumbilla Formation							Gilbert Formation	Solders Cap Group
	23JEWB004	23JEWB005	23JEWB006	23JEWB002	24JEWB015	23JEWB001	24JEWB0016	23JEWB007	23JEWB008	24JEWB011	23JEWB009	23JEWB003	23JEWB010
Electrical conductivity	TBA[6]			TBA[6]		1500[4]		1950[3]	2500[4]		1200[3]	1040[3]	960[3]

(µS/cm)								
pH (pH unit)	6.5-8.5[5]							
Fluoride (mg/L)	1.7[2]						2[3]	5.8[3]
Sulphate (mg/L)	TBA[6]	TBA[6]	410[4]	500[3]	870[4]	190[3]	280[3]	100[3]
Aluminium (mg/L)	0.055[2]						0.1[3]	0.055[2]
Arsenic (mg/L)	0.013[2]						0.097[3]	0.013[2]
Cadmium (mg/L)	0.0002[2]							
Chromium (mg/L)	0.001[2]							
Cobalt (mg/L)	0.0014[2]							
Copper (mg/L)	0.0014[2]							
Iron (mg/L)	0.3[2]		0.77	0.3[2]		0.43[3]	0.3[2]	
Lead (mg/L)	0.0034[2]							
Manganese (dissolved) (mg/L)	1.9[2]							
Manganese (total) (mg/L)	TBA[6]	TBA[6]	0.67[4]	0.5[5]	1.3[4]	0.66[3]	0.5[5]	
Molybdenum (mg/L)	0.034[2]							
Nickel (mg/L)	0.011[2]							
Selenium (mg/L)	0.005[2]							
Silver (mg/L)	0.00005[2]							
Uranium (mg/L)	0.0005[2]							
Vanadium (mg/L)	0.006[2]							
Zinc (mg/L)	0.008[2]							0.012[3]
Major ions	Interpretation purposes only							

1. *All metals and metalloids must be measured as total (unfiltered) and dissolved (filtered) concentrations. Groundwater quality limits are applicable to dissolved fraction, except for Manganese that both total and dissolved limits apply.*
2. *Default ANZG value based on 95% species protection (note that for selenium, the 99% species protection applies due to bioaccumulative properties).*
3. *The limit refers to the 80th percentile of the site-specific data.*
4. *80th percentile of data for groundwater with similar water types.*
5. *Default drinking water guideline value.*
6. *Contaminant limits for any TBA must be nominated in accordance with condition C35.*

(C26) Groundwater quality monitored from any bore specified in Schedule C – Table C7 (Groundwater Monitoring Locations and Frequency) must not exceed the limit on any five (5) consecutive sampling occasions.

(C27) If quality characteristics of groundwater from any bore identified in Schedule C - Table C7 (Groundwater Monitoring Locations and Frequency) exceeds the threshold specified under condition C26, the holder of this environmental authority must complete an investigation in accordance with the ANZECC & ARMCANZ 2000, into the potential for environmental harm and provide a written report to the administering authority within 3 months, outlining:

(a) details of the investigations carried out, and

(b) actions taken to prevent environmental harm.

(C28) From 30 September 2025, a Groundwater Management Program must be developed and documented by an appropriately qualified person and implemented and maintained by the environmental authority holder.

(C29) The Groundwater Management Program required by Condition C28 must:

(a) identify potential sources, mechanisms, and pathways of contamination to groundwater from the activity; and

(b) ensure that all potential groundwater impacts due to the activity are identified, monitored and mitigated; and

(c) document sampling and monitoring methodology; and

(d) ensure that adequate groundwater monitoring and data analysis is undertaken to achieve the following objectives:

i. detect any impacts to groundwater levels due to the activity,

ii. detect any impacts to groundwater quality due to the activity, and

iii. determine trends in groundwater quality showing decreasing and increasing trends; and

(e) include an appropriate quality assurance and quality control program; and

(f) include a conceptual groundwater model which includes an assessment of predicted drawdown associated with dewatering

(g) specify the purpose of each groundwater bore, the monitoring location, quality characteristics and frequency; and

(h) include a review process to identify improvements to the program that includes addressing any comments provided by the administering authority.

(C30) The Groundwater Management Program must be reviewed on an annual basis by 30 June by an appropriately qualified person to determine if it continues to meet the requirements stated in Condition C29. The review must include at a minimum:

(a) an assessment that the Groundwater Management Program continues to meet the requirements stated in condition C29; and

(b) an assessment of the suitability of the monitoring network for groundwater specified in Table C7 (Groundwater Monitoring Locations and Frequency) to detect impacts from the mining activities; and

(c) where relevant information gaps or uncertainty are identified as pertinent to the accuracy of the investigations finding/conclusions, include recommendations and associated timeframes to address those information gaps and resolve uncertainty.

