Permit

Environmental Protection Act 1994

Environmental authority EPPR03282115

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

Environmental authority number: EPPR03282115

Environmental authority takes effect on 01 May 2018. This is the take effect date.

The anniversary date of this environmental authority is 3 August. 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.

Environmental authority holder(s)

Name(s)	Registered address
ENDOCOAL PTY LTD	Level 4, Rowes Building 235 Edward Street BRISBANE CITY QLD 4000

Environmentally relevant activity and location details

Environmentally relevant activity/activities	Location(s)
Schedule 3 - 09 - A mining activity involving drilling, costeaning, pitting or carrying out geological surveys causing significant disturbance	EPC818
Schedule 3 - 09 - A mining activity involving drilling, costeaning, pitting or carrying out geological surveys causing significant disturbance	MDL3030

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.

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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.

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.

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

Enquiries:
Coal & Gemstone Mining
Department of Environment, Science and Innovation
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).

Obligations under the *Mining and Quarrying Safety and Health Act 1999*

If you are operating a quarry, other than a sand and gravel quarry where there is no crushing capability, you will be required to comply with the *Mining and Quarrying Safety and Health Act 1999*. For more information on your obligations under this legislation contact Mine Safety and Health at www.resources.qld.gov.au, or phone 13 QGOV (13 74 68) or your local Mines Inspectorate Office.

Development Approval

This permit is not a development approval under the *Planning Act 2016*. The conditions of this environmental authority are separate, and in addition to, any conditions that may be on the development approval. If a copy of this environmental authority is attached to a development approval, it is for information only, and may not be current. Please contact the Department of Environment and Science to ensure that you have the most current version of the environmental authority relating to this site.

Legislative Requirements and Conditions of Environmental Authority

Condition

General

A1 This environmental authority does not authorise environmental harm unless a condition contained within the authority explicitly authorises that harm. Where there is no condition or the authority is silent on a matter, the lack of a condition or silence shall not be construed as authorising harm.

A2 The activity must not be carried out until the environmental authority holder has given financial assurance to the administering authority as security for compliance with this environmental authority and any costs or expenses, or likely costs or expenses, mentioned in section 298 of the Act.

A3 The amount of financial assurance must be reviewed by the holder of this environmental authority when the authority is amended.

A4 The financial assurance is to remain in force until the administering authority is satisfied that no claim on the financial assurance is likely.

Note: Where certification of progressive rehabilitation is completed and acceptable to the administering authority, progressive reductions to the amount of financial assurance will be applicable where rehabilitation has been completed in accordance with the rehabilitation conditions specified in this environmental authority.

A5 The conditions of this environmental authority are in force until surrender of the authority is accepted pursuant to the Environmental Protection Act 1994.

A6 **Maintenance of Machinery, Plant and Equipment**

The environmental authority holder must:

a) install all measured, plant and equipment necessary to ensure compliance with the conditions of this environmental authority;

b) maintain such measures, plant and equipment in a proper manner; and

c) operate such measures, plant and equipment in a proper manner.

A7 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.

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A8 The notification in condition A7 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.

A9 The mining activity must not at any one time, cause more than 10ha of land to be significantly disturbed.

A10 No more than 20 cubic metres of any substance is, or will be, extracted from each kilometre of a riverine area affected by the mining activity in a year.

A11 The environmental authority holder is not authorised to undertake bulk sampling or costeaning.

A12 The environmental authority holder is not authorised to burn vegetation.

A13 **Waste**

The holder of the environmental authority must not directly or indirectly release waste from the project area to any watercourse, waterway, groundwater, wetland or lake.

Notes:

- When managing waste materials the following strategy should be adopted;
- avoid creating excess waste;
- reuse waste materials;
- recycle waste;
- create and utilise energy from waste;
- treat waste; and
- dispose of waste (e.g. provide rubbish containers on site).
- Where practicable take all General Waste to a Licensed General Waste Disposal Facility.

A14 All waste must be removed and disposed offsite.

A15 **Camps**

The holder of the environmental authority must consult with the landowner prior to establishing any campsites.

A16 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.

Notes:

- 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:

- locate campsites at least 100m from any riverine areas;

- only disturb the minimum area necessary for the safe functioning of the campsite;

- install an appropriate human waste disposal facility (e.g. portable self-contained toilets, pit toilets, septic tanks);

- use absorption trenches, transpiration beds or spray irrigation to dispose of grey water; and

- locate all disposal areas at least 100m distance from any watercourse, waterway, groundwater recharge area, wetland or lake.

- With regard to on site waste water management refer to the Environmental Protection (Water) Policy 2008.

A17 The mining activity must not at any one time, cause more than 5000 square metres of land to be disturbed at a camp site.

A18 Campsites must not be established within Category B ESA or within 500 metre buffer of any Category B ESA.

A19 **Roads and Tracks**

The holder of the environmental authority must consult with the landowner prior to establishing any new roads and tracks.

Notes:

- Repair all damage to existing private roads and tracks resulting from mining activities, so that they are as trafficable as they were prior to any damage.

A20 When constructing new roads and tracks, the holder of the environmental authority must ensure that the area and duration of disturbance to land, vegetation and watercourses is minimised.

