Permit

Environmental Protection Act 1994

Environmental authority EPPR03052115

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

Environmental authority number: EPPR03052115

Environmental authority takes effect 9 October 2023

Environmental authority holder(s)

Name(s)	Registered address
Hannigan & Associates Pty Limited	C/- Cuesta Coal Pty Ltd Suite 3B, 165 Moggill Road TARINGA QLD 4068

Environmentally relevant activity and location details

Environmentally relevant activity/activities	Location(s)
Resource Activity, Schedule 2A, 09: A mining activity involving drilling, costeaning, pitting or carrying out geological surveys causing significant disturbance	EPC2013

Additional information for applicants

<u>Environmentally relevant activities</u>

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).

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 contaminated land give written notice to the administering authority if they become aware of the following:

- the happening of an event involving a hazardous contaminant on the contaminated land (notice must be given within 24 hours); or
- a change in the condition of the contaminated land (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 contaminated land (notice must be given within 20 business days) that is causing, or is reasonably likely to cause, serious or material environmental harm.

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.

Signature	Date
	9 October 2023

Ben Byrd
Department of Environment and Science
Delegate of the administering authority
Environmental Protection Act 1994

Enquiries:
Business Centre (Coal)
Department of Environment and Science
PO Box 3028
EMERALD QLD 4720
Phone: (07) 4987 9320
Email: CRMining@des.qld.gov.au

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

Schedule A: General	
Condition number	**Condition**
A1	This environmental authority authorises environmental harm referred to in the conditions. Where there is no condition or this environmental authority is silent on a matter, the lack of a condition or silence does not authorise environmental harm.
A2	The conditions of this environmental authority are in force until a surrender of the authority is accepted pursuant to the *Environmental Protection Act 1994*. The conditions apply unless an amendment is approved pursuant to the *Environmental Protection Act 1994*.
A3	The holder of this environmental authority is not authorised to undertake costeaning or bulk sampling on EPC 2013.
A4	Contaminants must not be released to the receiving environment unless authorised by this environmental authority.
A5	The environmental authority holder must: a) install all measures, plant and equipment necessary to ensure compliance with the conditions of this environmental authority b) maintain such measures, plant and equipment in a proper and efficient condition c) operate such measure, plant and equipment in a proper and efficient condition d) ensure all instruments and devices used for the measurement and monitoring of any parameter under any condition of this environmental authority are properly calibrated.
A6	**Monitoring, reporting and emergency response procedures** The environmental authority holder must record and notify the administering authority of any emergency or incident which demonstrates non-compliance with the conditions of this environmental authority.
A7	The holder of this environmental authority must notify the administering authority by written notification within **twenty-four (24) hours**, after becoming aware of any emergency or incident which results in the release contaminants not in accordance, or reasonably to be not in accordance with, the conditions of this environmental authority.

A8	The notification in condition **A7** 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 emergency or incident; e) the time the holder of the environmental authority became aware of the emergency or incident; f) where known: i. the estimated quantity and type of substances involved in the emergency or incident; ii. the actual or potential cause of the emergency or incident; iii. a description of the nature and effects of the emergency or incident including environmental risks, and any risks to public health or livestock; g) any sampling conducted or proposed, relevant to the emergency or incident; h) immediate actions taken to prevent or mitigate any further environmental harm caused by the emergency or incident; and i) what notification of stakeholders who may be affected by the emergency or incident has occurred or is being undertaken.
A9	Within **ten (10) business days** following the initial notification of an emergency or incident under condition **A7**, or receipt of monitoring results, whichever is the latter, 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.
A10	The notification in condition **A9** must include the following: (a) the location of the emergency or incident; (b) the date and time of the emergency or incident; (c) the estimated quantity and type of any substances involved in the emergency or incident; (d) the potential impacts to environmental values caused by the emergency or incident; and (e) where there is potential impact on livestock or human health, precautionary measures that should be taken.

A11	**Complaints** The environmental authority holder must record all environmental complaints received about the mining activities including: a) name, address and contact number for of the complainant b) time and date of complaint c) reasons for the complaint d) investigations undertaken e) conclusions formed f) actions taken to resolve the complaint g) any abatement measures implemented h) person responsible for resolving the complaint.
A12	The environmental authority holder must notify, in writing, the occupiers or registered owners of affected land and any other potentially impacted stakeholder as soon as reasonably practicable 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.
A13	The environmental authority holder must, when requested by the administering authority, undertake relevant specified monitoring within a reasonable timeframe nominated or agreed to by the administering authority to investigate any complaint of environmental harm. The results of the investigation (including an analysis and interpretation of the monitoring results) and abatement measures, where implemented, must be provided to the administering authority within **ten (10) business days** of completion of the investigation, or no later than **ten (10) business days** after the end of the timeframe nominated by the administering authority to undertake the investigation.
A14	**Service, maintenance and storage areas** The environmental authority holder must not directly or indirectly release fuels, oils, lubricants or other contaminants to any watercourse, waterway, groundwater, wetland or lake.
A15	Where monitoring is a requirement of this environmental authority, ensure that a competent person(s) conduct all monitoring.
A16	**Hazardous Contaminants** The holder of the environmental authority must plan and conduct activities on site to prevent any potential or actual release of a Hazardous Contaminant.
A17	The environmental authority holder must ensure that spills of hazardous contaminants are cleaned up as quickly as practicable. Such spillage must not be cleaned up by hosing, sweeping or otherwise releasing such contaminants to any watercourse, waterway, groundwater, wetland or lake.
A18	The holder of the environmental authority must not carry out activities within 100m of a Historical, Archaeological or Ethnographic site.