(C31) From 1 January 2026, an Annual Groundwater Monitoring Report must be prepared for the period of 1 January to 31 December the preceding year by an appropriately qualified person and the report submitted to the administering authority each year by 1 April. The report must include at the minimum:

(a) an assessment, analysis and interpretation of groundwater quality results from each monitoring event, including time series graph of all data and an assessment of trends in the groundwater

quality and level, a graphical comparison with at least the past five (5) years previous monitoring data;

(b) recommendation/s of the review that is conducted by the appropriately qualified person under condition C30;

(c) investigation of any potential groundwater quality deterioration when measured at any bore listed in Schedule C - Table C7 (Groundwater Monitoring Locations and Frequency).

(d) a review process to identify improvements to the Groundwater Management Program that includes addressing any comments provided by the appropriately qualified person required under condition C30.

(C32) The construction, maintenance and decommissioning of groundwater monitoring bores must be undertaken by a licensed appropriately qualified person in a manner that:

(a) prevents contaminants entering the groundwater; and

(b) ensures the integrity of the bores to obtain representative groundwater samples from the target aquifer; and

(c) maintains the hydrogeological environment within the aquifer.

(C33) A bore drill log must be kept for each reference, compliance and observation groundwater monitoring bore which includes:

(a) bore identification reference and geographic coordinate location;

(b) specific construction information including but not limited to depth of bore, depth and length of casing, depth and length of screening and bore sealing details;

(c) standing groundwater level and water quality characteristics including physical characteristics and results of laboratory analysis for the possible trigger characteristics;

(d) lithological data and stratigraphic interpretation by an appropriately qualified person to identify important features associated with groundwater monitoring; and

(e) target hydrogeological feature of the bore.

(C34) Monitoring and sampling must be carried out in accordance with the latest edition of the administering authority's monitoring and sampling manuals.

(C35) All "TBA" listed in Schedule C – Table C8 (Groundwater Quality Limits) must be nominated via an amendment application pursuant to the *Environmental Protection Act 1994* to this environmental authority by 30 September 2026.

END OF CONDITIONS FOR SCHEDULE C

Schedule D – Waste

Waste Disposal

(D1) No waste generated on site is authorised to be stored or disposed of on site aside from waste rock from ML100348 which is authorised to be received and disposed of within the underground workings on site.

(D2) All waste must be lawfully reused, recycled or removed to a facility that can lawfully accept the waste.

Regulated waste:

(D3) Regulated waste generated from the mining activity are not authorised to be stored or disposed at site.

(D4) Regulated waste must only be removed and transported from the site by a person who holds a current authority to transport such wastes to a facility that is lawfully able to accept the waste under the *Environmental Protection Act 1994*.

(D5) Where regulated waste is removed from the site, records must be kept of the following:

(a) the date, quantity and type of waste removed;

(b) name of the waste transporter that removed the waste; and

(c) the intended treatment/disposal destination of the waste.

Note: Records of documents maintained in compliance with a waste tracking system established under the Environmental Protection Act 1994 or any other law for regulated waste will be deemed to satisfy this condition.

Tyres Storage and Disposal

(D6) Waste tyres generated from the mining activity are not authorised to be stored or disposed of on site.

END OF CONDITIONS FOR SCHEDULE D

Schedule E – Noise and Vibration

General

(E1) Unless authorised by this environmental authority, noise from any mining activity must not cause serious or material environmental harm at any sensitive place or commercial place.

(E2) In the event of a complaint made to the administering authority (which is neither frivolous nor vexatious nor based on mistaken belief in the opinion of the authorised officer) about noise generated in carrying out the mining activity and the noise is considered by the administering authority to be an unreasonable noise, the holder must take action to ensure that it will not in the future cause unreasonable noise.

Noise Limits

(E3) The holder of this environmental authority must ensure that noise generated by the mining activities does not cause the criteria in Schedule E Table E1 – Noise limits to be exceeded at a sensitive place or commercial place.

(E4) When requested by the administering authority, the holder of this environmental authority must undertake noise monitoring and recording within a reasonable and practicable timeframe nominated by the administering authority to investigate any complaint of environmental nuisance at any sensitive place or commercial place, and the administering authority must be notified of the results within ten (10) business days following completion of monitoring.

Schedule E Table E1 – Noise limits

Sensitive place						
Noise level dB (A) measured as	Monday to Saturday			Sunday and public holidays		
	6am-6pm	6pm-10pm	10pm-6am	9am-6pm	6pm-10pm	10pm-9am
$LA_{eq\ adj\text{-}15min}$	CV = 50 AV =5	CV =45 AV =5	CV =40 AV =0	CV =45 AV =5	CV =40 AV =5	CV =35 AV =0
$LA_{1\ adj\ 15min}$	CV =55 AV =10	CV =50 AV =10	CV =45 AV =5	CV =50 AV =10	CV =45 AV =10	CV =40 AV =5
Commercial place						
Noise level dB (A) measured as	Monday to Saturday			Sunday and public holidays		
	7am-6pm	6pm-10pm	10pm-7am	9am-6pm	6pm-10pm	10pm-9am
$LA_{eq\ adj\text{-}15min}$	CV =55 AV =10	CV =50 AV =10	CV =45 AV =5	CV =50 AV =10	CV =45 AV =10	CV =40 AV =5

Note:

1. CV = Critical Value
2. AV = Adjustment Value.
3. Bg = background noise level ($L_{A90,\ adj,\ 15min}$) measured over 3-5 days at the nearest sensitive receptor.
4. To calculate noise limits in Table E1:
    a. If bg $\leq$ (CV – AV): Noise limit = bg +AV
    b. If (CV – AV) < bg $\leq$ CV : Noise limit = CV
    c. If bg >CV: Noise limit = bg + 0
5. In the event that measured bg ($L_{A90,\ adj,\ 15min}$) is less than 30 dB(A), then 30 dB(A) can be substituted for the measured background level.
6. If the project is unable to meet the noise limits as calculated above alternative limits may be calculated using the processes outline in the “Planning for Noise Control” guideline.

