Permit

Environmental Protection Act 1994

Environmental authority P-EA-100611922

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

Environmental authority number: P-EA-100611922

Environmental authority takes effect on a date to be decided later.

Environmental authority holder(s)

Name(s)	Registered address
Daniel Chafer	4 Tellembuggerem Cl RUBYVALE QLD 4702

Environmentally relevant activity and location details

Environmentally relevant activity/activities	Location(s)
Non-Scheduled - Mining Activity - Mining Claim (MC)	MC300489

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:

- the happening of an event involving a hazardous contaminant on the contaminated land (notice must be given within 24 hours); or
- a change in the condition of the contaminated land (notice must be given within 24 hours); or

- a notifiable activity (as defined in Schedule 3) having been carried out, or is being carried out, on the contaminated land (notice must be given within 20 business days)

that is causing, or is reasonably likely to cause, serious or material environmental harm.

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

Take effect

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

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

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

c) otherwise on the day the authority is issued.

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

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

The anniversary day of this environmental authority is the same day each year as the original take effect date unless you apply to change the anniversary day. The payment of the annual fee will be due each year on this day.An annual return will be due each year on 01 April.

If you have incorrectly claimed that an additional authorisation is not required, carrying out the ERA without the additional authorisation is not legal and could result in your prosecution for providing false or misleading information or operating without a valid environmental authority.

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

Permit and Licence Management
Department of Environment and Science
GPO Box 2454 BRISBANE QLD 4001
Phone: 1300 130 372 (option 4)
Email: palm@des.qld.gov.au

Privacy statement

Pursuant to section 540 of the EP Act, the Department is required to maintain a register of certain documents and information authorised under the EP Act. A copy of this document will be kept on the public register. The register is available for inspection by members of the public who are able take extracts, or copies of the documents from the register. Documents that are required to be kept on the register are published in their entirety, unless alteration is required by the EP Act. There is no general discretion allowing the Department to withhold documents or information required to be kept on the public register. For more information on the Department's public register, search 'public register' at www.qld.gov.au. For queries about privacy matters please email privacy@des.qld.gov.au or telephone 13 74 68.

Obligations under the *Environmental Protection Act 1994*

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

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

Other permits required

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

Conditions of environmental authority

Conditions of approval for this environmental authority are:

- All reasonable steps must be taken to ensure the activity complies with the eligibility criteria.
- The eligibility criteria and standard conditions contained within the attached document(s) entitled:
  - Eligibility criteria and standard conditions for mining claims – Version 2

End of conditions.

END OF ENVIRONMENTAL AUTHORITY

Eligibility criteria and standard conditions for mining claims—Version 2

This document provides eligibility criteria and standard conditions for mining claim activities. Eligibility criteria are to be used for making a standard or variation application for an environmental authority. Standard conditions are to be used in an environmental authority (standard or variation application) or where necessary and desirable on an environmental authority (site specific application).

Eligibility criteria

Eligibility criteria are constraints set to ensure environmental risks associated with the operation of the environmentally relevant activity (ERA) are able to be managed by the standard conditions. Eligibility criteria set out the circumstances in which a standard or variation application for an environmental authority can be made.

Standard conditions

Standard conditions are the minimum operating requirements an environmental authority holder must comply with.

Standard applications

If an applicant can meet all of the eligibility criteria, they can make a standard application for an environmental authority that is subject to all standard conditions. Applicants are required to complete a 'Standard application form'.

Variation applications

If an applicant can meet all of the eligibility criteria but needs to vary one or more of the standard conditions to suit their operational needs, then they can make a variation application for an environmental authority. Applicants are required to complete a 'Variation application form'.

Site specific applications

Applicants who cannot meet the eligibility criteria must make a site specific application for an environmental authority. Applicants are required to complete a 'Site specific application form'.

Amendment applications

If the holder of an environmental authority needs to amend a standard condition in the issued environmental authority, then the holder must submit an ‘Amendment application form’.

Application forms

The relevant application forms can be downloaded from the Queensland Government’s Business and Industry Portal at www.business.qld.gov.au/ea.

