Permit

Environmental Protection Act 1994

Environmental authority EPPR00665113

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

Environmental authority number: EPPR00665113

Environmental authority takes effect on 18 December 2019

Environmental authority holder(s)

Name(s)	Registered address
AQUILA COAL PTY LTD	Level 4 10 Eagle Street BRISBANE CITY QLD 4000 Australia

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	MDL519

Additional information for applicants

Environmentally relevant activities

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

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

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

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:

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Queensland Government

- 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 isissued.

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 Sustainable Planning Act 2009 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.

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

Enquiries:
Coal & Gemstone Mining
Department of Environment and Science
Phone: 07 4987 9320
Email: crmining@des.qld.gov.au

Date issued: 18 December 2019

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Obligations under the Environmental Protection Act 1994

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

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

Schedule A: General Conditions

A1 **Estimated rehabilitation cost**

The holder must not carry out, or allow the carrying out of the activity under this authority unless:

(a) an estimated rehabilitation cost (ERC) decision is in effect for the activity when the activity is carried out; and

(b) the holder has paid a contribution to the scheme fund or given a surety for the authority under the Mineral and Energy Resources (Financial Provisioning) Act 2018; and

(c) the holder has complied with the requirements under the Mineral and Energy Resources (Financial Provisioning) Act 2018 for paying a contribution to the scheme fund, or giving a surety for the authority, as required from time to time.

A2 Where a change in activities will result in an increase to the maximum area of significant disturbance on tenure, a new ERC calculation must be provided to the administering authority for assessment, which reflects the change.

A3 The environmental authority holder must develop a program to ensure that all employees and contractors on site are aware of and comply with the relevant requirements of this authority and implement the program during the continuation of this authority.

A4 Contaminants must not be released into the receiving environment unless they are in accordance with the contaminant limits authorised by this environmental authority.

A5 This environmental authority does not authorise environmental harm unless a condition contained within the authority explicitly authorises the harm. Where there is no condition or the authority is silent on a matter, the lack of condition or silence shall not be construed as authorising harm.

A6 Mining activities undertaken must be consistent with the “Environmental Management Plan for the Eagle Downs South Exploration Project”.

A7 **Maintenance of Measures, Plant and Equipment**

The environment authority holder must:

(a) Install all measures, plant and equipment necessary to ensure compliance with the conditions of this environmental authority; and

(b) Maintain such measures, plant and equipment in a proper condition; and

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

A8 **Monitoring, Reporting and Emergency Response Procedures**

All reasonable actions are to be taken to minimise environmental harm, potential environmental harm, resulting from any emergency, incident or circumstances not in accordance with the conditions of this environmental authority.

A9 The 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.

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; and

(d) The potential impacts to environmental values caused by the emergency or incident; and where there is potential impact on livestock or human health, precautionary measures that should be taken.

A11 Where monitoring is a requirement of this environmental authority, ensure that a competent person(s) conducts all monitoring.

Schedule B: Air

B1 **Dust nuisance**

The release of dust or particulate matter or both resulting from the exploration activity must not cause an environmental nuisance, at any 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 within a reasonable and practicable timeframe nominated by the administering authority, and the results thereof notified to the administering authority within fourteen (14) days following completion of monitoring.

B3 If the environmental authority holder provides evidence through monitoring that the following limits are not being exceeded then the holder is not in breach of condition **B1**:

(a) Dust deposition of 120 milligrams per square metre per day, averaged over one month, 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) (PM10) suspended in the atmosphere of 50 micrograms per cubic metre over a 24 hour averaging time, at a nuisance sensitive or commercial place downwind of the site, when monitored in accordance with:

i. Australian Standard AS3580.9.6 of 2003 (or more recent editions) Ambient air – Particulate matter – Determination of suspended particulate PM10 high-volume sampler with size-selective inlet-Gravimetric method; or

ii. An alternative method of monitoring PM10 which may be permitted by the Air Quality Sampling Manual as published from time to time by the administering authority.