(E5) Noise monitoring and recording must include the following descriptor characteristics and matters:

(a) $L_{AN,T}$ (where N equals the statistical levels of 1, 10 and 90 and T = 15 mins);

(b) background noise L_{A90},

(c) the level and frequency of occurrence of impulsive or tonal noise and any adjustment and penalties to statistical levels;

(d) (d)atmospheric conditions including temperature, relative humidity and wind speed and directions;

(e) (e) effects due to any extraneous factors such as traffic noise;

(f) (f) location, date and time of monitoring;

(g) (g) if the complaint concerns low frequency noise, Max $Lp_{LIN,T}$; and

(h) if the complaint concerns low frequency noise, one third octave band measurements in dB(LIN) for centre frequencies in the 10 – 200 Hz range.

Airblast and overpressure nuisance.

(E6) Subject to condition E7 vibration from the mining activity must not cause an environmental nuisance, at any sensitive or commercial place.

(E7) When requested by the administering authority, vibration monitoring must be undertaken within a reasonable and practicable timeframe nominated by the administering authority to investigate any complaint (which is neither frivolous nor vexatious nor based on mistaken belief in the opinion of the authorized officer) of environmental nuisance at any sensitive or commercial place, and the results must be notified within 14 days to the administering authority following completion of monitoring.

(E8) The holder of this environmental authority must ensure that blasting does not cause the limits for peak particle velocity and air blast overpressure in Schedule E Table E2 – Blasting noise limits to be exceeded at a sensitive place or commercial place

***Schedule E Table E2* – Blasting noise limits**

Blasting noise limits	**Sensitive or commercial place limits**	
	6am to 6pm	**6pm to 6am**
Airblast overpressure	115 dB (Linear) Peak for 9 out of 10 consecutive blasts initiated and not greater than 120 dB (Linear) Peak at any time	115 bd (Linear) Peak
Ground vibration peak particle velocity	5mm/second peak particle velocity for 9 out of 10 consecutive blasts and not greater than 10 mm/second peak particle velocity at any time	0.3mm/second peak particle velocity.

END OF CONDITIONS FOR SCHEDULE E

Schedule F – Biodiversity

Prescribed environmental matters - matters of State environmental significance

(F1) Impacts to matters of State environmental significance (MSES) as a result of carrying out the activity must only occur within the locations and to the maximum extents stated in Schedule F Table F1 – Authorised impacts to MSES.

Schedule F Table F1– Authorised impacts to MSES

Matters of State environmental significance	Location of impact	Significant residual impact	Offset Required	Maximum extent of impact of total area on site
Regulated Vegetation				
Endangered regional ecosystem – RE 1.3.7a. Intersecting a water course.	See Schedule H – Figure 4 - Mapped Environmentally Sensitive Areas	Yes	Yes	0.48 ha of 30.58ha total site disturbance.

(F2) All impacts to MSES must be determined, documented, and mapped by an appropriately qualified person.

(F3) Records of impacts to MSES in conditions F2 must be kept for the life of the environmental authority and include:
(a) the size and extent of impact; and
(b) details about the condition of the MSES (e.g., dominant vegetation and remnant status); and
(c) a determination of whether the impact is a significant residual impact.

Environmental Offsets

(F4) An environmental offset must be made in accordance with the Environmental Offsets Act 2014 and Queensland Environmental Offsets Policy, dated 05/06/2025, for the maximum extent of impact to each prescribed environmental matter requiring an offset as listed in Schedule F Table F1 – Authorised impacts to MSES.

Note: Deemed conditions provided in section 16 of the *Environmental Offsets Act 2014* also apply to this authority. Any contravention of a deemed condition will be dealt with under the *Environmental Protection Act 1994*.

(F5) The environmental offset required by condition F4 can be delivered for each stage of impact.

END OF CONDITIONS FOR SCHEDULE F

Schedule G – Definitions

Where a word or phrase in this document is defined in this Schedule or within the document, it has its corresponding meaning. Where a word or phrase in this document is not defined in this Schedule, it has the meaning given to it in (in order of priority):

• the Environmental Protection Act 1994 (EP Act), its regulations or its environmental protection policies;

• the Acts Interpretation Act 1954;

• the Macquarie Dictionary (taking account of the context in which the word or phrase is used in this document).