Definitions

Specific terms used in this document are defined in Appendix 2.

References to other documents

References in this document to laws, regulations, standards, policies, programs, guidelines and similar documents and instruments are to the current version of those documents and instruments, as amended or

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replaced from time to time.

Uranium mining

The Queensland Government has determined that mining activities associated with uranium do not meet the eligibility criteria for this code of environmental compliance. This determination is based on an environmental impact statement (EIS) being triggered for uranium mining activities as they are defined as the “introduction of novel or unproven resource extraction process, technology or activities”. A standard application for mining activities associated with uranium therefore cannot be made. As such a site specific application is required for all mining activities associated with uranium.

Version history

Version	Effective date	Description of changes
2.00	31 March 2016	Minor amendments to remove outdated legislative requirements and references. Publication number changed from EM587 to ESR/2016/2242.

Eligibility criteria

a) The mining activity does not, or will not, at any one time, cause more than 10ha of land to be significantly disturbed;
b) the mining activity is not, or will not be, carried out in a category A environmentally sensitive area or a category B environmentally sensitive area;
c) the mining activity is not, or will not be, carried out under an environmental authority under which either of the following is, or is to be, authorised—
   i. an environmentally relevant activity to which a section of schedule 2 of the Environmental Protection Regulation 2008 applies and for which there is an aggregate environmental score;
   ii. a resource activity, other than a mining activity, that is an ineligible ERA;
d) the mining activity is not, or will not be, carried out in a strategic environmental area, unless—
   i. the mining activity is authorised under an environmental authority for a mining activity relating to a mining claim, an environmental authority for a mining activity relating to an exploration permit or an environmental authority for a mining activity relating to a mineral development licence; or
   ii. the mining activity involves alluvial mining and is, or will be, carried out at a place that is not in a designated precinct in a strategic environmental area; or
   iii. the mining activity involves clay pit mining, dimension stone mining, hard rock mining, opal mining or shallow pit mining and is, or will be, carried out at a place that is not in a designated precinct in a strategic environmental area.
e) the mining activity does not, or will not, at any one time, cause more than 5000m^2 of land to be disturbed at a camp site;
f) no more than 20m^3 of any substance is, or will be, extracted from each kilometre of a riverine area affected by the mining activity in a year.

Standard conditions

Schedule A – General conditions
Financial Assurance
A1: The holder of a new environmental authority must submit the required amount of financial assurance (i.e. a security deposit) to the administering authority prior to carrying out any activities on the mining tenement. If an application is lodged to transfer the environmental authority to another person or company, the proposed transferee must submit the required financial assurance prior to the transfer taking effect.
Note 1 - A financial assurance must be calculated in accordance with the Schedule of Rehabilitation Costs in form 3 schedule of financial assurance. Note 2 - Chapter 5, Part 12, Division 2 of the Environmental Protection Act 1994, requires that the holder of the environmental authority gives the administering authority a financial assurance in an acceptable form (i.e. either cash or a bank guarantee) and for the amount calculated in a manner decided by the administering authority. When necessary, the holder of the environmental authority must amend the financial assurance under section 302 of the *Environmental Protection Act 1994* (e.g. increasing the area of disturbance on the mining claim). The holder of the environmental authority must lodge a single financial assurance with the Department of Natural Resources and Mines. The financial assurance will consist of two components: (a) An amount to cover the potential costs of rehabilitation of areas disturbed by mining activities (i.e. the Department of Environment and Heritage Protection component); and (b) An amount to cover the potential costs of restoring property improvements disturbed by mining activities and the failure of the tenure holder to pay rents and royalties (i.e. Department of Natural Resources and Mines component).
Land disturbance
A2: The holder of the environmental authority must ensure that the area and duration of disturbance to land, vegetation and watercourses are minimised.
Note 3 - To minimise the area and duration of disturbance to land, vegetation and watercourses the following measures or similar measures can be used: - where practical, avoid disturbing large and/or mature trees; - select specific trees to be cleared and avoid causing damage to surrounding vegetation; and - where practical, leave the rootstock intact to promote regeneration and regrowth.