B4 If monitoring indicates exceedance of the relevant limits in condition **B3**, 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.

B5 **Odour nuisance**

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

B6 When requested by the administering authority, odour monitoring must be undertaken within a reasonable and practicable timeframe nominated by the administering authority to investigate any complaint (which is neither frivolous nor vexatious nor based on mistaken belief in the opinion of the authorised officer) of environmental nuisance at any sensitive or commercial place, and the results thereof notified within fourteen (14) days to the administering authority following completion of monitoring.

B7 If the administering authority determines the odour released to constitute an environmental nuisance, then the environmental authority holder must:

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

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

Schedule C: Water

C1 **Release of Contaminants**

Contaminants must not be released from the site to any watercourses or bed and banks of any watercourses.

C2 **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.

C3 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.

Schedule D: Acoustic

D1 Noise from the mining activity must not cause an environmental nuisance, at any sensitive or commercial place.

D2 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), noise monitoring must be undertaken within a reasonable and practicable timeframe nominated by the administering authority, and the results thereof notified to the administering authority within fourteen (14) days following completion of monitoring.

D3 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), noise monitoring must be undertaken within a reasonable and practicable timeframe nominated by the administering authority, and the results thereof notified to the administering authority within fourteen (14) days following completion of monitoring.

D4 Noise from the mining activity must not cause an environmental nuisance, at any sensitive or commercial place. If monitoring indicates exceedence of the relevant limits in **Table D1: Noise limits**, then the environmental authority holder must:

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

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

D5 The method of measurement and reporting of noise levels must comply with the latest edition of the administering authority's Noise Measurement Manual.

Table D1: Noise limits

Noise level dB(A)	Monday to Sunday (including public holidays)	
	6 am – 6 pm	6 pm – 6 am
LA, max adj, 10 min	Background + 5	Background + 3
LA, max adj, 10 min	Background +10	Background + 5

NOTE: 'Background' means background sound pressure level measured in accordance with the latest edition of the administering authority's Noise Measurement Manual.

Schedule E: Waste

E1 General Waste must not be disposed of within MDL519.

E2 Regulated Waste must not be disposed of within MDL519.

E3 **Storage of waste**

A designated area of storage containers must be set aside for the laydown and segregation of wastes.

E4 An effective fire break must be provided and maintained around all waste laydown areas.

E5 All reasonable and practicable fire prevention measures must be implemented, including removal of grass and other materials within a 10 m radius of all waste laydown areas.

E6 Waste must not be burned or allowed to be burned within the *Eagle Downs South Exploration Project* Site unless by approval of the administering authority.

E7 Waste batteries must be stored:

(a) in a bunded and roofed area, or

(b) palletised and plastic wrapped.

E8 Regulated waste may be temporarily stored on MDL519 before being directed to a facility that can lawfully accept such waste.

E9 All regulated waste must be removed from the site by a person who holds a current approval to transport such waste under the provisions of the *Environmental Protection Act 1994.*

E9 All regulated waste must be removed from the site by a person who holds a current approval to transport such waste under the provisions of the *Environmental Protection Act 1994.*

Schedule F: Land

F1 **Non Linear Disturbance**

The environmental authority holder is authorised to carry out exploration mining and disturbance activities on MDL519 within Category B Environmentally Sensitive Areas (ESA) and within 500 m of Category B ESA in accordance with:

(a) **Table F1: Authorised disturbance within Category B Environmentally Sensitive Areas and within 500m of any Category B Environmentally Sensitive Areas**; and

(b) the location specified in **Table F2: Drill Site and Office Complex Locations** and illustrated in the locations shown **Figure 1: Eagle Downs South MDL 519 Proposed Disturbance Locations, ESA's and Prescribed Environmental Matters**, provided as an attachment to this environmental authority