For example, environmental value, environmental harm, environmental nuisance, material environmental harm, serious environmental harm and relevant act are defined in the EP Act and groundwater is defined in the Environmental Protection Regulation 2019.

Defined words or phrases in the singular include the plural and vice versa.

Activity means the environmentally relevant activities to which the environmental authority relates

Airblast overpressure means energy transmitted from the blast site within the atmosphere in the form of pressure waves. The maximum excess pressure in the wave, above ambient pressure is the peak airblast overpressure measured in decibels linear (dB).

ambient (or total) noise at a place, means the level of noise at the place from all sources (near and far), measured as the Leq for an appropriate time interval.

ANZECC means Australia and New Zealand Environment and Conservation Council.

ARMCANZ means Agriculture and Resource Management Council of Australia and New Zealand.

Appropriately qualified person means a person who has professional qualifications, training, skills or experience relevant to the EA requirements and can give authoritative assessment, advice and analysis in relation to the EA requirements using the relevant protocols, standards, methods or literature.

Assessed and **assessment** by a suitably qualified and experienced person in relation to a hazard assessment of a dam, means that a statutory declaration has been made by that person and, when taken together with any attached or appended documents referenced in that declaration, all of the following aspects are addressed and are sufficient to allow an independent audit of the assessment:

(a) exactly what has been assessed and the precise nature of that determination;
(b) the relevant legislative, regulatory and technical criteria on which the assessment has been based;
(c) the relevant data and facts on which the assessment has been based, the source of that material, and the efforts made to obtain all relevant data and facts; and
(d) the reasoning on which the assessment has been based using the relevant data and facts, and the relevant criteria.

Authority means environmental authority (mining activities) under the *Environmental Protection Act 1994*.

Authorised officer means a person appointed under section 445 of the *Environmental Protection Act 1994.*

Background means prevailing level in a specified environment measured in the absence of impacts being studied.

Blasting means the use of explosive materials to fracture (a) rock, coal and other minerals for later recovery, or (b) structural components or other items to facilitate removal from a site or for reuse.

Certification, in connection with dam management, means assessment and approval must be undertaken by a suitably qualified and experienced person in relation to any assessment or documentation required by this manual, including design plans, ‘as constructed’ drawings and specifications, construction, operation or an annual report

regarding regulated structures, undertaken in accordance with the Board of Professional Engineers of Queensland Policy "Certification by RPEQs (ID: 1.4 (2A)).

Certifying, **certify** or **certified** have a corresponding meaning as 'certification'

Commercial place means a workplace used as an office or for business or commercial purposes, which is not part of the mining activity and does not include employees' accommodation or public roads.

Competent person means a person with the demonstrated skill and knowledge required to carry out the task to a standard necessary for the reliance upon collected data or protection of the environment.

Emergency action plan means documentation forming part of the operational plan held by the holder or a nominated responsible officer, that identifies emergency conditions that sets out procedures and actions that will be followed and taken by the dam owner and operating personnel in the event of an emergency. The actions are to minimise the risk and consequences of failure and ensure timely warning to downstream communities and the implementation of protection measures. The plan must require dam owners to annually update contact details that are part of the plan, and to comprehensively review the plan at least every five years.

Emergency event in the context of this environmental authority, is an unexpected situation which will disrupt production and where environmental harm has the potential to occur if alternate actions are not taken.

EC means Electrical Conductivity.

Environmental authority holder means the holder of this environmental authority.

Infrastructure means water storage dams, roads and tracks, buildings and other structures built for the purpose of mining activities but does not include facilities required for the long-term management of mining impacts or the protection of potential resources. Such facilities include dams containing hazardous waste, waste rock dumps, voids, or ore stockpiles and buildings or other structures whose ownership can be transferred and which have a residual beneficial use for the next owner of the operational land or the background landowner.

Land in the "land schedule" of this document means land excluding waters and the atmosphere.

Measures includes any measures to prevent or minimise environmental impacts of the activity such as bunds, silt fences, diversion drains, capping, and containment systems.

Mineral means a substance which normally occurs naturally as part of the earth's crust or is dissolved or suspended in water within or upon the earth's crust and includes a substance which may be extracted from such a substance, and includes—

(a) clay if mined for use for its ceramic properties, kaolin and bentonite;
(b) foundry sand;
(c) hydrocarbons and other substances or matter occurring in association with shale or coal and necessarily mined, extracted, produced or released by or in connection with mining for shale or coal or for the purpose of enhancing the safety of current or future mining operations for coal or the extraction or production of mineral oil there from;
(d) limestone if mined for use for its chemical properties;
(e) marble;
(f) mineral oil or gas extracted or produced from shale or coal by in situ processes;
(g) peat;
(h) salt including brine;
(i) shale from which mineral oil may be extracted or produced;
(j) silica, including silica sand, if mined for use for its chemical properties;
(k) rock mined in block or slab form for building or monumental purposes; but does not include—
(l) living matter;
(m) petroleum within the meaning of the *Petroleum Act 1923*;
(n) soil, sand, gravel or rock (other than rock mined in block or slab form for building or monumental purposes) to be used or to be supplied for use as such, whether intact or in broken form;
(o) water.