A19	The environmental authority holder must ensure that: a) all chemical, fuel and oil storage facilities of less than **ten thousand (10,000) litres** on a mining tenement are designed and operated in accordance with Australian Standard 1940 – 'The storage and handling of flammable and combustible liquids', Section 2, Minor Storage; and b) all chemical, fuel and oil storage facilities of more than **ten thousand (10,000) litres** on a mining tenement are bunded to contain at least **one hundred (100) percent** of the volume of the largest container, plus twenty-five percent of the storage capacity of the largest container up to a maximum of **ten thousand (10,000) litres**, together with ten percent of the storage capacity beyond **ten thousand (10,000) litres**; and c) chemical, fuel and oil storage facilities on a mining tenement are operated and maintained in accordance with the Australian Standard 1940 – "The Storage and Handling of flammable and combustible liquids".
A20	The holder of the environmental authority must ensure: a) all marker pegs are marked with contrasting colour so as to be clearly visible; b) all marker pegs are removed from the tenement at the completion of exploration activities; c) all permanent markers (example, concrete plugs or steel plates) are installed at ground level and made safe.
A21	All explosives, hazardous chemicals, corrosive substances, toxic substances, gases and dangerous goods must be stored and handled in accordance with the current Australian Standard where such is applicable.
A22	Flammable and combustible liquids, including petroleum products, must be stored and handled in accordance with the latest edition of *AS1940 – The storage and handling of flammable and combustible liquids*.
A23	The environmental authority holder must minimise the potential for contamination of land and waters by diverting stormwater around contaminated areas and facilities used for the storage of chemicals and flammable or combustible liquids.
A24	All chemicals and flammable or combustible liquids stored on site that have the potential to cause environmental harm must be stored in or serviced by an effective containment system that is impervious to the materials stored and managed to prevent the release of liquids to waters or land. Where no relevant Australian Standard is available, the following must be applied: (a) storage tanks must be bunded so that the capacity and construction of the bund is sufficient to contain at least 110% of a single storage tank or 100% of the largest storage tank plus 10% of the second largest storage tank in multiple storage areas, and (b) drum storages must be bunded so that the capacity and construction of the bund is sufficient to contain at least 25% of the maximum design storage volume within the bund.
A25	**Spill Kit** An appropriate spill kit, personal protective equipment and relevant operator instructions/emergency procedure guides for the management of wastes, chemicals and flammable and combustible liquids associated with the activity must be kept at the site.
A26	Anyone operating with wastes, chemicals or flammable and combustible liquids under this approval must be trained in the use of the spill kit.

Schedule B: Air and Noise	
Condition number	**Condition**
B1	The release of dust or particulate matter or both resulting from the exploration activity must not cause an environmental nuisance, at any nuisance sensitive or commercial place.
B2	When requested by the administering authority or as a result of a complaint (which is neither frivolous nor vexatious nor based on mistaken belief in the opinion of the authorised officer), dust and particulate monitoring must be undertaken, and the results thereof notified to the administering authority within **fourteen (14) days** following completion of monitoring. Monitoring must be carried out at a place(s) relevant to the potentially affected dust sensitive place. Dust and particulate matter must not exceed the following levels when measured at any sensitive receptor or commercial place: (a) dust deposition of 120 milligrams per square metre per day, when monitored in accordance with *Australian Standard AS 3580.10.1 of 2003* (or more recent editions); and (b) a concentration of particulate matter with an aerodynamic diameter of less than 10 micrometre (μm) (PM_{10}) suspended in the atmosphere of 50 micrograms per cubic metre over a 24 hour averaging period, at a sensitive receptor or commercial place downwind of the site, when monitored in accordance with: (i) *Australian Standard AS 3580.9.6 of 2003* (or more recent editions) *Ambient air – Particulate matter – Determination of suspended particulate PM_{10} high-volume sampler with size-selective inlet – Gravimetric method*; or (ii) Any alternative method of monitoring PM_{10} which may be permitted by the current edition of the *Air Quality Sampling Manual* as published from time to time by the administering authority.
B3	If monitoring indicates exceedance of the relevant limits in condition **B2**, then the environmental authority holder must: (a) address the complaint including the use of appropriate dispute resolution if required; and (b) immediately implement dust abatement measures so that emissions of dust from the activity do not result in further environmental nuisance.
B4	The holder of the environmental authority must not cause an unreasonable release of dust. To prevent the unreasonable release of dust, the following measures or similar measures can be used: a) altering work practices to avoid or minimise the generation of dust; b) scheduling activities for times when they will have least impact; c) spraying water on roads and tracks; d) revegetating disturbed areas as soon as practicable; e) leaving or creating wind breaks or screening; and f) installing pollution control equipment (e.g. fitting bag filters or a cyclone to dust generating equipment).
B5	The environmental authority holder must not cause unreasonable noise at a noise sensitive place.

Schedule C: Water	
Condition number	**Condition**
C1	Contaminants must not be released to any water or the bed and banks of any waters.
C2	Sediment control barriers must be made of non-organic material to prevent the spread of weeds.
C3	Diversion drains and sediment control barriers must be in place immediately after any clearing.