Table F1: 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 of Category B Environmentally Sensitive Area
Exploration Drill Holes	10	23	1000m^2 per drill pad 250mm diameter per drill pad 50m^2 sumps	1ha	2.3ha
Campsite		1		0.2ha	

Table F2. Drill sites, and Office Complex locations

Site Name	Latitude (GDA94)	Longitude (GDA94)
1	148.247	-22.223
2	148.249	-22.231
3	148.256	-22.227
6	148.267	-22.28
7	148.284	-22.281
8	148.276	-22.284
9	148.285	-22.289
10	148.268	-22.288
11	148.277	-22.293
12	148.271	-22.297
13	148.29	-22.299
14	148.28	-22.3
15	148.293	-22.308
MB01	148.307	-22.263
MB02	148.261	-22.244
HU_C05	148.301	-22.311
TN034	148.297	-22.298
Office Complex	148.243	-22.227
HL_C05	148.272	-22.251
HL_C06	148.264	-22.247
HL_C11	148.288	-22.249
HL_C13	148.296	-22.262
HU_C06	148.31	-22.314
HU_C07	148.316	-22.307
HU_C09	148.292	-22.314
HU_C10	148.284	-22.314
HU_O05	148.292	-22.272
HUL_C01	148.267	-22.272
HUL_C02	148.29	-22.275
HUL_C03	148.298	-22.278
HUL_C04	148.292	-22.283
HUL_C06	148.293	-22.2906
HUL_C07	148.285	-22.2964
HU_O06	148.3	-22.2723

F2 Drill holes are to be located as far as practicable in previously cleared areas.

F3 No clearing of mature trees with visible hollows or evidence of arboreal mammal scars is authorised.

F4 Trees or shrubs with nests of birds of prey (raptors) whether active or not, or visibly active non-raptor bird nests must be protected.

F5 The edge of a drill site should not be within 20m of any raptor nest, whether active or not.

F6 No dead trees are to be removed unless they are a safety risk.

F7 The holder of the environmental authority must not drill, excavate or clear vegetation:

(a) in standing waters, wetlands or lakes; or.

(b) on the sloped banks or within 3m of the top of the bank or 5m of the toe of

(c) the bank; or

(d) within, or on the levee banks of the normal flow channel

F8 **Seismic Lines**

This environmental authority authorises the undertaking of 2D seismic lines and tracks within MDL519, as shown in **Figure 1: Eagle Downs South MDL 519 Proposed Disturbance Locations, ESA's and Prescribed Environmental Matters**, provided as an attachment to this environmental authority

F9 2D and 3D seismic lines and tracks must not exceed 5m in width.

F10 2D and 3D seismic lines must not cause disturbance to the bed and banks of any watercourse.

F11 Existing access and fence line tracks must be used wherever possible. Any new tracks are to be constructed by linking previously cleared or disturbed areas

F12 The holder of the environmental authority must consult with the landowner prior to establishing any new tracks within Category B ESA or within 500m of any Category B ESA.

F13 The environmental authority holder must minimise disturbance within Category B ESA and within 500 m of any Category B ESA and avoid clearing of trees where possible when constructing tracks.

F14 Construction of new crossings over watercourses must be avoided and is only permitted when no reasonable alternative is available.

F15 Constructed tracks must be less than 5 m in width, including shoulder width.

F16 Track construction involving blade clearing of established ground cover vegetation and/or clearing of mature trees is to be minimised and undertaken in accordance with Conditions F3 to F6 of this environmental authority.

F17 Tracks should not be used when soil is saturated and prone to displacement or erosion by vehicle movement.

F18 All new tracks are to be recorded with GPS and records kept of their location and made available to the administering authority on request.

F19 **Other Land Disturbance**

Activities must not include costeaning or bulk sampling.

F20 Topsoil stripping must be limited to the sump area. Where topsoil is removed it must be stockpiled for respreading at the completion of disturbance.