Notes:

- When planning and constructing new roads and tracks the following measures or similar measures can be used to minimise the area and duration of disturbance of land, vegetation and watercourses;

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- wherever possible use or upgrade existing roads and tracks;

- construct roads and tracks along natural grades;

- minimise the width of roads and tracks;

- minimise the number of crossings in riverine areas;

- construct crossings in riverine areas in a stable section of the bed;

- avoid constructing roads or tracks that run straight down the bank to the crossing;

- do not disadvantage other users of existing public roads and tracks;

- construct a bed level causeway, a culvert or a bridge where natural bed conditions within a watercourse will not carry the intended traffic load or where crossing of the bed will generate a significant increase in turbidity;

- minimise the number of cuts and fills in riverine areas;

- position cuts and fills in riverine areas to minimise risk of erosion from subsequent flood events;

- position crossings to prevent flow being directed towards the banks and provide erosion resistance to the bed and banks downstream of a crossing for a distance equal to the width of the normal flow channel;

- do not create any downstream or upstream drops at the lip of culverts or causeways;

- regularly clean out culverts, bridges and causeways to prevent flow being impeded or redirected; and

- construct in-stream crossings outside of main fish migration periods.

A21 The construction of new tracks must be recorded with a Global Positioning System (GPS) in GDA94 coordinate system and records kept of their location and made available to the administering authority upon request.

A22 Roads or tracks must not be constructed within Category B ESA or within 500 metre buffer of any Category B ESA, expected where authorised in this environmental authority.

A23 The holder of the environmental authority must ensure that all explosives, hazardous chemicals, corrosive substances, toxic substances, gases and dangerous goods should be stored and handled in accordance with the current Australian standard where such is applicable.

Note - Where no relevant Australian standard exists store such materials within an effective on-site containment system.

A24 The holder of the environmental authority must ensure that flammable and combustible liquids, including petroleum products, should be stored and handled in accordance with the latest edition of AS1940—The storage and handling of flammable and combustible liquids.

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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.

A27 Notification of emergencies, incidents and exceptions

The holder of this environmental authority must notify the administering authority by written notification within 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 environmental authority.

A27 Within 10 business days following the initial notification of an emergency or incident, 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.

A29 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.

A30 Except where specified otherwise in another condition of this environmental authority, all monitoring records or reports required by this environmental authority must be kept for a period of not less than five years.

Air

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.

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B2 The Proponent 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 one month, 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, for no more than five exceedances recorded each year, when monitored in accordance with the most recent version of either:

i) Australian Standard AS3580.9.6 Methods for sampling and analysis of ambient air—Determination of suspended particulate matter—PM10 high volume sampler with size-selective inlet – Gravimetric method, or

ii) Australian Standard AS3580.9.9 Methods for sampling and analysis of ambient air— Determination of suspended particulate matter—PM10 low volume sampler—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 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.

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.

Acoustic

C1 Noise or vibration resulting from the activity must not cause an environmental nuisance to any sensitive place or commercial place

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Water

D1 Contaminants that will, or have the potential to cause environmental harm must not be released directly or indirectly to any waters as a result of the activity.

Land

E1 **Category A Environmentally Sensitive Areas (ESA)**

The environmental authority holder must not undertake activity within 1 kilometre of any Category A ESA.

E2 **Exploration Program within Category B Environmentally Sensitive Areas (ESA) and 500m buffer of Category B ESA**

The environmental authority holder is authorised to carry out exploration mining activities within Category B ESA and within 500 metre buffer of Category B ESA in accordance with Table 1: Authorised disturbance within Category B ESA and within 500m buffer of Category B ESA and illustrated in Appendix 3: Authorised mining activities within Category B ESA and within 500m buffer of Category B ESA.

Table 1: Authorised disturbance within Category B ESA and within 500m buffer of Category B ESA

Activity	Limitation of activity within Category B ESA	Limitation of activity within Category B ESA 500m buffer	Maximum footprint of disturbance permitted for each activity within Category B Environmentally Sensitive Area and within 500m buffer	Maximum disturbance authorised within Category B Environmentally Sensitive Area	Maximum disturbance authorised within 500m buffer of Category B Environmentally Sensitive Area
Exploration drill holes	1	2	1000 square metres per drill pad	0.1ha	0.2ha
Access tracks	0.8km	1.6km	3 metres wide per track	0.3ha	0.6ha

E3 **Land disturbance**

The holder of the environmental authority must ensure that the area and duration of disturbance to land and vegetation is minimised. Not more than 1000m2 can be disturbed at any one location, excluding campsites.

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Notes:

To minimise the area and duration of disturbance to land and vegetation the following measures or similar measures can be used:

- avoid disturbing large and/or mature trees;

- select specific trees to be cleared and avoid causing damage to surrounding vegetation;

- where practical leave the rootstock intact to promote regeneration and regrowth.

Before carrying out activities on the tenement refer to the Technical Guideline 'Good Relations with Landowners' and the Department of Mines and Energy Code of Conduct, 'Procedure for Sound Landholder/Explorer Relations'.

E4 **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.

E5 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.