Noxious means harmful or injurious to health or physical wellbeing, other than trivial harm**.**

NATA means National Association of Testing Authorities (Australia).

Natural flow means the flow of water through waters caused by nature.

Offensive means causing reasonable offence or displeasure; is disagreeable to the sense; disgusting, nauseous or repulsive, other than trivial harm.

Oxide ore means fully oxidised rock which has no acid forming potential.

Ore or waste rock characterised as having acid forming potential means any rock with either a Net Acid Producing Potential of greater than 5 kg of H_2SO_4/tonne or a Net Acid Generation oxidation pH of less than 4.5 (pH unit).

Peak particle velocity (ppv) means a measure of ground vibration magnitude which is the maximum rate of change of ground displacement with time, usually measured in millimetres/second (mms^{-1}).

Protected area means - a protected area under the *Nature Conservation Act 1992*; or
- a marine park under the *Marine Parks Act 1992*; or
- a World Heritage Area.

Reference site (or analogue site) may reflect the original location, adjacent area or another area where rehabilitation success has been completed for a similar biodiversity. Details of the reference site may be as photographs, computer generated images and vegetation models etc.

Receiving environment means all groundwater, surface water, land, and sediments that are not disturbed areas authorised by this environmental authority.

Representative means a sample set which covers the variance in monitoring or other data either due to natural changes or operational phases of the mining activities.

Qualified person (see “appropriately qualified person”)

Sensitive place means;
- a dwelling, residential allotment, mobile home or caravan park, residential marina or other residential premises; or
- a motel, hotel or hostel; or
- an educational institution; or
- a medical centre or hospital; or
- a protected area under the *Nature Conservation Act 1992*, the *Marine Parks Act 1992* or a World Heritage Area; or
- a public park or gardens.

Significant disturbance - includes land;
(a) if it is contaminated land; or
(b) it has been disturbed and human intervention is needed to rehabilitate it;
    i. to a state required under the relevant environmental authority; or
    ii. if the environmental authority does not require the land to be rehabilitated to a particular state - to its state immediately before the disturbance.

Some examples of disturbed land include:
- areas where soil has been compacted, removed, covered, exposed or stockpiled;
- areas where vegetation has been removed or destroyed to an extent where the land has been made susceptible to erosion; (vegetation & topsoil)
- areas where land use suitability or capability has been diminished;
- areas within a watercourse, waterway, wetland or lake where mining activities occur;
- areas submerged by tailings or hazardous contaminant storage and dam walls in all cases;

- areas under temporary infrastructure. Temporary infrastructure includes any infrastructure (roads, tracks, bridges, culverts, dams, bores, buildings, fixed machinery, hardstand areas, airstrips, helipads etc.) which is to be removed after mining activities have ceased; or
- areas where land has been contaminated and a suitability statement has not been issued.

However, the following areas are not included:

- areas off lease (e.g. roads or tracks which provide access to the mining lease);
- areas previously significantly disturbed which have achieved the rehabilitation outcomes;
- by agreement with the administering authority, areas previously significantly disturbed which have not achieved the rehabilitation objective(s) due to circumstances beyond the control of the mine operator (such as climatic conditions);
- areas under permanent infrastructure. Permanent infrastructure includes any infrastructure (roads, tracks, bridges, culverts, dams, bores, buildings, fixed machinery, hardstand areas, airstrips, helipads etc.) which is to be left by agreement with the landowner. The agreement to leave permanent infrastructure must be recorded in the Landowner Agreement and lodged with the administering authority;
- disturbances that pre-existed the grant of the tenure unless those areas are disturbed during the term of the tenure.

Stakeholder means a person who is readily identifiable and is affected by, or is directly concerned with the holder of this environmental authority's mining activities

TBD means to be determined

Trivial harm means environmental harm which is not material or serious environmental harm and will not cause actual or potential loss or damage to property of an amount of, or amounts totalling more than $5,000.

Watercourse has the same meaning given in the *Water Act 2000*.

Waters includes all or any part of a river, stream, lake, lagoon, pond, swamp, wetland, unconfined surface water, unconfined water in natural or artificial watercourses, bed and bank of a watercourse, dams, non-tidal or tidal waters (including the sea), stormwater channel, stormwater drain, roadside gutter, stormwater runoff, and groundwater.