F21 All equipment such as earthmoving and drilling equipment must be used in a manner which prevents the spread of weeds and minimises unnecessary disturbance of topsoil and ground cover vegetation.

F22 Burning of vegetation is not permitted.

F23 Prior to entering Category B ESA or within 500m of Category B ESA all vehicles, machinery and equipment must be washed down in accordance with the latest Vehicle and machinery checklists.

F24 The environmental authority holder must control buffel grass and other weeds as far as practicable (e.g. targeted herbicide spraying) to promote the establishment of native plant species endemic to the area.

F25 **Preventing contaminant release to land**

Contaminants must not be released to land in manner which constitutes nuisance, material or serious environmental harm.

F26 **Storage and handling of chemicals, or flammable or combustible liquids**

All chemicals, or flammable or combustible liquids must be stored and handled in accordance with the current Australian standard where such is applicable. Where no relevant Australian standard exists store such materials within an effective on-site containment system.

F27 Impacts on Prescribed Environmental Matters Significant residual impacts to prescribed environmental matters, are not authorised under this environmental authority or the *Environmental Offset Act 2014.*

F28 Notwithstanding Condition **F1**, the environmental authority holder is authorised to impact prescribed environmental matters in accordance with **Table F3: Impacts to prescribed environmental matters (non-linear disturbance)** and at the locations specified in **Table F2. Drill Site and Office Complex Locations**, and illustrated in the locations shown in **Figure 1: Eagle Downs South MDL 519 Proposed Disturbance Locations, ESA's and Prescribed Environmental Matters**, provided as an attachment to this environmental authority.

Table F3 – Impacts to prescribed environmental matters (non linear disturbance)

Activity	Prescribed environmental matter	Regional Ecosystem Identified and species for which Essential habitat or Wildlife habitat is identified	Maximum footprint of disturbance permitted (ha)
	REGULATED VEGETATION		
Drilling	Endangered Regional Ecosystem (not within an urban area) in Category B (remnant)	11.4.9	0.466ha
Drilling		11.4.8	0.44ha
Drilling		11.3.1	0.12ha
Drilling	Of Concern Regional Ecosystem (not within an urban area) in Category B (remnant)	11.3.2	0.205ha
Drilling	Regional ecosystems (not within an urban area) within the defined distance from the defining banks of a relevant watercourse on the vegetation management watercourse map	11.3.25	0.004ha (non linear) + 0.03ha (linear)
Drilling	Essential habitat (not in an urban area) for vulnerable wildlife	11.5.3 Ornamental Snake (*Denisonia maculata*) & squatter pigeon (Geophaps scripta scripta)	1.88ha
	PROTECTED WILDLIFE HABITAT		
Drilling	Wildlife habitat	Ornamental Snake (*Denisonia maculata*)	1.14 ha

Note: Linear clearing for tracks and seismic surveying as part of the exploration program (detailed in Figure 1) does not exceed applicable residual impact thresholds.

F29 Records demonstrating that each impact to a prescribed environmental matter did not, 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.

F30 **Rehabilitation and Reporting**

Rehabilitation of areas disturbed within the Category B ESA and / or within 500m of Category B ESA must commence as soon as practicable to the extent that erosion impacts are minimised, and be completed as soon as practicable but no longer than three (3) months after completion of the disturbance activity.

F31 The holder of the environmental authority must ensure that any exploration drill holes that are to be retained for groundwater monitoring, must be converted to groundwater monitoring bores within 6 months of the completion of the disturbance activity.

F32 Rehabilitation of areas disturbed outside of Category B ESA and the 500m buffer of Category B ESA, must be completed as soon as practicable but no longer than 6 months after the completion of the disturbance activity.

F33 The environmental authority holder must revegetate disturbed areas of the Category B ESA and within 500m of any Category B ESA with native plant species endemic to the area that will promote the same vegetation type and density of cover to that of the surrounding undisturbed areas in the Category B ESA and within 500m of any Category B ESA.