Notes:

- When designing and constructing sediment ponds refer to the "Engineering Guidelines for Queensland Construction Sites" Soil Erosion and Sediment Control.

- Regularly clean out sediment traps, ponds and drains and maintain them in effective working order, until erosion stability has been achieved in disturbed areas.

- The capacity of sediment traps, ponds, drains and banks should not be reduced below 70% of their design capacity.

E6 **Topsoils and overburden management**

The holder of the environmental authority must ensure that topsoil is removed and stockpiled prior to carrying out any mining activity. Prevent or minimise the mixing and erosion of topsoil and overburden stockpiles.

Notes:

- To separate topsoil and overburden and to prevent or minimise the erosion of these stockpiles the following measures or similar measures can be used:

- identify topsoil and overburden layers before stripping topsoil;

- store topsoil and overburden in separate stockpiles;

- install silt fences or bunding around the stockpiles;

- where practical reuse topsoil stockpiles within 12 months;

- establish and maintain a temporary cover crop on stockpiles; and

- limit the height of topsoil stockpiles to 2 metres.

E7 **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.

Notes:

- Section 442 of the Environmental Protection Act 1994 makes it an offence to release a prescribed contaminant. A prescribed contaminant is a contaminant prescribed by an Environmental Protection Policy.

- Section 443 of the Environmental Protection Act 1994 makes it an offence to cause or allow a contaminant to be placed in a position where it could reasonably be expected to cause serious or material environmental harm or environmental nuisance.

E8 The holder of the environmental authority 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.

Notes:

- If a mining lease becomes Significantly Disturbed Land because it is contaminated, it ceases to be significantly disturbed land if a Suitability Statement is issued for the land. Refer to Chapter 7, Part 8 of the Environmental Protection Act 1994.

- A Site Management Plan approved under Chapter 7, Part 8 of the Environmental Protection Act 1994 may be required by the administrating authority for sites recorded on the Environmental Management Register or the Contaminated Land Register. Such sites may include acid producing waste rock stockpiles or tailings dams containing acid producing wastes.

E9 The holder of the environmental authority must, where practical, separate acid producing waste rock from benign waste rock.

E10 The holder of the environmental authority 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 1m thick.

Notes:

- The owner or occupier of a mining lease must notify the administering authority if they become aware that a Notifiable Activity listed in Schedule 4 of the Environmental Protection Act 1994, is being carried out on the land within 30 days, by giving notice to the administering authority in the approved form. For example, an exploration or mineral development project that generates waste materials that contain hazardous contaminants must notify the administrating authority that this activity is being carried out. Refer to section 371 of the Environmental Protection Act 1994.

- For detailed information on the management of acid mine waste material refer to the "Technical Guidelines for the Environmental Management of Exploration and Mining in

Queensland", Part B, 'Assessment and Management of Acid Drainage' and the 'Guidelines for Sampling and Analysis of Lowland Acid Sulfate Soils (ASS) in Queensland'.

E11 **Drilling, Excavating and Sampling**

The holder of the environmental authority must ensure:

1. all marker pegs are marked with contrasting colour so as to be clearly visible;

2. all marker pegs are removed from the tenement at the completion of exploration activities;

3. all permanent markers (example, concrete plugs or steel plates) are installed at ground level and made safe.

E12 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.

Notes:

- When drilling, excavating or sampling the following measures or similar measures can be used to minimise the area and duration of disturbance to land and vegetation:

- consider seasonal influences, such as rainfall before excavating or establishing a drill site;

- construct drill pads no larger than necessary to safely accommodate the drilling rigs and ancillary equipment;

- use excavators or backhoes wherever possible in preference to bulldozers; and

- use drilling fluids and other process fluids which are non-toxic.

- Prior to working in riverine areas refer to the "Technical Guidelines for the Environmental Management of Mining and Exploration in Queensland", Part B, "Exploration and Mining in Watercourses".

- Install and maintain adequate warning signs, fences and rock bunds to exclude people, livestock and native animals from excavations and shafts.

- Provide safe access to water for livestock and native animals by:

- providing hard surfaces around water storage areas; and

- fencing off any soft areas around the edge of water storage areas.

E13 The holder of the environmental authority must not drill, excavate or clear vegetation:

Notes:

1. in standing waters, wetlands or lakes; or

2. on the sloped banks or within 3m of the top of the bank or 5m of the toe of the bank; or

3. within, or on the levee banks of the normal flow channel.

Note - For representative diagrams that define the different landform elements that make up a watercourse refer to Figure 1 - Cross Section Through a Watercourse and Figure 2 – Plan View of a Watercourse.

E14 **Exploration drill holes**

The holder of the environmental authority must decommission all non-artesian drill holes, apart from those still required for monitoring purposes as soon as practical, but no later than 6 months after the hole was drilled by undertaking the following actions:

1. where practical dispose of all unused drill chips to the hole or to a sump pit and;

2. cap the hole at a depth that is appropriate for the previous land use of the area (unless the land owner stipulates a future use which requires the cap to be placed deeper); and

3. backfill the hole above the cap with soil or material similar to the surrounding soil or material.