Schedule D: Land	
Condition number	**Condition**
D1	Excluding campsites, no more than **one thousand** (**1,000) square meters** can be disturbed at any one location.
D2	Campsites must not, at any one time, cause more than **five thousand (5,000) square meters** to be disturbed.
D3	Campsites must not be established within Category B Environmentally Sensitive Areas or within 500 metres of any Category B Environmentally Sensitive Areas.
D4	The holder of the environmental authority must consult with the landowner prior to establishing any Campsites.
D5	When establishing a campsite, the holder of the environmental authority must ensure that the area and duration of disturbance to land, vegetation and watercourses is minimised.
D6	When establishing and maintaining campsites the following measures or similar measures can be used to minimise the area and duration of disturbance to land, vegetation and watercourses: a) locate campsites at least 100m from any riverine areas; b) only disturb the minimum area necessary for the safe functioning of the campsite; c) install an appropriate human waste disposal facility (e.g. portable self contained toilets, pit toilets, septic tanks); d) use absorption trenches, transpiration beds or spray irrigation to dispose of grey water; and e) locate all disposal areas at least 100m distance from any watercourse, waterway, groundwater recharge area, wetland or lake.
D7	The environmental authority holder must not undertake mining activities in any Category A Environmentally Sensitive Area. Activities involving machinery must not be carried out within 1 km of a Category A environmentally sensitive area.
D8	The environmental authority holder is authorised to carry out exploration mining activities on EPC2013 within Category B Environmentally Sensitive Areas and within 500 metres of any Category B Environmentally Sensitive Areas in accordance with **Table 1: Authorised disturbance within Category B Environmentally Sensitive Areas and within 500m of any Category B Environmentally Sensitive Areas**.

Table 1: Authorised disturbance within Category B Environmentally Sensitive Areas and within 500m of any Category B Environmentally Sensitive Areas

Activity	Limitation of activity within Category B Environmentally Sensitive Area	Limitation of activity within 500m buffer of Category B Environmentally Sensitive Area	Maximum footprint of disturbance permitted for each activity within Category B Environmentally Sensitive Area and within 500m buffer of Category B Environmentally Sensitive Area	Maximum disturbance authorised within Category B Environmentally Sensitive Area	Maximum disturbance authorised within 500m buffer of Category B Environmentally Sensitive Area	Location illustrated in
Geotechnical sampling sites	1	10	Conducted on access tracks therefore no additional disturbance is authorised	0ha	0ha	
Access tracks	0.05km	8.23km	3m wide per track	0.02ha	2.47ha	
Groundwater Monitoring Bores	½ bore pad	½ bore pad	400m^2	400 m^2 per drill pad 300 mm diameter per drill hole	400 m^2 per drill pad 300 mm diameter per drill hole	Figure 1: Mapped Regional Ecosystems and Groundwater Monitoring Bore Locations
Access tracks to groundwater monitoring Bores	1 track	1 track	3m wide per track	0.01 ha	0 ha	

D9	**Topsoil and overburden management** Topsoil stripping within Category B Environmentally Sensitive Areas or within 500 metres of any Category B Environmentally Sensitive Areas must be limited to the sump area.
D10	The environmental authority holder must ensure that topsoil is removed and stockpiled prior to carrying out any mining activity and prevent or minimise the mixing and erosion of topsoil and overburden stockpiles.
D11	The environmental authority holder is authorised to undertake rehabilitation work in Category B Environmentally Sensitive Areas and within 500m of any Category B Environmentally Sensitive Areas as per the rehabilitation requirements of this environmental authority.
D12	**Seismic Surveying** The environmental authority holder is not authorised to undertake 2D or 3D seismic surveys within Category B Environmentally Sensitive Areas or within 500m of any Category B Environmentally Sensitive Area.
D13	**Vegetation and Tree Protection** Clearing native plants or interfering with animal breeding places is not permitted unless authorised under the *Nature Conservation Act 1992*.
D14	Burning of vegetation is not permitted.
D15	Tracks must be constructed and maintained such that: a) existing access and fence line tracks are preferentially used; b) any tracks constructed link natural clearings; c) line of site clearing is avoided; d) new crossings over watercourses are avoided and is only permitted when no reasonable alternative is available; and e) all tracks are constructed and maintained with adequate drainage to avoid accelerated erosion.
D16	The holder of the environmental authority must consult with the Landowner prior to establishing any new roads and tracks.
D17	The construction of new tracks must be recorded with a Global Positioning System (GPS) in GDA2020 coordinate system and records kept of their location and made available to the administering authority upon request.
D18	The environmental authority holder must revegetate disturbed areas in any Category B Environmentally Sensitive Areas with plant species that will promote the same vegetation type and density of cover to that of the surrounding undisturbed areas of the relevant Category B Environmentally Sensitive Area.
D19	The environmental authority holder must revegetate disturbed areas within 500m of any Category B Environmentally Sensitive Area with plant species that will promote the same vegetation type and density of cover to that of the surrounding undisturbed areas.
D20	All land subject to mining activities must be rehabilitated to a non-polluting, safe, stable and self-sustaining landform.

D21	**Weed Management** All equipment such as earthmoving and drilling equipment must be used in a manner which prevents the spread of weeds and minimise unnecessary disturbance of topsoil and ground cover vegetation.
D22	An annual report must be prepared each year and submitted with each annual return. The report must include a map identifying **all** exploration activities undertaken to date. The map is to clearly distinguish between proposed, completed and rehabilitated mining activities to demonstrate compliance with this environmental authority.
D23	The environmental authority holder must not drill, excavate, or clear vegetation: a) in standing waters, wetlands, or lakes; or b) on the sloped banks or within **three (3) meters** of the top of the bank or **five (5) meters** of the toe of the bank; or c) within, or on the levee banks of the normal flow channel.
D24	The environmental authority holder must not directly or indirectly release wastewater to any watercourse, waterway, groundwater, wetland or lake.
D25	From **9 October 2023**, records demonstrating that each impact to a prescribed environmental matter did not, or is not likely to, result in a significant residual impact to that matter must be: a) completed by an appropriately qualified person; and b) kept for the life of the environmental authority.
D26	Significant residual impacts to prescribed environmental matters are not authorised under this environmental authority or the *Environmental Offsets Act 2014*.
D27	**Erosion and Sediment Control** The holder of the environmental authority must design, install and maintain adequate banks and or diversion drains to minimise the potential for storm water runoff to enter disturbed areas.
D28	The holder of the environmental authority must design, install and maintain adequate erosion and sediment control structures wherever necessary to prevent or minimise erosion of disturbed areas and the sedimentation of any watercourse, waterway, wetland or lake.
D29	All equipment such as earthmoving and drilling equipment must be used in a manner which prevents the spread of weeds, minimises unnecessary disturbance of topsoil and ground cover vegetation; and avoids mature trees.
D30	The construction, maintenance and management of groundwater bores (including groundwater monitoring bores) must be undertaken in a manner that prevents or minimises impacts to the environment and ensures the integrity of the bores to obtain accurate monitoring.
D31	The environmental authority holder must decommission all non-artesian drill holes, apart from those still required for monitoring purposes, as soon as practical but no later than **six (6) months** after the hole was drilled by undertaking the following actions: a) where practical dispose of all unused drill chips to the hole or to a sump pit and; b) cap the hole at a depth that is appropriate for the previous land use of the area (unless the landowner stipulates a future use which requires the cap to be placed deeper); and c) backfill the hole above the cap with soil or material similar to the surrounding soil or material.