F34 All land subject to mining activities on MDL519 must be rehabilitated to a non-polluting, safe, stable and self-sustaining landform and in accordance with **Table F4: Rehabilitation schedule.**

F35 The holder of the environmental authority must complete rehabilitation of disturbed areas to the satisfaction of the administrating authority

F36 An annual report must be prepared each year and submitted with each annual return. The report must include a map showing the location of completed drill holes and seismic lines authorised by this environmental authority, as well as details of progressive rehabilitation works completed to demonstrate compliance with conditions F30 to F35 of this environmental authority.

Table F4: Rehabilitation schedule

Tenure ID	**Disturbance type**		
	Road(s) and tracks(s)	**Areas within Category B Environmentally Sensitive Areas**	**Areas within 500 metres of any Category B Environmentally Sensitive Area**
Eagle Downs South Exploration Project Site			
Post exploration land use	Light intensity grazing	Light intensity grazing with native Vegetation	Light intensity grazing with native Vegetation
Post exploration land description	Flat revegetated land	Flat revegetated land	Flat revegetated land
Projective cover range (%)	30-50 Weediness is no greater than 5% higher than adjacent background landholders groundcover [Note 1]	30-50 Weediness is no greater than 5% higher than adjacent background landholders groundcover [Note 1]	30-50 Weediness is no greater than 5% higher than adjacent background landholders groundcover [Note 1]
Species mix	Pasture mixtures	Appropriate native vegetation	Appropriate native vegetation

NOTE 1: Weediness includes weeds that are declared plants as defined under the Land Protection (Pest and Stock Route Management) Act 2002.

END OF CONDITIONS

DEFINITIONS

Words and phrases used throughout this environmental authority are defined in this section. Where a definition for a term used in this environmental authority is sought and the term is not defined within this environmental authority, the definitions in the EP Act, its regulations and policies must be used.

"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-the local government; 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, whose role is to administer provisions under other enacted legislation.

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

"annual exceedence probability (AEP)" refers to the probability that a given rainfall 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" refers to 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" refers to 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.

"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.

"chemical" means:

a) an agricultural chemical product or veterinary chemical product within the meaning of the Agricultural and Veterinary Chemicals Code Act 1994 (Commonwealth), or

b) a dangerous good under the Australian Code for the Transport of Dangerous Goods by Road and Rail approved by the Australian Transport Council, or

c) a lead hazardous substance within the meaning of the Workplace Health and Safety Regulation 1997, or

d) a drug or poison in the Standard for the Uniform Scheduling of Drugs and Poisons prepared by the Australian Health Ministers' Advisory Council and published by the Commonwealth, or

e) any substance used as, or intended for use as:

i) a pesticide, insecticide, fungicide, herbicide, rodenticide, nematocide, miticide, fumigant or related product, or

ii) a surface active agent, including, for example, soap or related detergent, or

iii) a paint solvent, pigment, dye, printing ink, industrial polish, adhesive, sealant, food additive, bleach, sanitiser, disinfectant, or biocide, or

iv) a fertiliser for agricultural, horticultural or garden use, or

v) a substance used for, or intended for use for mineral processing or treatment of metal, pulp and paper, textile, timber, water or wastewater, or

vi) manufacture of plastic or synthetic rubber.

"clearing" has the meaning the dictionary of the Vegetation Management Act 2000 and for vegetation:

a) means remove, cut down, ringbark, push over, poison or destroy in any way including by burning, flooding or draining; but

b) does not include destroying standing vegetation by stock, or lopping a tree.

"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" is defined in section 11 of The Environmental Protection Act 1994 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" is defined in section 10 of the Environmental Protection Act 1994, and defines contamination of the environment is the release (whether by act or omission) of a contaminant into the environment.

"contaminated land" is defined in schedule 4 of the Environmental Protection Act 1994, and defines contaminated land as land contaminated by a hazardous contaminant. (See definition for hazardous contaminant.)