Notes:

- The following depths are considered as appropriate for capping:

- surface level in rock outcrops; and

- at least 1m below the surface on land used for cropping; and

- at least 300 mm below the surface on other land.

E15 The holder of the environmental authority 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 2 months after the hole was drilled, apart from those holes that are still required for monitoring purposes if:

1. the flow difference between aquifers exceeds 500 L/hour; and

2. the difference in electrical conductivity of water is greater than 10% of the lower value.

E16 Conditions E14 and E15 do not apply to a non-artesian exploration drill hole if:

1. the land owner and the explorer have agreed that it should be left for conversion to a water bore;

2. the landowner gives a written undertaking to accept responsibility for the hole;

3. 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 Natural Resources, Mines and Energy within 30 days of the land owner giving the undertaking; and

4. the hole is temporarily capped so as to prevent possible ingress of surface waters and associated sediments and pollutants.

Note - Drill holes that are to be converted to a water bore must be done so by a licensed water bore driller.

E17 The holder of the environmental authority must ensure that exploration drill holes that strike artesian flows of water that exceeds 500 L/hour for seven days must be either:

1. decommissioned as soon as practical, but no later than 1 month after the hole was drilled, apart from holes that are still required for monitoring or evaluation purposes. Refer to Report No. SW4 – “Minimum Construction Requirements for Water Bores in Australia”, (ARMCANZ 1997); or

2. capped to allow for future conversion into a controlled artesian bore by a licensed water bore driller; or

3. converted into a controlled artesian bore by a licensed water bore driller, provided that:

(a) the land owner has undertaken in writing to accept responsibility for the drill hole; and

(b) the explorer provides details of the agreement and the drill hole to the Department of Natural Resources, Mines and Energy within 30 days of obtaining the landowner's agreement.

Note - Provisions apply under the Water Act 2000 with respect to the utilisation of ground water from boreholes in Proclaimed Areas (which include all Artesian Basin areas) and the rehabilitation of boreholes.

E18 The holder of the environmental authority 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.

E19 **Gridlines and Geophysical Surveys**

The holder of the environmental authority must plan and determine the final position of gridlines and geophysical lines in consultation with the landowner.

E20 When constructing gridlines and geophysical lines, the holder of the environmental authority must ensure that the area and duration of disturbance to land and vegetation is minimised.

Notes:

- When constructing gridlines and geophysical lines the following measures or similar measures can be used to ensure that the area and duration of disturbance to land and vegetation is minimised;

- conduct surveying of gridlines on foot;

- use existing gates, tracks, roads and seismic lines;

- 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;

- in planning for drilling and sampling activities, where possible, ensure the activities occur at least 100m from riverine areas;

- construct seismic lines that do not exceed the width necessary to safely undertake the survey;

- use Global Positioning Systems (GPS), or other techniques, to reduce the need for line of sight clearing;

- maintain buffer widths of at least 25m between all disturbed areas;

- minimise the use of bulldozers and excavators when cutting gridlines and/or seismic lines; and

- notify landowners at least 24 hours prior to detonating seismic explosives.

E21 The environmental authority holder is not authorised to undertake 2D or 3D seismic surveys within Category B ESA or within 500 metre buffer of any Category B ESA.

E22 **Rehabilitation**

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.

Condition E22 is to ensure that there is adequate erosion protection in riverine areas prior to the onset of the wet season. In Queensland the wet season is generally considered to be from November to April each year.

E23 For all other areas on the mining tenement, expect areas within Category B Environmentally Sensitive Areas (ESA) and 500 metre buffer of Category B ESA, 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 at least within six months of the completion of works in those areas.

E24 Rehabilitation of disturbance within Category B ESA or within 500 metre buffer of any Category B ESA must be completed as soon as practicable, but no longer than three (3) months after completion of the disturbance activity.

E25 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.

E26 Condition E25 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.

E27 All land subject to mining activities must be rehabilitated to a non-polluting, safe, stable and self-sustaining landform.

E28 The holder of the environmental authority must rehabilitate areas disturbed by mining activities to a stable landform similar to that of surrounding undisturbed areas.

Notes: When rehabilitating disturbed areas refer to the “Technical Guidelines for the Environmental Management of Mining and Exploration in Queensland”, Part D, ‘Geo-technical Slope Stability’.

E29 The environmental authority holder must revegetate disturbed areas with plant species that will promote the same vegetation type and density of cover to that of the surrounding undisturbed areas.

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E30 For any Mine Infrastructure to remain after all mining activities have ceased, the holder of the environmental authority must obtain the written agreement of the land owner stating they will take over responsibility for that infrastructure.

E31 The holder of the environmental authority must complete rehabilitation of disturbed areas to the satisfaction of the administrating authority.

Condition E31 is a requirement of the Environmental Protection Act 1994. The environmental authority holder must submit a Final Rehabilitation Report (FRR) and a compliance statement prior to the cancellation or expiry of the mining tenement. The surrender of the environmental authority will not be granted until the administrating authority has accepted the FRR and the compliance statement.

Nature Conservation

F1 The holder of the environmental authority must take all reasonable measures to prevent the spread of Declared Plants.

F2 The holder of the environmental authority must not carry out activities within 100m of a Historical, Archaeological or Ethnographic site.