END OF CONDITIONS FOR SCHEDULE G

Schedule H: Figures

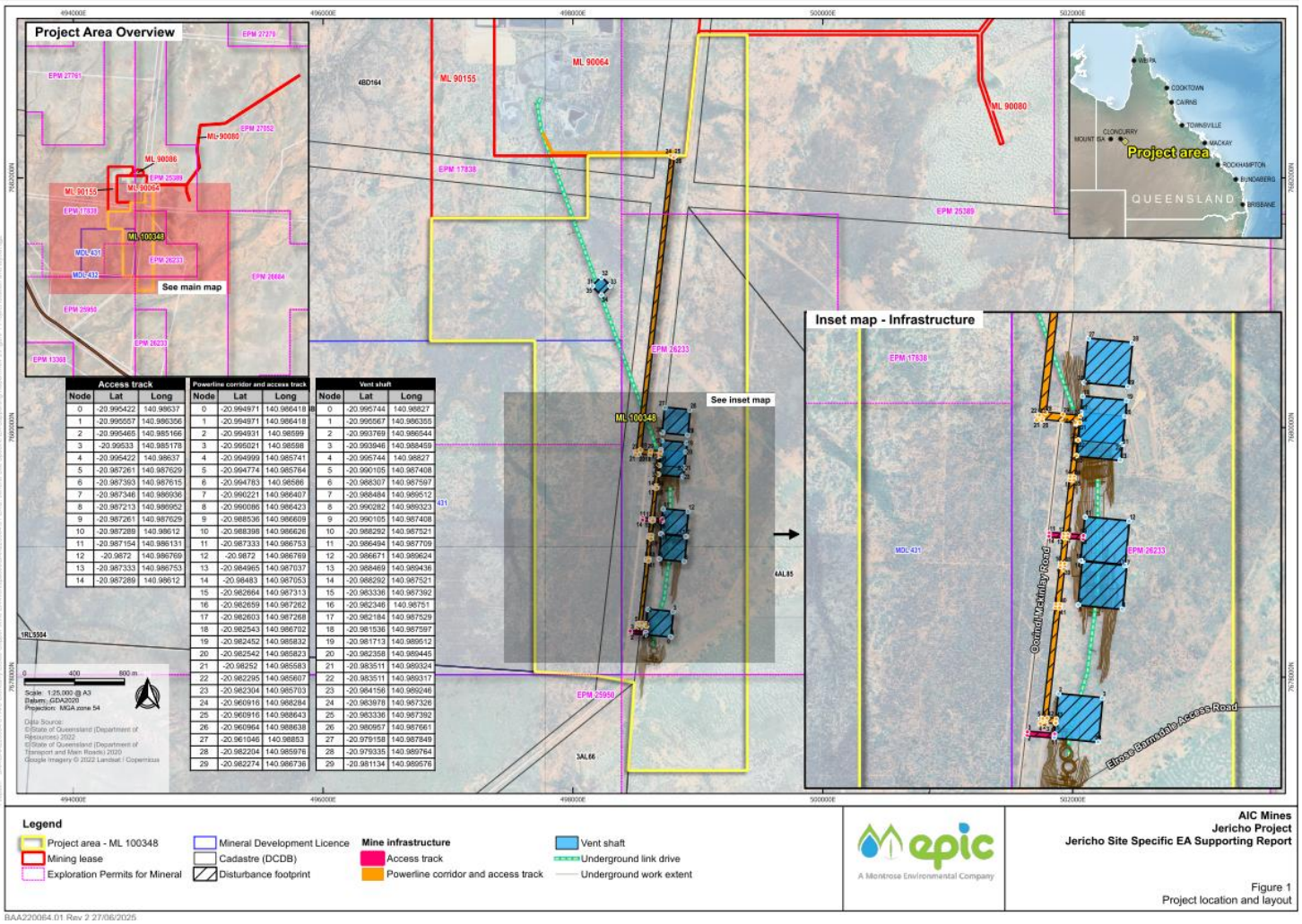


Figure 1 – Project layout and location.