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

"contour banks" refer to 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" refers to 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" means 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 species (e.g. grasses and forbs), it means the percentage of surface area covered with exploration project.

"designated service area" refers to 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.

"Environment" is defined in section 8 of the Environmental Protection Act 1994, and 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 an environmental authority (resource activity) issued by the administering 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" (as defined in Section 15 of the Environmental Protection Act 1994) means- 'unreasonable interference or likely interference with an environmental value' caused by:

(a) aerosols, fumes, light, noise, odour, particles or smoke

(b) an unhealthy, offensive or unsightly condition because of contamination

(c) another way prescribed by regulation.

"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 A of the Code of Environmental Compliance for Exploration and Mineral Development Projects (EM586).

"environmental value" is defined in section 9 of the Environmental Protection Act 1994, and 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" means 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" is represented in RA004, Figure 1- 'Cross Section Through a Watercourse' and Figure 2 - 'Plan View of a Watercourse'.

"GDA" means Geocentric Datum of Australia

"general waste" – Schedule 12, Part 2 of the Environmental Protection Regulation 2008 defines general waste as meaning "…. 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" refers to the 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" is defined in schedule 4 of the Environmental Protection Act 1994, and 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" refers to 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" means project infrastructure and 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" means a natural or artificial body of water, either permanent or intermittent.

"landowner" is defined in schedule 4 of the Environmental Protection Act 1994, and defines the owner of the land as -

(a) The "owner" of land is-

(i) for freehold land-the person recorded in the freehold land register as the person entitled to the fee simple interest in the land; or

(ii) for land held under a lease, licence or permit under an Act-the person who holds the lease, licence or permit; or

(iii) for trust land under the Land Act 1994-the trustees of the land; or

(iv) for Aboriginal land under the Aboriginal Land Act 1991-the persons to whom the land has been transferred or granted; or

(v) 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

(vi) 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.

(b) Also, a mortgagee of land is the owner of the land if-

(i) the mortgagee is acting as a mortgagee in possession of the land and has the exclusive management and control of the land; or

(ii) 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" refers to a site authorised by the administrating authority to receive general waste or limited regulated waste (e.g. a rubbish dump).

"limited regulated waste" is defined in schedule 12 of the Environmental Protection Regulation. The only limited regulated wastes relevant to mining projects are asbestos and tyres.

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

"material environmental harm" is defined in section 16 of the Environmental Protection Act 1994, and

defines material environmental harm as:

(a) material environmental harm is environmental harm (other than environmental nuisance)-

(i) that is not trivial or negligible in nature, extent or context; or

(ii) 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

(iii) that results in costs of more than the threshold amount but less than the maximum amount being incurred in taking appropriate action to -

1. prevent or minimise the harm; and

2. 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" is defined in section 6A of the Mineral Resources Act 1989, and defines mining as –

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

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

(ii) extracting mineral from its natural state; or

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

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

(c) 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.

(d) However, extracting does not include –

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

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

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

(e) For subsection (a), includes the disposal of tailings and waste rock.

A regulation under subsection (d)(iii) 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" is represented in RA004, 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" refers to an outer bend of a watercourse as shown in RA004, Figure 1 - "Cross Section Through a Watercourse" and Figure 2 - "Plan View of a Watercourse".

"overburden" refers to material overlying a mineral ore deposit, up to but not including the topsoil.

"prescribed environmental matters" has the meaning in section 10 of the Environmental Offsets Act 2014, limited to Matters of State Environmental Significant listed in schedule 2 of the Environmental Offsets Regulation 2014.

"progressive rehabilitation" means rehabilitation (defined below) undertaken progressively or a staged approach to rehabilitation as mining operations are ongoing.

'**protected area'** means – a protected area under the Nature Conservation Act 1992, or

a) a marine park under the Marine Parks Act 1992; or

b) a World Heritage Area.