Note - Refer to the Aboriginal Cultural Heritage Register established under the Aboriginal Cultural Heritage Act 2003 and the Queensland Heritage Act 1992. Prior to carrying out any activities on the mining tenement, the holder of the environmental authority should consult with the administrating authority if a site has the potential to be designated as a historical, archaeological or ethnographic site.

F3 Clearing native plants or interfering with animal breeding places is not permitted unless authorised under the “Nature Conservation Act 1992”.

END OF CONDITIONS

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Appendix 1: Definition

Key terms and/or phrases used in this document are defined in this section and bolded throughout this document. Applicants should note that 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.

Term	Definition
Administering authority	Means: (a) for a matter, the administration and enforcement of which has been devolved to a local government under section 514 of the Environmental Protection Act 1994; or (b) for all other matters – the Chief Executive of the Department of Environment and Heritage Protection; or (c) another State Government Department, Authority, Storage Operator, Board or Trust, who's role is to administer provisions under other enacted legislation
Annual exceedence probability (AEP)	For a given rainfall event the AEP is the probability that the event will be exceeded within a one year period. The AEP is usually expressed as a one in 'n' (years) or a percentage.
Approved form	Means a form approved by the administrating authority.
Archaeological site	A site that has physical evidence of the past, which has the potential to increase our knowledge of earlier human occupation, activities and events.
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.
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	(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	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 A environmentally sensitive area	Means any of the areas mentioned in Schedule 12, Part 1, section 1 of the Environmental Protection Regulation 2008.
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 is the release (whether by act or omission) of a contaminant into the environment.
Contaminated land	Schedule 4 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	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.
Declared plant area	Areas designated by the Department of Agriculture and Fisheries or Local Government as areas infested with plants declared under Land Protection (Pest and Stock Route Management) Act 2002.
Declared plant -	A plant that has been declared under the Land Protection (Pest and Stock Route Management) Act 2002.
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 plant species (e.g. grasses and forbs), it means the percentage of surface area covered by a particular species.
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	Any area that has had its natural state altered by the action or interference of carrying out an activity associated with the exploration project.
Environment	Section 8 of the Environmental Protection Act 1994 defines the environment as:

	(a) ecosystems and their constituent parts, including people and communities; and (b) all natural and physical resources; and (c) the qualities and characteristics of locations, places and areas, however large or small, that contribute to their biological diversity and integrity, intrinsic or attributed scientific value or interest, amenity, harmony and sense of community; and (d) the social, economic, aesthetic and cultural conditions that affect, or are affected by, things mentioned in paragraphs (a) to (c).
Environmental authority	Means a licence or approval issued by the administrating authority under the Environmental Protection Act 1994.
Environmental authority holder	Means the holder of this environmental authority.
Environmental management register	Means the register kept by the administrating authority under section 541 of the Environmental Protection Act 1994.
Environmental nuisance	Section 15 of the Environmental Protection Act 1994 defines environmental nuisance as "unreasonable interference or likely interference with an environmental value" caused by: (a) aerosols, fumes, light, noise, odour, particles or smoke ; or (b) an unhealthy, offensive or unsightly condition because of contamination; or (c) another way prescribed by regulation. (e.g. unreasonable noise or dust emissions)"
Environmental protection policy	Means an environmental protection policy approved under chapter 2 of the Environmental Protection Act 1994.
Environmental relevant activity	Means an activity prescribed by regulation as an environmental relevant activity.
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 3.
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 section 264 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.
Financial assurance	Means a security deposit, either cash or a bank guarantee, that is held by the administrating authority to cover the potential: (a) costs to rehabilitate areas disturbed by mining activities; and (b) costs to restore property improvements disturbed by mining activities; and (c) failure of the tenure holder to pay rents and royalties.
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	Schedule 12 of the Environmental Protection Regulation 2008 defines general waste as "means waste other than regulated waste". Waste rock, overburden and the contents of tailings dams are not included in the definition of general waste for the purposes of these conditions.
Guidelines for livestock drinking water	Recommended water quality guidelines for livestock drinking water. Refer to the Australian and New Zealand Guidelines for Fresh and Marine Water Quality 1992.
Hazardous contaminant	Schedule 4 of the Environmental Protection Act 1994 defines a hazardous contaminant as "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	Project infrastructure includes roads, tracks, bridges, culverts, dams, bores, buildings, fixed machinery, hardstand areas, pipelines, powerlines, airstrips, helipads etc., which are constructed or installed specifically for the project.
Lake	A natural or artificial body of water, either permanent or intermittent.
Landowner	Schedule 4 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 Native Title Act 1993 (Cwlth) —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 12 of the Environmental Protection Regulation 2008, 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.
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. 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	Vegetation that occurs naturally in a certain area.
Noise sensitive place	Means any of the following places – (a) a dwelling; (b) a library, childcare centre, kindergarten, school, college, university or other educational institution; (c) a hospital, surgery or other medical institution; (d) a protected area or an area identified under a conservation plan as a critical habitat or an area of major interest, under the Nature Conservation Act 1992; (e) a marine park under the Marine Parks Act 2004; and (f) a park or garden that is open to the public (whether or not on payment of money) for use other than for sport or organised entertainment).
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 3 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.
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	Section 65 of the Environmental Protection Regulation 2008, defines mining as – 1) Regulated waste is waste that— (a) is commercial or industrial waste, whether or not it has been immobilised or treated; and (b) is of a type, or contains a constituent of a type, mentioned in schedule 7, part 1. 2) Waste prescribed under subsection (1) includes— (a) for an element—any chemical compound containing the element; and (b) anything that contains residues of the waste. 3) However, waste is not regulated waste if it is mentioned in schedule 7, part 2.
Rehabilitation processes	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.
Riverine area	Refers to the land adjoining and associated with watercourses, including the bed, banks, adjoining terraced land and riparian vegetation. Refer to Figure 1 – "Cross Section Through a Watercourse".
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.
Serious environmental harm	Section 17 of the Environmental Protection Act 1994 defines serious environmental harm as 1) serious environmental harm (other than environmental nuisance) (a) that is irreversible, of a high impact or widespread; or (b) caused to – (i) an area of high conservation value; (ii) an area of special significance, such as the Great Barrier Reef World Heritage Area; (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. 2) 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: - 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 and topsoil)