D32	The environmental authority holder must isolate non-artesian aquifers where a drill hole intersects more than one water bearing strata by casing or plugging the hole as soon as practical after the hole is no longer required, but no later than **two (2) months** after the hole was drilled, apart from those holes that are still required for monitoring purposes if: a) the flow difference between aquifers exceeds **five hundred (500) litres per hour**; and b) the difference in electrical conductivity of water is greater than **ten (10) percent** of the lower value.
D33	Conditions **D31** and **D32** do not apply to a non-artesian exploration drill hole if: a) the land owner and the environmental authority holder have agreed that it should be left for conversion to a water bore; and b) the land owner gives a written undertaking to accept responsibility for the hole; and c) the details of the agreement and the drill hole (such as its GPS location and the drill logs showing the water bearing strata and flow rates) are provided to the Department of Resources within **thirty (30) days** of the land owner giving the undertaking; and d) the hole is temporarily capped so as to prevent possible ingress of surface waters and associated sediments and pollutants.
D34	The environmental authority holder must ensure that exploration drill holes that strike artesian flows of water that exceeds **five hundred (500) litres per hour** for **seven (7) days** must be either: a) decommissioned as soon as practical, but no later than **one (1) month** after the hole was drilled, apart from holes that are still required for monitoring or evaluation purposes; or b) capped to allow for future conversion into a controlled artesian bore by a licensed water bore driller; or c) converted into a controlled artesian bore by a licensed water bore driller, provided that: i) the land owner has undertaken in writing to accept responsibility for the drill hole; and ii) the explorer provides details of the agreement and the drill hole to the Department of Resources within **thirty (30) days** of obtaining the landowner's agreement.
D35	The environmental authority holder must ensure that exploration drill holes that are to be retained for future mineral resource evaluation purposes are cased and capped. Holes to be retained for more than three years must be capped with steel casing and appropriately identified.
D36	When drilling, excavating or sampling, the holder of the environmental authority must ensure that the area and duration of disturbance to land and vegetation is minimised.
D37	**Gridlines and geophysical surveys** The environmental authority holder must plan and determine the final position of gridlines and geophysical lines (including, but not limited to, seismic lines) in consultation with the landowner

D38	When constructing gridlines and geophysical lines (including, but not limited to, seismic lines), the environmental authority holder must ensure that the area and duration of disturbance to land and vegetation is minimised by undertaking the following measures: a) conduct surveying of gridlines on foot; b) use existing gates, tracks, roads and seismic lines; c) before deciding on the location of new seismic lines, record the location of all underground or surface pipelines, cables, power lines, etc. and avoid these areas; d) in planning for drilling and sampling activities, where possible, ensure the activities occur at least **one hundred (100) metres** from riverine areas; e) construct seismic lines that do not exceed the width necessary to safely undertake the survey; f) use Global Positioning Systems, or other techniques, to reduce the need for line of sight clearing; g) maintain buffer widths of at least **twenty-five (25) metres** between all disturbed areas; h) minimise the use of bulldozers and excavators when cutting gridlines and/or seismic lines; and i) notify landowners at least **twenty-four (24) hours** prior to detonating seismic explosives.

Schedule E: Waste	
Condition number	**Condition**
E1	General Waste must not be disposed of within EPC2013.
E2	Regulated Waste must not be disposed of within EPC2013.
E3	**Waste rock** The environmental authority holder must, where practical, separate acid producing waste rock from benign waste rock.
E4	The environmental authority holder must dispose of acid producing waste rock in an excavation or pit and backfill as soon as practical. Backfill the excavation or pit containing acid producing waste rock with benign, low permeability material and seal the excavation or pit with a compacted capping layer at least **one (1) metre** thick.

Schedule F: Rehabilitation	
Condition number	**Condition**
F1	The environmental authority holder must rehabilitate areas disturbed by mining activities to a stable landform similar to that of surrounding undisturbed areas, unless otherwise stated in the conditions of this environmental authority

F2	The environmental authority holder must revegetate disturbed areas in any Category B Environmentally Sensitive Area with plant species that will promote the same vegetation type and density of cover to that of the surrounding undisturbed areas of the relevant Category B Environmentally Sensitive Area.
F3	The environmental authority holder must revegetate disturbed areas within 500m of any Category B Environmentally Sensitive Area with plant species that will promote the same vegetation type and density of cover to that of the surrounding undisturbed areas.
F4	An annual report must be prepared each year and submitted with each annual return. The report must include a map and details of all exploration activities undertaken, including details of new tracks, monitoring bores and progressive rehabilitation works completed to demonstrate compliance with conditions **F2** to **F3**
F5	The holder of the environmental authority must backfill all excavations drill holes or sampling sites as soon as practical following the completion of exploration activities. This does not apply to any excavations, drill holes or sampling sites that are to remain after the completion of exploration activities, by agreement with the land owner.
F6	In Riverine Areas, the holder of the environmental authority must complete the rehabilitation Processes on all areas disturbed by mining activities, apart from those areas currently being utilised for mining activities, as soon as practical and prior to the onset of the wet season.
F7	Notwithstanding condition **F5**, **F6**, **D31** and **D32**, rehabilitation processes on all areas disturbed by mining activities, apart from those areas currently being utilised for mining activities under this environmental authority, must be completed as soon as practical but no longer than **six (6) months** after completion of works in those areas.
F8	For any infrastructure to remain after all mining activities have ceased, the environmental authority holder must obtain the written agreement of the landowner stating they will take over responsibility for that infrastructure. Infrastructure may only be retained where its use aligns with the post mining land use for the disturbed area