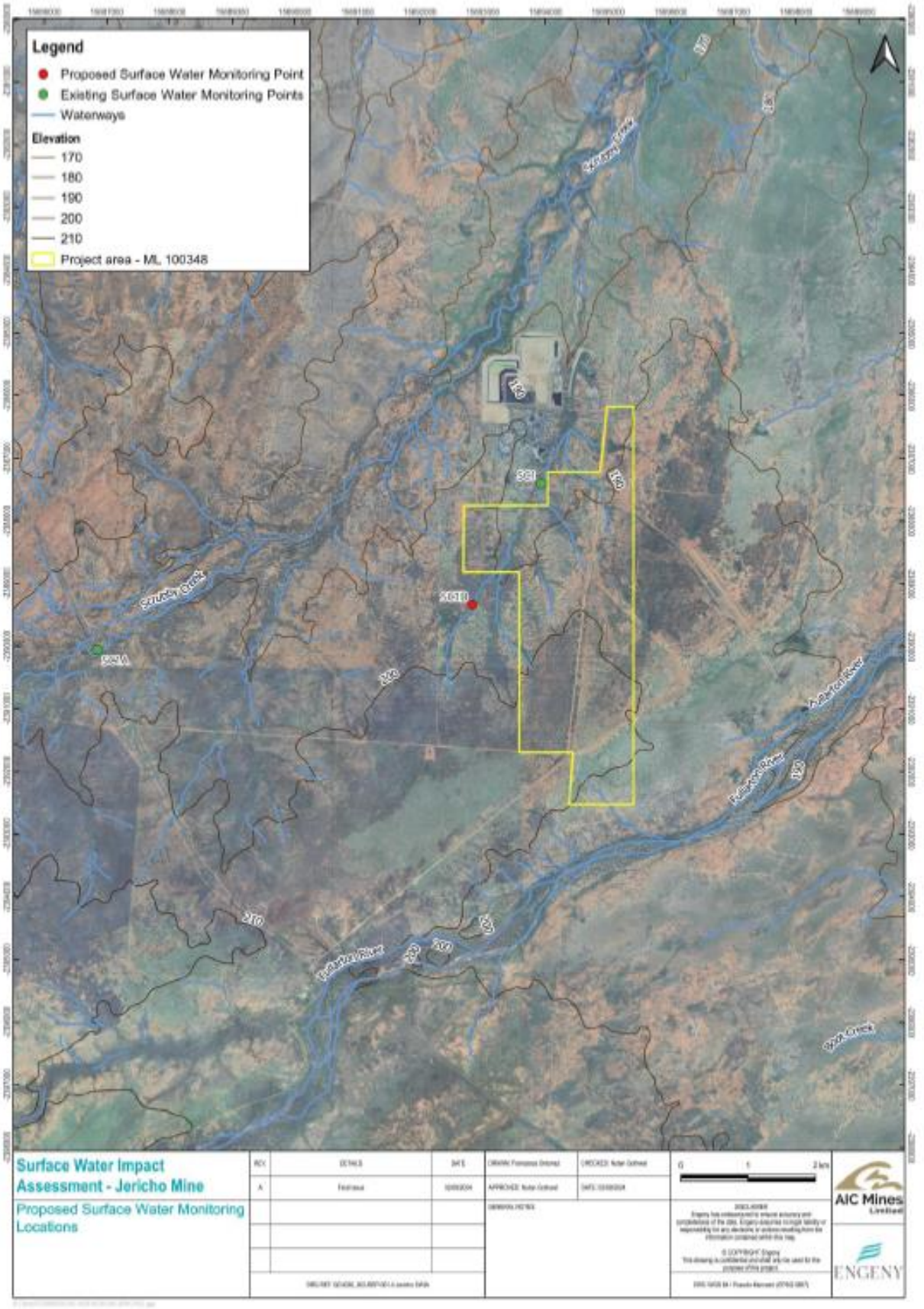


Figure 2: Surface Water Monitoring Locations.