Air quality
A3: The holder of the environmental authority must not cause an unreasonable release of dust.
Note 4 - To prevent causing an unreasonable release of dust, the following measures or similar measures can be used: - altering work practices to avoid or minimise the generation of dust; - scheduling activities for times when they will have least impact; - revegetating disturbed areas as soon as practical; - leaving or creating wind breaks or screening; and - installing pollution control equipment (e.g. fitting bag filters or a cyclone to dust generating equipment).
Noise emissions
A4: The holder of the environmental authority must not cause unreasonable noise at a Noise Sensitive Place.
Note 5 - To prevent causing unreasonable noise at a noise sensitive place the following measures or similar measures can be used: - construct and maintain noise barriers and enclosures around noisy equipment or along the noise transmission path; - implement noise reduction measures at noise sensitive places; - provide and maintain low noise equipment; - carry out routine maintenance on fans to minimise bearing noise; - repair or replace defective mufflers of vehicles and plant with suitable effective mufflers; and - limit the hours of operation of the project to between the hours of 7am to 6pm Monday to Saturday. Note 6 - If aircraft are used for mining related activities, operate them so as to minimise disturbance to livestock (e.g. helicopters).
Erosion and Sediment Control
A5: The holder of an environmental authority must design, install and maintain adequate banks and/or diversion drains to minimise the potential for storm water runoff to enter areas disturbed by mining activities.
A6: The holder of the environmental authority must design, install and maintain adequate erosion and sediment controls wherever necessary to prevent erosion of disturbed areas and sedimentation of any Watercourse, Waterway, Groundwater, Wetland or Lake.
Note 7 - For information on the design and construction of sediment ponds refer to the “Technical

Guidelines for the Environmental Management of Exploration and Mining in Queensland", Part C, "Site Water Management".

Note 8 – Regularly clean out sediment traps, ponds and drains and maintain them in effective working order, until erosion stability has been achieved in disturbed areas.

Note 9 – The capacity of sediment traps, ponds, drains and banks should not be reduced below 70% of their design capacity.

A7: The holder of the environmental authority must ensure that any *turbidity* at a point 300m downstream from any mining activity being carried out in a watercourse, is no greater than any turbidity upstream from the activity.

Note 10 – With regard to on site management of water refer to the Environmental Protection (Water) Policy 2008.

Topsoil and overburden management

A8: 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.

Note 11 - 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.

Hazardous contaminants

A9: The holder of the environmental authority must plan and conduct activities on site to prevent any potential or actual release of a hazardous contaminant.

Note 12 - 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 or a regulation.

Note 13 - 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.

Note 14 - The owner or occupier of a mining claim must notify the administering authority if the owner or occupier becomes 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, a mining operation 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.*
A10: The holder of the environmental authority must ensure that spills of hazardous contaminants are cleaned up as quickly as practical. Do not clean up such spillage by hosing, sweeping or otherwise releasing such contaminants to any watercourse, waterway, groundwater, wetland or lake.
Note 15 - If a mining claim becomes Significantly Disturbed Land because it is contaminated land, it ceases to be significantly disturbed land if a Suitability Statement is issued for the land. Refer to section Chapter 7, Part 8 of the *Environmental Protection Act 1994*. Note 16 - 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.
A11: The holder of the environmental authority must dispose of acid producing waste rock in a mine excavation where practical and backfill as soon as practical. Where not practical, bury acid producing waste rock in an excavation or pit and backfill as soon as practical. Backfill all mine excavations, other excavations and pits containing acid producing waste rock with benign, low permeability material and seal the mine excavation, other excavation or pit with a compacted capping layer at least 1m thick.
Note 17 - 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 Sulphate Soils (ASS) in Queensland’.
Nature conservation
A12: The holder of the environmental authority must prevent the spread of Declared Plants by ensuring that all vehicles and machinery are adequately cleaned before taking the vehicles and machinery out of a Declared Plant Area.
Note 18 - Every precaution must be taken to ensure there is no dispersal of Parthenium weed or the seed of any other declared plant within the meaning of the *Land Protection (Pest and Stock Route Management) Act 2002*, as a result of mining or as a result of access to the area of the mining claim. Note 19 - The Department of Agriculture and Fisheries provide Pest Fact sheets for declared plants in Queensland as well as clean down procedures for motor vehicles and machinery. For advice on declared plant areas contact the Department of Department of Agriculture and Fisheries or your Local Government.
A13: The holder of the environmental authority must not carry out activities in a category A or B environmentally sensitive area. Prior to carrying out activities in a category C environmentally sensitive area, consult with the relevant administering authority and the Department of Environment