	- areas where land use suitability or capability has been diminished; - areas within a watercourse, waterway, wetland or lake where mining project 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 has ceased; or - areas where land has been contaminated. 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 EPA, 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); - 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 Department of Environment and Heritage Protection; - disturbances that pre-existed the grant of the tenure unless those areas are disturbed during the term of the tenure.
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 4 of the Environmental Protection Act 1994. They are: (a) the following principles of environmental policy as set out in the Intergovernmental Agreement on the Environment— (i) the precautionary principle; (ii) intergenerational equity; (iii) conservation of biological diversity and ecological integrity; and

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	(b) any applicable Commonwealth or State government plans, standards, agreements or requirements about environmental protection or ecologically sustainable development; and (c) any applicable environmental impact study, assessment or report; and (d) the character, resilience and values of the receiving environment; and (e) all submissions made by the applicant and submitters; and (f) best practice environmental management for activities under any relevant instrument, or proposed instrument, as follows—; (i) an environmental authority; (ii) a transitional environmental program; (iii) an environmental protection order; (iv) a disposal permit; (v) a development approval; and (g) the financial implications of the requirements under an instrument, or proposed instrument, mentioned in paragraph (g) as they would relate to the type of activity or industry carried out, or proposed to be carried out, under the instrument; and (h) the public interest; and (i) any applicable site management plan; and (j) any relevant integrated environmental management system or proposed integrated environmental management system; 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 Chapter 5A Part 1 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	Section 18 of the Environmental Protection (Noise) Policy 1997 defines unreasonable noise as noise that: (a) causes unlawful environmental harm; and (b) is unreasonable, having regard to the following matters: (i) its characteristics; (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) is not declared to be reasonable in Schedule 2 of the Environmental Protection (Noise) Policy 1997 'Reasonable Noise Levels'.
Unreasonable release of a contaminant to the air environment	means a release of odours, dust, smoke or other atmospheric contaminants, that: (a) cause unlawful environmental harm; and (b) is unreasonable having regard to the following matters: (i) its characteristic; (ii) its intrusiveness; (iii)other releases of contaminants at the place affected by the release; (iv)where the effect of the release of the contaminants can be noticed; or (v) the order in which the person releasing the contaminant 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 the contaminant.
Waters	Means Queensland waters.
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 clear bed and banks and evidence of biological dependence.
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

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Appendix 2: Forms

Form 1: Monitoring and record keeping summary

Environmental Authority No:
Project No:
Term of Plan (yrs):
Commencement Date

Data and Information	Method Of Record Keeping To Be Used				Frequency
	site plans	journal	photographs	Other	
Topsoil stripping and stockpiling (e.g. record topsoil stockpiles, location and age)					
Area disturbed and rehabilitation (e.g. map of the area of disturbance and photos of rehabilitation)					
Pre and post-mine landform (e.g. record photographs of the area prior to and following mining)					
Water discharge quality (e.g. note colour of discharge water from sediment dams)					
Dam maintenance (e.g. record of dam maintenance such as sediment removal)					
Record of complaints (e.g. air, noise, tracks etc) (e.g. record in journal any complaints received by adjoining land owner, actions taken and the outcomes of the action)					
Site specific conditions (e.g. record of monitoring to demonstrate compliance with any site specific conditions)					
Remediation of contaminated land (e.g. record of current and remediated contaminated land)					
Waste Management (e.g. record of waste taken to a regulated waste collection depot)					
Rehabilitation quotes, estimates and actual costs					
Others – relevant to performance category					

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Form 2: Emergency Response Table

Emergency situation	Who to contact in case of emergency situation occurring	Equipment required to be kept and maintained on site	Procedure to be followed in case of emergency situation occurring
Hydrocarbon spill causing serious or material environmental harm			
Chemical spill causing serious or material environmental harm			
Other			

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Appendix 2: Watercourse figures