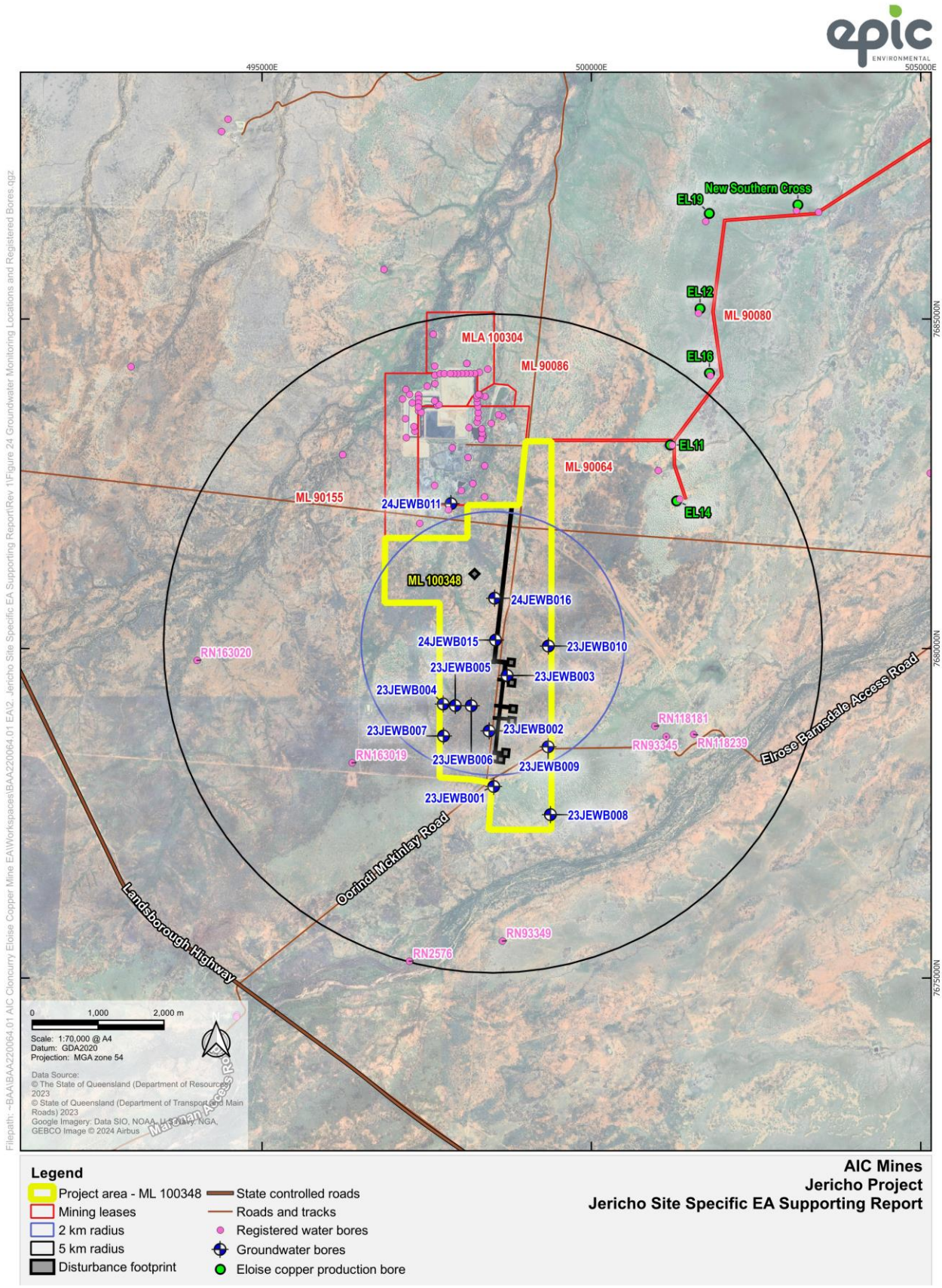


Figure 3: Groundwater Monitoring Locations.

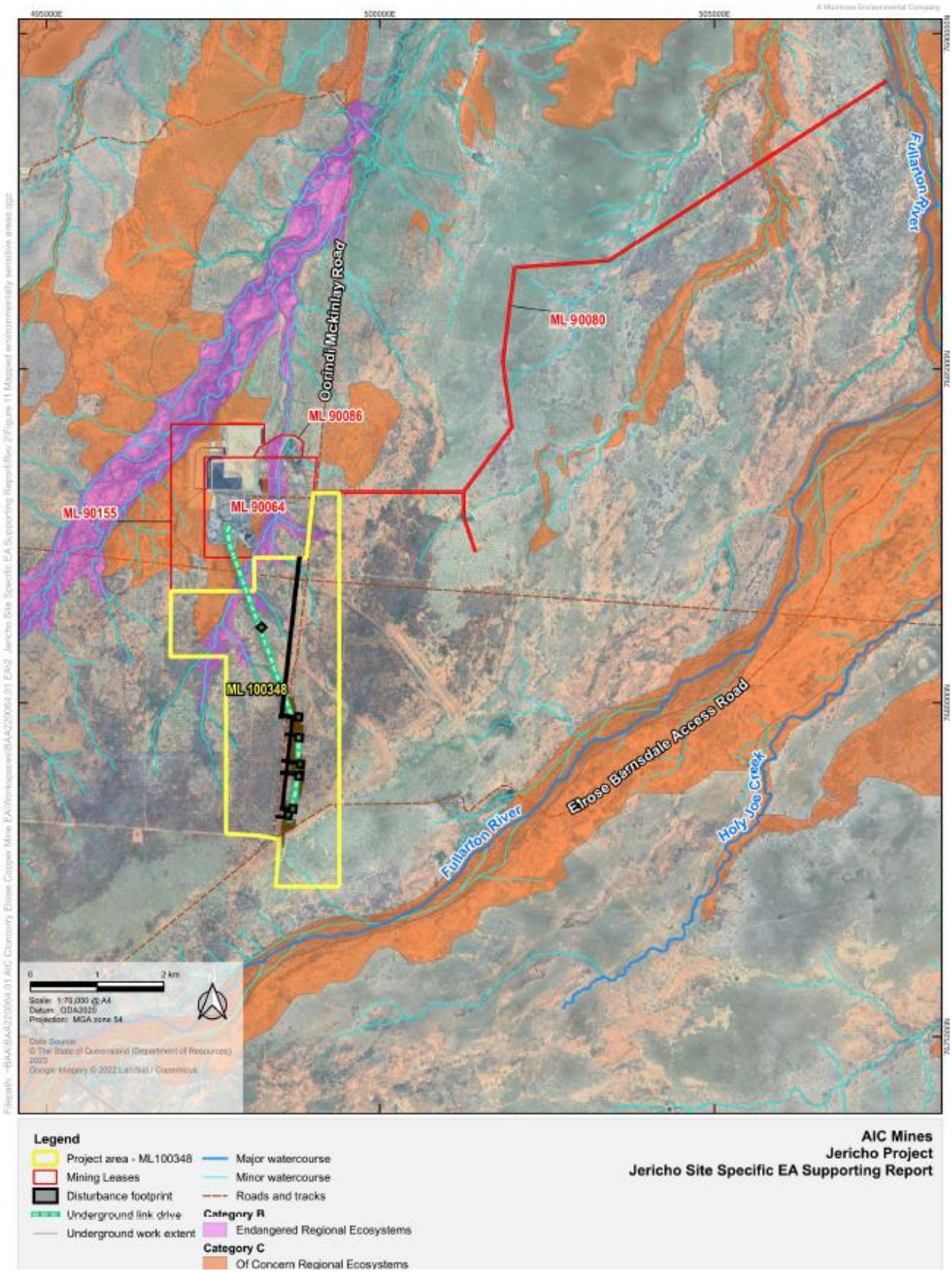


Figure 4: Mapped Environmentally Sensitive Areas

END OF ENVIRONMENTAL AUTHORITY