"Referable dam" is defined in The Water Resources Act 1989, and 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 metres in height and has a storage capacity of more than 500 ML; or

(ii) is more than 8 metres 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.

'regional ecosystem' has the meaning in the Methodology for Surveying and Mapping of Regional Ecosystems and Vegetation Communities in Queensland (Version 3.2 August 2012) and means a vegetation community in a bioregion that is consistently associated with a particular combination of geology, landform and soil. Regional ecosystems of Queensland were originally described in Sattler and Williams (1999). The Regional Ecosystem Description Database (Queensland Herbarium 2013) is maintained by Queensland Herbarium and contains the current descriptions of regional ecosystems.

"regulated waste" is defined in section 65 of the Environmental Protection Regulation 2008, and defines mining as -

(a) Regulated waste is waste that-

(i) is commercial or industrial waste, whether or not it has been immobilised or treated; and

(ii) is of a type, or contains a constituent of a type, mentioned in schedule 7, part 1.

(b) Waste prescribed under subsection (a) includes-

(i) for an element-any chemical compound containing the element; and

(ii) anything that contains residues of the waste.

(c) However, waste is not regulated waste if it is mentioned in schedule 7, part 2.

"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.

"Riverine area" refers to the land adjoining and associated with watercourses, including the bed, banks, adjoining terraced land and riparian vegetation. Refer to RA004, Figure 1 "Cross Section Through a Watercourse".

"Sediment pond" means a bunded or excavated structure used to contain and settle waterborne sediment running off disturbed areas.

"Sediment trap" means 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.

Note: The definition of 'sensitive place' and 'commercial place' is based on Schedule 1 of Environmental Protection (Noise) Policy 2008. That is, a sensitive place is inside or outside on a dwelling, library and educational institution, childcare or kindergarten, school or playground, hospital, surgery or other medical institution, commercial & retail activity, protected area or an area identified under a conservation plan under Nature Conservation Act 1992 as a critical habitat or an area of major interest, marine park under Marine Parks Act 2004, park or garden that is outside of the mining lease and open to the public for the use other than for sport or organised entertainment. A commercial place is inside or outside a commercial or retail activity.

A mining camp (i.e., accommodation and ancillary facilities for mine employees or contractors or both, associated with the mine the subject of the environmental authority) is not a sensitive place for that mine or mining project, whether or not the mining camp is located within a mining tenement that is part of the mining project the subject of the environmental authority. For example, the mining camp might be located on neighbouring land owned or leased by the same company as one of the holders of the environmental authority for the mining project, or a related company. Accommodation for mine employees or contractors is a sensitive place if the land is held by a mining company or related company, and if occupation is restricted to the employees, contractors and their families for the particular mine or mines which are held by the same company or a related company.

For example, a township (occupied by the mine employees, contractors and their families for multiple mines that are held by different companies) would be a sensitive, even if part or all of the township is constructed on land owned by one or more of the companies.

"serious environmental harm"

Section 17 of the Environmental Protection Act 1994 defines serious environmental harm as:

(a) serious environmental harm (other than environmental nuisance)

(i) that is irreversible, of a high impact or widespread; or

(ii) caused to:

(1) an area of high conservation value;

(2) an area of special significance, such as the Great Barrier Reef World Heritage Area;

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

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

(1) prevent or minimise the harm; and

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

(b) 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 and 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" has the meaning in section 8 Environmental Offsets Act 2014.

"Site management plan" refers to 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

(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.

"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" means guidelines that indicate best practice environmental management.

"topsoil" refers to 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 300 millimetres 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" is defined in section 18 of the Environmental Protection (Noise) Policy 1997 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.