END OF CONDITIONS

Definitions

Key terms and/or phrases used in this document are defined in this section. Where a term is not defined, the definition in the *Environmental Protection Act 1994*, its regulations or environmental protection policies must be used. If a word remains undefined it has its ordinary meaning.

"administering authority" means the Department of Environment and Heritage Protection (DEHP) or its successor.

"artesian drill hole" - An exploration drill hole from which water freely flows at a rate of greater than 500 L/hour for at least 7 days after being drilled.

"authority" means environmental authority (exploration) under the *Environmental Protection Act 1994*.

"banks" -The feature which confines major flows within a watercourse. They are steeper than a terrace and are generally of a slope greater than 1:1 on outer bends. Refer to Figure 1 – Cross Section through a Watercourse.

"bund" - means

(a) An earth mound or similar structure (e.g. a concrete block wall), whether impervious or not, constructed to contain spilled material (e.g. petrol, diesel, oil etc); or

(b) a structure to prevent or reduce soil erosion.

"campsite" means the area encompassing any dwelling, amenities (e.g. toilet block, power generator), sewage or general waste disposal facility and includes the office area and vehicle parking areas associated with a temporary or permanent mining camp.

"category B environmentally sensitive area" means any of the areas mentioned in Schedule 12, Part 1, section 2 of the *Environmental Protection Regulation 2008*.

"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.

"contaminant" - The *Environmental Protection Act 1994* defines, under Section 11, a contaminant as:

(a) a gas, liquid or solid; or

(b) an odour; or

(c) an organism (whether alive or dead), including a virus; or

(d) energy, including noise, heat, radioactivity and electromagnetic radiation; or

(e) a combination of contaminants.

"contamination" -Section 10 of the *Environmental Protection Act 1994* defines contamination of the environment as the release (whether by act or omission) of a contaminant into the environment.

"contaminated land" -Schedule 3 of the *Environmental Protection Act 1994* defines contaminated land as land contaminated by a hazardous contaminant. (See below for a definition of hazardous contaminant.)

"contaminated land register" - Means the register kept by the administrating authority under section 541 of the *Environmental Protection Act 1994*.

"contour banks" -Are mounds of earth constructed along the contours of the land to reduce the amount and velocity of run-off down the slope.

"costeaning" means the digging of a trench or pit across the seam or ore body for exposing, sampling and mapping of the ore body.

"culvert" -A covered channel, or a pipe of large diameter conveying water below ground level. Also applies to a tunnel through which water is pumped or permitted to flow.

"density of cover", in reference to trees and/or shrubs, it means the number of trees or shrubs in a specified area (e.g. 50 trees per square kilometre). With reference to understorey species (e.g. grasses and forbs), it means the percentage of surface area covered with exploration project.

“designated service area” -Is a nominated site, selected and managed to minimise contamination of land or water, where the majority of services or maintenance of machinery or plant is to be conducted.

“disturbed” means any area that has had its natural state altered by the action or interference of carrying out an activity associated with the exploration project.

“endangered regional ecosystem (ERE)” means an endangered regional ecosystem as declared in the *Vegetation Management Regulation 2000* shown on the current Regional Ecosystem Map and identified in the database maintained by the Department of Environment and Heritage Protection (or its successor) called ‘Regional Ecosystem Descriptions” database containing regional ecosystem numbers and descriptions.

“environmental audit statement” - Verifies the accuracy of the final rehabilitation report and identifies any residual financial assurance requirements.

‘Environmental authority’ or **‘authority’** means a licence or approval issued by the administering authority under the *Environmental Protection Act 1994* (Qld).

“environmental management register” - Means the register kept by the administrating authority under section 541 of the *Environmental Protection Act 1994*.

“environmental protection policy” - Means an environmental protection policy approved under chapter 2 of the *Environmental Protection Act 1994*.

“environmentally sensitive areas” refers to locations, however large or small, that have environmental values that contribute to maintaining biological diversity and integrity, have intrinsic or attributed scientific, historical or cultural heritage value, or are important in providing amenity, harmony or sense of community. Refer to Appendix A.

“environmental value” - Section 9 of the *Environmental Protection Act 1994* defines an environmental value as:

(a) a quality or physical characteristic of the environment that is conducive to ecological health or public amenity or safety; or

(b) another quality of the environment identified and declared to be an environmental value under an Environmental Protection Policy or Regulation (e.g. water suitable for swimming in or drinking)

“ethnographic site” - An archaeological site of particular importance to the study of a cultural group.

“final rehabilitation report” - Means a final rehabilitation report prepared under chapter 5, part 10, division 2, subdivision 2 of the *Environmental Protection Act 1994*. The report assesses the extent to which the standard environmental conditions and any additional conditions of the environmental authority have been met.

“flood flow channel” - For a representative drawing of a flood flow channel refer to Figure 1‘Cross Section Through a Watercourse’ and Figure 2 – ‘Plan View of a Watercourse’.

“general waste” as per the definition in the Environmental Protection Regulation 2019.