and Heritage Protection. If it is determined through the consultation that additional conditions are necessary, comply with those conditions.

Note 20 - For information on environmentally sensitive areas refer to Appendix 3.

A14: The holder of the environmental authority must not carry out activities within 100m of a Historical, Archaeological or Ethnographic Site.

Note 21 – 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.

Prescribed environmentally relevant activities

A15: The holder of the environmental authority must not carry out the following prescribed environmentally relevant activities (ERA) on the mining tenement:

1. ERA 61 Waste incineration and thermal treatment at threshold 1 - incinerating waste vegetation, clean paper or cardboard
2. ERA 52 Battery Recycling – operating a facility for receiving, and recycling or reprocessing, any type of battery; and
3. ERA 59 Tyre Recycling – operating a facility on a commercial basis for receiving and recycling or receiving and reprocessing 1000 or more equivalent passenger units of tyres, or parts of tyres, in a year. (The relevant activity does not include retreading tyres).

Schedule B – Activity based conditions

Waste management

B1: 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.

Note 22 - 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).

Note 23 - Where practicable take all general waste to a licensed general waste disposal facility.

Note 24 - Up to 50 tonnes of general waste may be buried on the mining tenement per year. When

burying general waste the following measures or similar measures should be used:

- locate the waste pit so as to ensure that the waste will not contaminate any watercourse, waterway, groundwater, wetland or lake;
- divert stormwater runoff from entering the pit;
- make the pit safe and protect it from scavengers;
- crush drums and other containers to reduce the volume of waste;
- backfill the pit when the level of rubbish in the pit is not less than 1m below the surface; and
- sufficiently overfill the pit to allow for settlement.

Note 25 -limited regulated waste may be disposed of to a licensed general waste disposal facility provided the annual volume of limited regulated waste does not exceed 10% of the annual volume of general waste (e.g. tyres).

Service, Maintenance and Storage Areas

B2: The holder of the environmental authority must not directly or indirectly release fuels, oils, lubricants or other Contaminants to any watercourse, waterway, groundwater, wetland or lake.

Note 26 - To prevent the direct or indirect release of fuels, lubricants or other contaminants to any watercourse, waterway, groundwater, wetland or lake the following measures or similar measures can be used:

- maintain all refuelling equipment in good working order; and
- use groundsheets or drip trays to capture spillage during maintenance of machinery and vehicles; and
- locate all fuel storages within an impermeable bund; and
- ensure all liquid containment, including fuel tank bunds and process water ponds, have a volume at least equal to the design volume plus an additional 10% of that volume; and
- where practical, undertake all refuelling and routine maintenance of vehicles within designated service areas.

Note 27 – With regard to the management of waste water refer to the Environmental Protection (Water) Policy 2008.

B3: The holder of the environmental authority must ensure that all chemical, fuel and oil storage facilities less than 10 000L on a mining claim, must be designed and operated in accordance with Australian Standard 1940 – 'The storage and handling of flammable and combustible liquids', Section 2, Minor Storage.

B4: The holder of the environmental authority must ensure that:

(1) all chemical, fuel and oil storage facilities of more than 10 000L on a mining claim, must be bunded to contain at least one hundred percent of the volume of the largest container, plus

twenty-five percent of the storage capacity of the largest container up to a maximum of 10, 000L, together with ten percent of the storage capacity beyond 10, 000L; and

(2) the facility must be operated and maintained in accordance with the Australian Standard 1940 – 'The Storage and Handling of flammable and combustible liquids'.