"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;

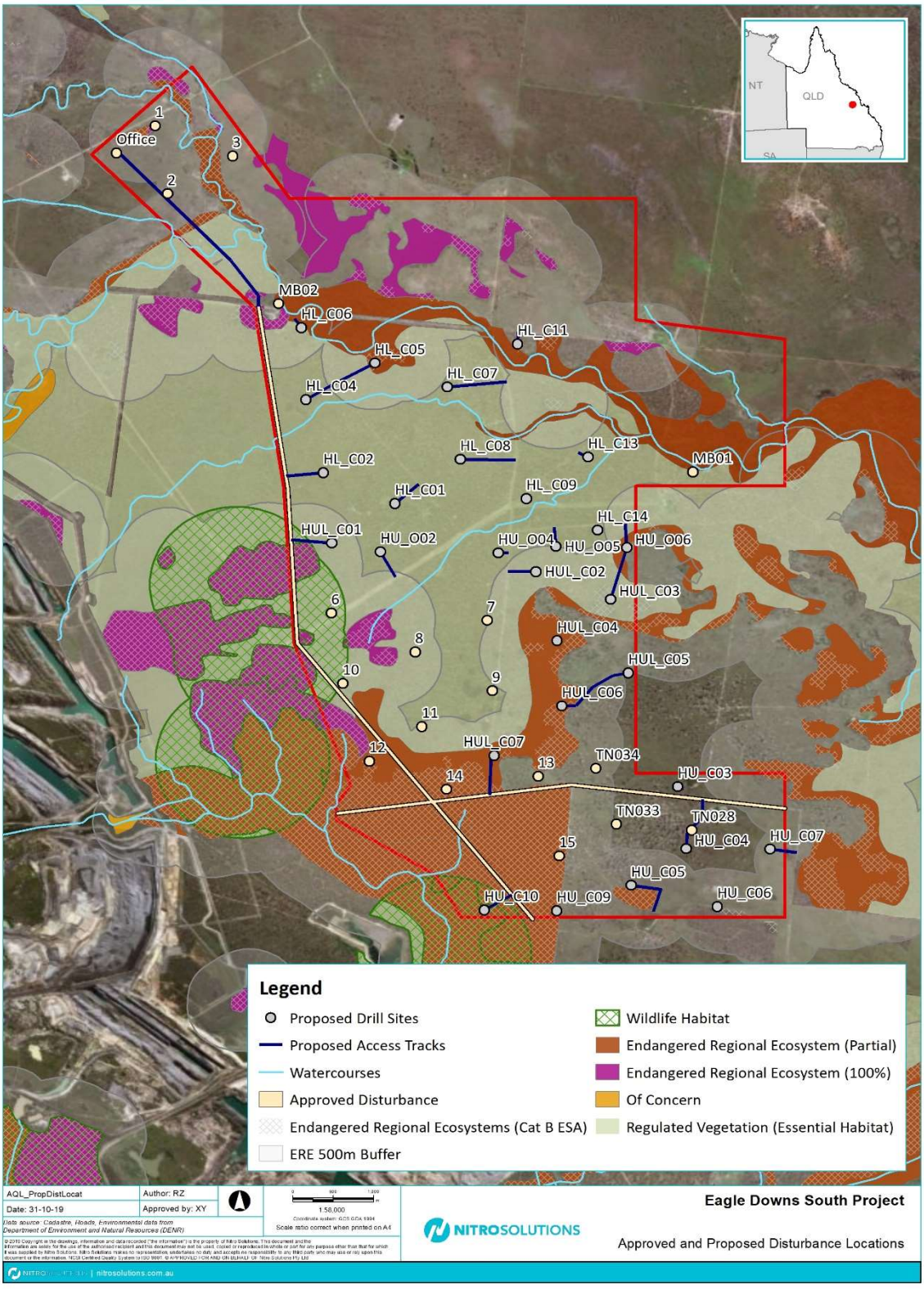
(b) an extended period of flow for some months after rain ceases, and

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

"wetland" refers to an area 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

Figure 1: Eagle Downs South MDL 519 Proposed Disturbance Locations, ESA's and Prescribed Environmental Matters.



END OF ENVIRONMENTAL AUTHORITY