‘Hazardous contaminant’ means a contaminant that, if improperly treated, stored, disposed of or otherwise managed, is likely to cause serious or material environmental harm because of:

a) its quantity, concentration, acute or chronic toxic effects, carcinogenicity, teratogenicity, mutagenicity, corrosiveness, explosiveness, radioactivity, flammability; or

b) its physical, chemical or infectious characteristics (e.g.: spills of mercury, cyanide, petrol, diesel or oil).

“historical site” -A site containing objects from the past that allows the study of the way people lived and worked at that place in the past.

‘Infrastructure’ includes roads, tracks, bridges, culverts, dams, bores, buildings, fixed machinery, hardstand areas, pipelines, powerlines, airstrips, helipads and other similar structures.

“lake” -A natural or artificial body of water, either permanent or intermittent.

'Land' means land excluding waters and the atmosphere, that is, the term has a different meaning from the term as defined in the *Environmental Protection Act 1994*. For the purposes of the *Acts Interpretation Act 1954*, it is expressly noted that the term 'land' in this environmental authority relates to physical land and not to interests in land.

"landowner" -Schedule 3 of the *Environmental Protection Act 1994* defines the owner of the land as –

(1) The **"owner"** of land is—

- (a) for freehold land—the person recorded in the freehold land register as the person entitled to the fee simple interest in the land; or
- (b) for land held under a lease, licence or permit under an Act—the person who holds the lease, licence or permit; or
- (c) for trust land under the *Land Act 1994*—the trustees of the land; or
- (d) for Aboriginal land under the *Aboriginal Land Act 1991*—the persons to whom the land has been transferred or granted; or
- (e) for Torres Strait Islander land under the *Torres Strait Islander Land Act 1991*—the persons to whom the land has been transferred or granted; or
- (f) for land for which there is a native title holder under the Commonwealth Native Title Act— each registered native title party in relation to the land.

(2) Also, a mortgagee of land is the owner of the land if—

- (a) the mortgagee is acting as a mortgagee in possession of the land and has the exclusive management and control of the land; or
- (b) the mortgagee, or a person appointed by the mortgagee, is in possession of the land and has the exclusive management and control of the land.

"licensed general waste disposal facility" - A site authorised by the administrating authority to receive general waste or limited regulated waste (e.g. a rubbish dump).

"limited regulated waste" - Schedule 9 of the *Environmental Protection Regulation 1998*, defines limited regulated waste. The only limited regulated wastes relevant to mining projects are asbestos and tyres.

"material environmental harm" – Section 16 of the *Environmental Protection Act 1994* defines material environmental harm as:

(1) material environmental harm is environmental harm (other than environmental nuisance)

- (a) that is not trivial or negligible in nature, extent or context; or
- (b) that causes actual or potential loss or damage to property of an amount of, or amounts totalling, more than the threshold amount but less than the maximum amount; or
- (c) that results in costs of more than the threshold amount but less than the maximum amount being incurred in taking appropriate action to
  - i) prevent or minimise the harm; and
  - ii) rehabilitate or restore the environment to its condition before the harm.

In this section

"maximum amount" means the threshold amount for serious environmental harm.

"threshold amount" means $5 000 or, if a greater amount is prescribed by regulation, the greater amount.

"mature trees" means any tree that is 70% or greater of the predominant canopy height.

"mine" -Section 6A of the *Mineral Resources Act 1989*, defines mining as –

(1) **"Mine"** means to carry on an operation with a view to, or for the purpose of

- (a) winning mineral from a place where it occurs; or

(b) extracting mineral from its natural state; or

(c) disposing of mineral in connection with, or waste substances resulting from, the winning or extraction.

(2) For subsection (1), extracting includes the physical, chemical, electrical, magnetic or other way of separation of a mineral.

(3) Extracting includes, for example, crushing, grinding, concentrating, screening, washing, jigging, tabling, electro winning, solvent extraction electro winning (SX-EW), heap leaching, flotation, fluidised bedding, carbon-in-leach (CIL) and carbon-in-pulp (CIP) processing.

(4) However, extracting does not include

(a) a process in a smelter, refinery or anywhere else by which mineral is changed to another substance; or

(b) testing or assaying small quantities of mineral in teaching institutions or laboratories, other than laboratories situated on a mining lease; or

(c) an activity, prescribed under a regulation, that is not directly associated with winning mineral from a place where it occurs.

(5) For subsection (1), includes the disposal of tailings and waste rock.

(6) A regulation under subsection (4)(c) may prescribe an activity by reference to the quantities of minerals extracted or to any other specified circumstances.

“native vegetation” means vegetation that occurs naturally in a certain area.

“normal flow channel” - For a representative drawing of a normal flood flow channel of a water course refer to Figure 1- ‘Cross Section Through a Watercourse’ and Figure 2 - ‘Plan View of a Watercourse’.

“notifiable activity” - Means an activity in schedule 2 of the *Environmental Protection Act 1994*.

“outer bends” - For a representative drawing of an outer bend of a watercourse refer to Figure 1– “Cross Section Through a Watercourse” and Figure 2 – “Plan View of a Watercourse”.

“overburden” -Material overlying a mineral ore deposit, up to but not including the topsoil.

“Progressive rehabilitation” means rehabilitation (defined below) undertaken progressively or a staged approach to rehabilitation as mining operations are ongoing.

“referable dam” -The *Water Resources Act 1989* defines referable dams as

(a) works or proposed works that include or would include a barrier whether permanent or temporary that does or could or would impound, divert or control water, which barrier

i) is more than 8 m in height and has a storage capacity of more than 500 ML; or

ii) is more than 8 m in height and has a storage capacity of more than 250 ML and a catchment area that is more than 3 times its maximum surface area or full supply level;

(b) works:

i) that consist of or include or would consist of or include a barrier whether permanent or temporary that does or could or would impound, divert or control water or hazardous waste, other than a barrier defined in paragraph (a);

ii) other than a barrier whether permanent or temporary that does or could or would impound, contain, divert or control hazardous waste; declared by the chief executive by notification published in the gazette to be a referable dam by reason of the danger to life or property that could or would eventuate upon the collapse or failure of or the escape of hazardous waste from those works and includes the storage areas created by the works but does not include a tank constructed of steel or concrete or a combination of those materials.