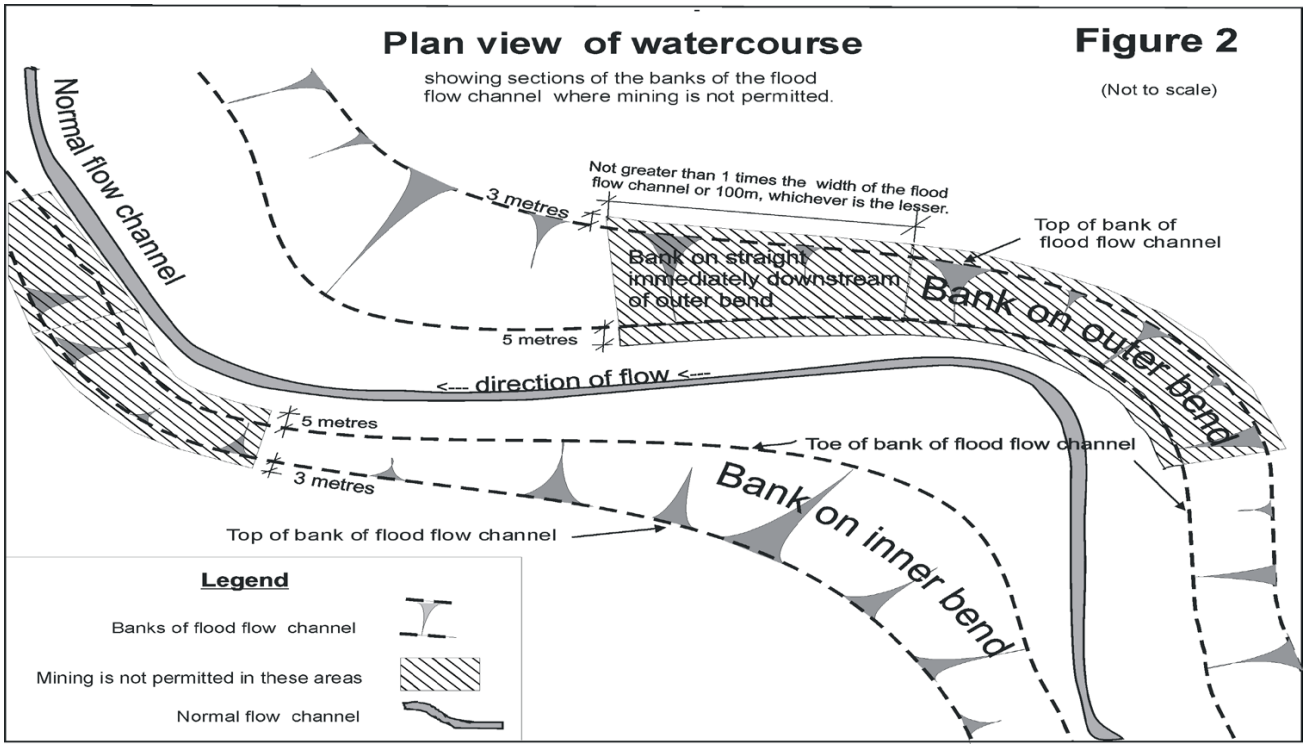

Figure 1: Cross section through a watercourse

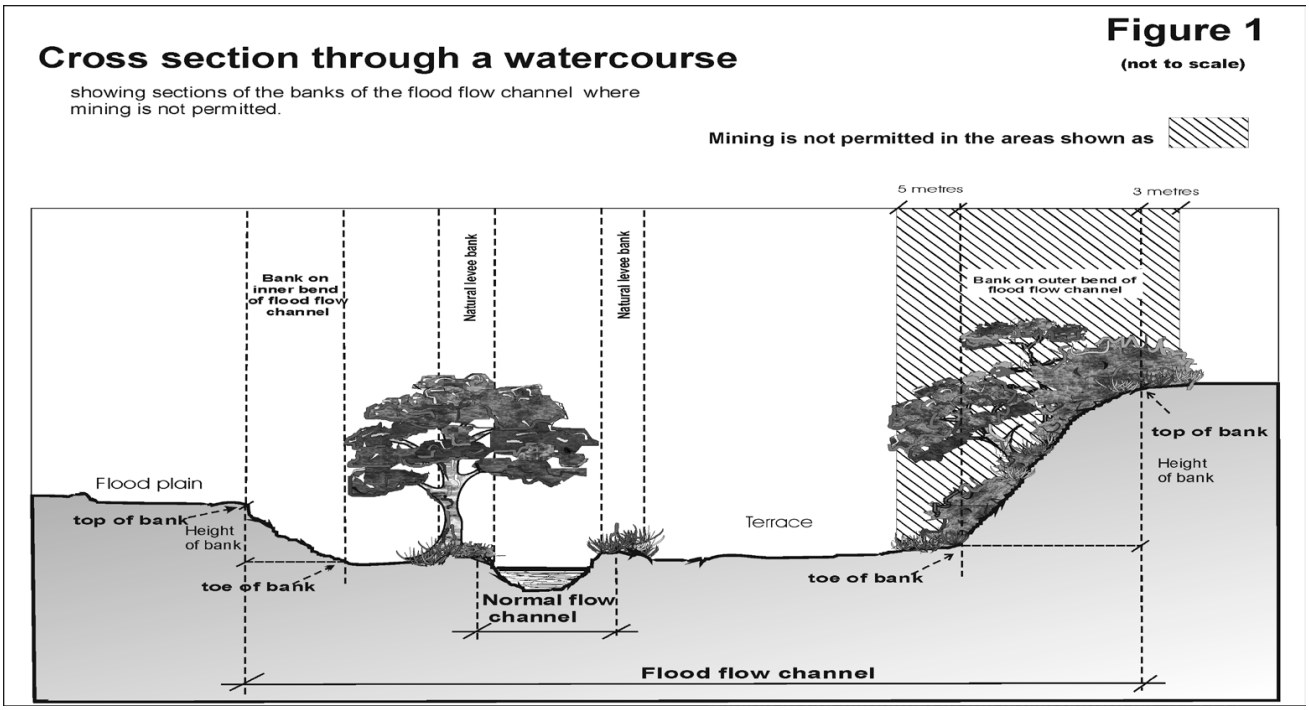

Figure 2: Plan of watercourse

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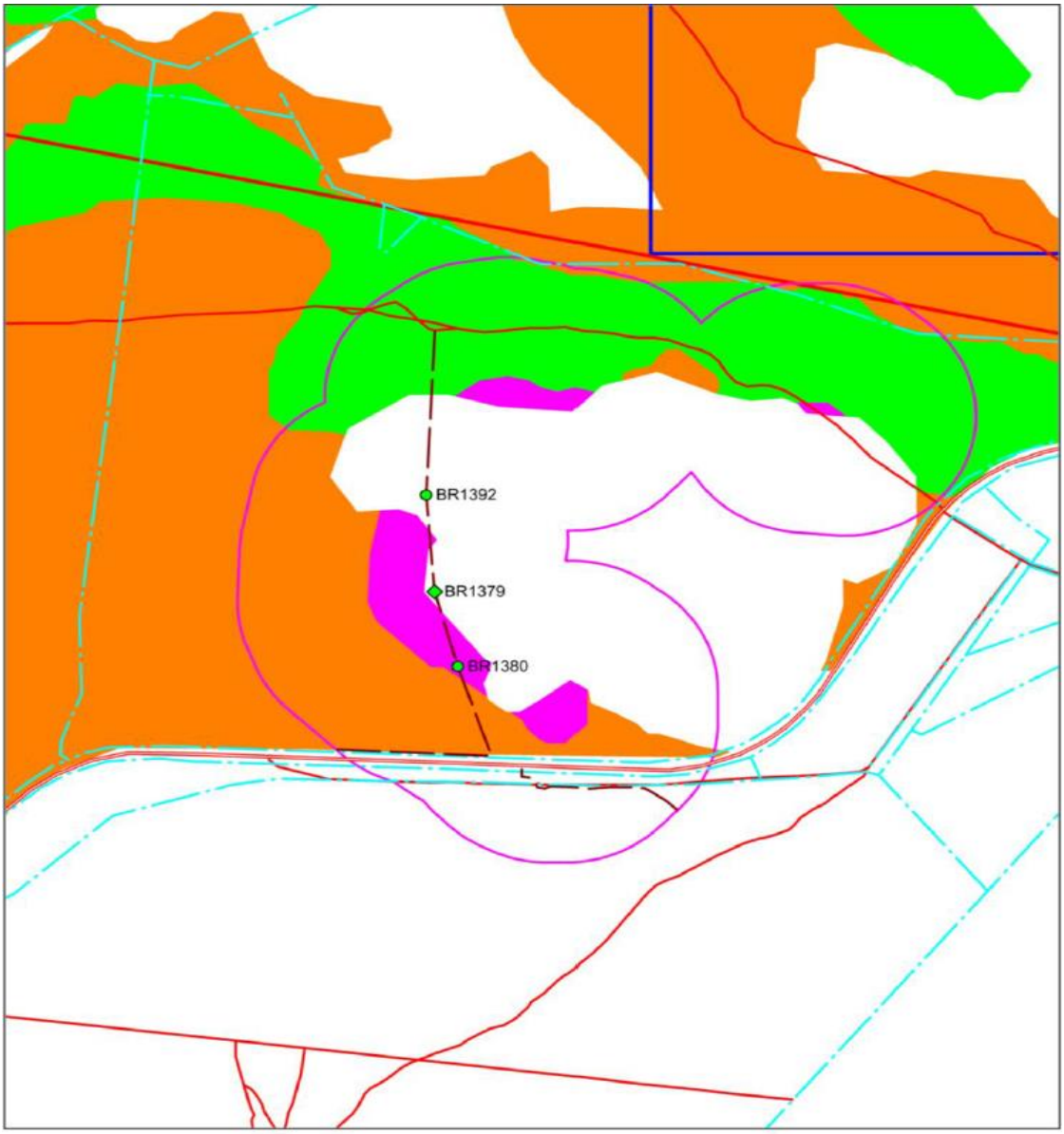
Appendix 3: Authorised mining activities within Category B ESA and within 500m buffer of any Category B ESA



END OF APPEDNICES

END OF PERMIT

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