The term does not include a weir, other than a weir that has a variable flow control structure on the crest of the weir.

“regulated waste” - Schedule 9 of the *Environmental Protection Regulation 1998* defines regulated waste as non-domestic waste mentioned in schedule 7 (whether or not it has been treated or immobilised), and includes for an element - any chemical compound containing the element; and

anything that has contained the waste.

(e.g. Regulated waste commonly generated from mining projects include tyres, oils, cyanide, mercury and batteries)

"rehabilitation processes" means the measures and actions taken to achieve rehabilitation outcomes, including any or all of the following:

(a) removing all unwanted infrastructure;

(b) backfilling mine excavations (e.g. pits) and capping drill holes;

(c) reshaping the land surface to a stable landform similar to that of surrounding undisturbed areas;

(d) spreading of topsoil;

(e) spreading seed or planting seedlings to promote revegetation;

(f) benching ridge cuts and removing any overhanging material.

'Residual drilling material' means waste drilling materials including muds and cuttings or cement returns from drill holes which are left behind after drilling fluids are removed.

'Riverine area' means the land adjoining and associated with watercourses, including the bed, banks, adjoining terraced land and riparian vegetation.

"sediment pond" - A bunded or excavated structure used to contain and settle waterborne sediment running off disturbed areas.

"sediment trap" - A device used to filter waterborne sediment running off disturbed areas. May include silt fences, hay bales or grassed strips.

'sensitive place' means:

(a) a dwelling, residential allotment, mobile home or caravan park, residential marina or other residential premises, or

(b) a motel, hotel or hostel, or

(c) an educational institution, or

(d) a medical centre or hospital, or

(e) a protected area under the *Nature Conservation Act 1992*, the *Marine Parks Act 1992* or a World Heritage Area, or

(f) a public park or gardens.

"serious environmental harm" – Section 17 of the *Environmental Protection Act 1994* defines serious environmental harm as

1. environmental harm (other than environmental nuisance)

(a) that causes actual or potential harm to environmental values that is irreversible, of a high impact or widespread; or

(b) that causes actual or potential harm to environmental values of an area of high conservation value or special significance; or

(c) that causes actual or potential loss or damage to property of an amount of, or amounts totalling, more than the threshold amount; or

(d) that results in costs of more than the threshold amount being incurred in taking appropriate action to

  i) prevent or minimise the harm; and

  ii) rehabilitate or restore the environment to its condition before the harm.

In this section - **"Threshold amount"** means $50 000 or, if a greater amount is prescribed by regulation, the greater amount.

"significantly disturbed land" - Land is significantly disturbed if –

(a) it is contaminated land; or

(b) it has been disturbed and human intervention is needed to rehabilitate it.

Significantly disturbed land includes:

(a) areas where soil has been compacted, removed, covered, exposed or stockpiled;

(b) areas where vegetation has been removed or destroyed to an extent where the land has been made susceptible to erosion; (vegetation & topsoil)

(c) areas where land use suitability or capability has been diminished;

(d) areas within a watercourse, waterway, wetland or lake where mining project activities occur;

(e) areas submerged by tailings or hazardous contaminant storage and dam walls in all cases;

(f) 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 has ceased; or

(g) areas where land has been contaminated.

However, the following areas are not included:

(a) areas off lease (e.g. roads or tracks which provide access to the mining lease);

(b) areas previously significantly disturbed which have achieved the rehabilitation outcomes;

(c) by agreement with the administering authority, areas previously significantly disturbed which have not achieved the rehabilitation objectives due to circumstances beyond the control of the mine operator (such as climatic conditions);

(d) 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;

(e) disturbances that pre-existed the grant of the tenure unless those areas are disturbed during the term of the tenure.

'**Significant Residual Impact**' as determined by the latest version of the Queensland Government's 'Queensland Environmental Offsets Policy – Significant Residual Impact Guideline'

"site management plan" - Means a site management plan approved under chapter 7, part 8 of the *Environmental Protection Act 1994*.

"standard criteria" - Are defined in schedule 3 of the *Environmental Protection Act 1994*.

They are:

(a) the principles of ecological sustainable development; and

(b) any applicable environmental protection policy; and

(c) any applicable Commonwealth, State or local government plans, standards, agreements or requirements; and

(d) any applicable environmental impact study, assessment or report; and

(e) the character, resilience and values of the receiving environment; and

(f) all submissions made by the applicant and interested parties; and

(g) best practice environmental management; and

(h) financial implications; and

(i) the public interest; and

(j) any applicable site management plan; and

(k) any other matter prescribed under a regulation.

“Standard Environmental Conditions” For an environmental authority, means the standard environmental conditions approved for the authority under section 707A of the *Environmental Protection Act 1994.*

“standard mining activity” - Means a mining activity decided to be a standard activity under section 151 of the *Environmental Protection Act 1994*.

“suitability statement” - The *Environmental Protection Act 1994* defines a suitability statement as :

for land, means a statement about the uses and activities for which the land is suitable.

“technical guidelines” - Guidelines that indicate best practice environmental management.

“topsoil” - The surface layer of a soil profile, which is usually more fertile, darker in colour, better structured and supports greater biological activity than underlying layers. The surface layer may vary in depth depending on soil forming factors, including parent material, location and slope, but generally is not greater than about 300mm in depth from natural surface.

“tracks” means roads, tracks or paths, greater than ten (10) metres in length, that have been fully stripped of all vegetation to enable the progress of vehicles, equipment or pedestrians.

‘Unreasonable noise’ means noise that:

a) causes unlawful environmental harm; and
b) is unreasonable, having regard to the following matters:
    i) its characteristic;
    ii) its intrusiveness
    iii) the time at which it is made;
    iv) where it can be heard;
    v) other noises ordinarily present at the place where it can be heard; and
c) exceeds quality objectives defined in Schedule 1 of the Environmental Protection (Noise) Policy 2019 ‘Acoustic quality objectives’.

‘Unreasonable release’ of dust to the air environment, means a release of dust, that:

a) causes unlawful environmental harm; and
b) is unreasonable having regard to the following matters:
    i) its characteristic;
    ii) its intrusiveness;
    iii) other releases of dust at the place affected by the release;
    iv) where the effect of the release of dust can be noticed; or
    v) the order in which the person releasing the dust started to carry out the activity from which the release is made and persons affected by the release started to carry out other activities that may be affected by the release of dust.

“watercourse” means a river, creek or stream in which water flows permanently or intermittently in a visibly defined channel (natural, artificial or artificially improved) with:

(a) continuous bed and banks;

(b) an extended period of flow for some months after rain ceases, and

(c) an adequacy of flow that sustains basic ecological processes and maintains biodiversity

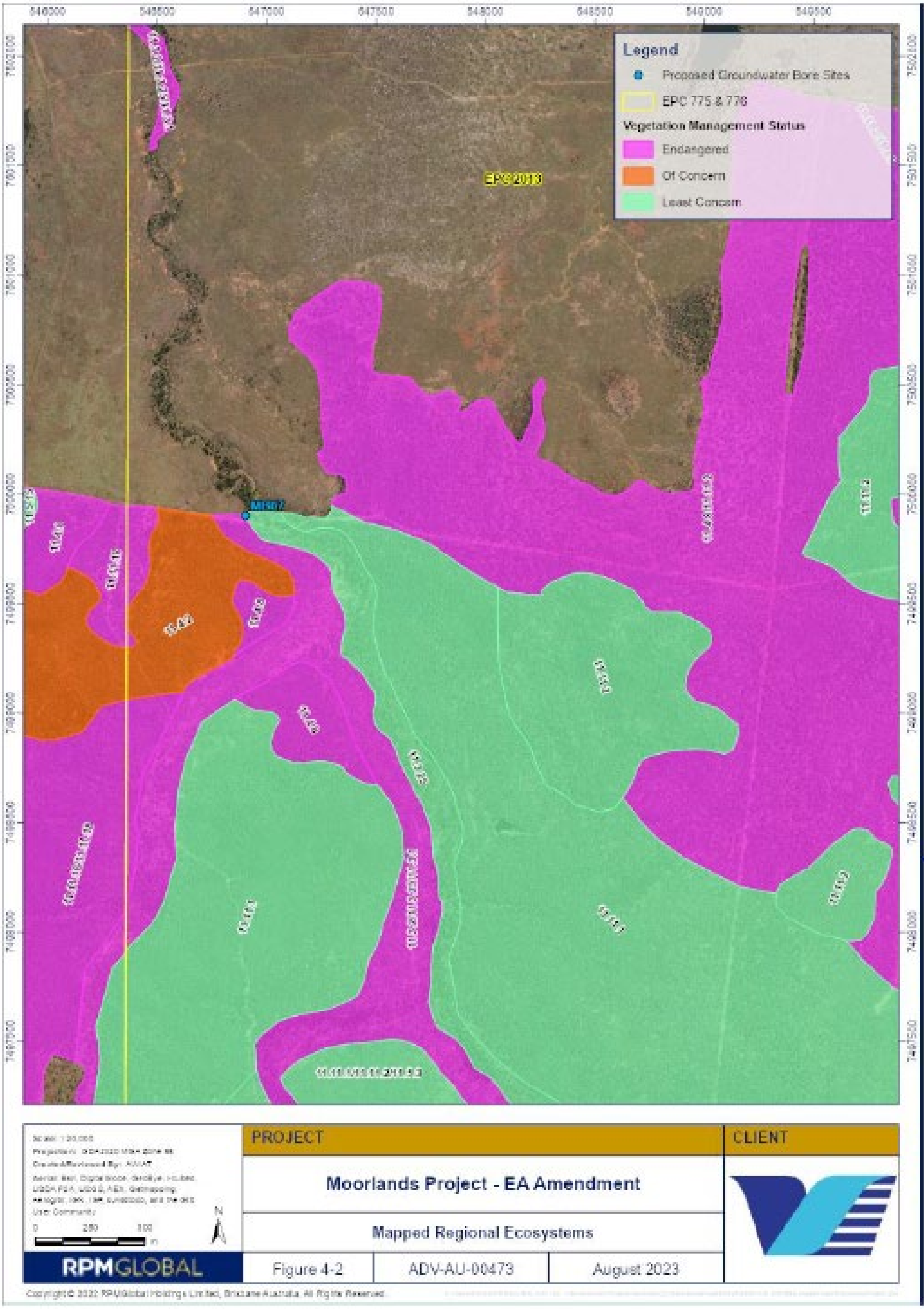
"waterway" - A naturally occurring feature where surface water runoff normally collects, such as a clearly defined swale or gully, but only flows in response to a local rainfall event.

"wetland" - Are areas of permanent or periodic/intermittent inundation, whether natural or artificial, with water that is static or flowing, fresh, brackish or salt, including areas of marine water the depth of which at low tide does not exceed 6m. Wetlands typically include areas such as lakes, swamps, marshes, estuaries or mudflats.

END OF DEFINITIONS

Schedule 1 – Approved plans

Figure 1: Mapped Regional Ecosystems and Groundwater Monitoring Bore Locations



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