Monitoring, reporting and emergency response procedures

B5: The holder of the environmental authority must record and notify the administering authority of any emergency or incident which demonstrates non-compliance with the standard environmental conditions.

Note 28 - A notification of any emergency or incident, which demonstrates non-compliance to the standard environmental conditions, cannot be used in evidence in any further action taken by the administering authority as a result of the notification.

Note 29 - To demonstrate ongoing compliance with the standard environmental conditions, complete Form 1, 'Monitoring and Record Keeping Summary'. Establish programs to monitor project activities and maintain records for review by the administrating authority.

Note 30 - To demonstrate compliance with the standard environmental conditions complete Form 2, 'Emergency Response Table'. Provide and maintain appropriate emergency response equipment and inform all operational personnel, contractors and visitors of emergency response procedures.

Note 31 - Observe the provisions and regulations under the *Fire and Emergency Services Act 1990* and the *Mining and Quarrying Safety and Health Act 1999.*

Rehabilitation

B6: The holder of the environmental authority must backfill excavations less than 3m deep with overburden and waste rock as soon as practical following the completion of mining activities.

B7: Where it is impractical to return overburden and waste rock to excavations deeper than 3m, the holder of the environmental authority must construct overburden and waste rock stockpiles in accordance with **Condition B10**.

B8: For excavations that are to remain at the completion of mining activities, by agreement with the land holder, and will be used as livestock water drinking supplies, the holder of the environmental authority must:

(1) ensure that water quality in any remaining excavation complies with the acceptable water quality G*uidelines For Livestock Drinking Water* as detailed in the Australian and New Zealand Guidelines for Fresh and Marine Water Quality; and

(2) provide safe access for livestock and native animals to the excavation.

Note 32 - Install and maintain adequate warning signs, fences and rock bunds to exclude people, stock and wild animals from excavations and shafts.

Note 33 - Prior to the surrender of a mining claim all excavations that are to remain open after mining activities have ceased, need to be made safe (e.g. an open pit). Refer to the *Mines Regulation Act 1985* and the 'Technical Guidelines for the Environmental Management of Exploration and Mining in Queensland', Part D, 'Open Pit Rehabilitation'.

Note 34 - 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.

B9: The holder of the environmental authority must complete the Rehabilitation Processes on areas disturbed by mining activities, apart from those areas currently being utilised for mining activities, as soon as practical and within six months of the completion of works in those areas.

Note 35 – Where practical undertake progressive rehabilitation of disturbed areas.

B10: The holder of the environmental authority must rehabilitate areas disturbed by mining activities to a stable landform, similar to that of the surrounding undisturbed areas.

Note 36 - 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'.

B11: The holder of the environmental authority must spread seeds or plant species that will promote vegetation of a similar species and density of cover to that of the surrounding undisturbed areas or vegetation that is appropriate for providing erosion control and stabilisation of the disturbed areas.

Note 37 - To revegetate disturbed areas the following measures or similar measures can be used:

- for areas which have become compacted during the project, break up the soil surface to a depth
- that is suitable for establishing vegetation;
- spread stockpiled topsoil over disturbed areas to a depth that is suitable as a rooting medium for
- the revegetation process;
- provide suitable nutrient conditions for planting by using fertiliser if necessary; and
- collect and store native seeds to be used in rehabilitation.

Note 38 - When revegetating disturbed areas, the proponent should plant native species endemic to the area and location in the landscape (e.g. if clearing has occurred in a riverine area, revegetate the disturbed area using local riverine species).

Note 39 - Vegetation used to stabilise disturbed areas in the short term should be comprised of sterile, short-lived species (e.g. a cover crop). However, the long-term aim of revegetating any disturbed area is to establish a stable vegetation community that is similar to that of the surrounding undisturbed landscape.

Note 40 - The holder of the environmental authority is not liable for rehabilitation of disturbed areas that existed prior to the grant of the tenure unless the holder undertakes activities within the previously disturbed areas during the term of the tenure. Note 41 - Where continuity of tenure makes the holder of the environmental authority liable for disturbances from previous projects, no further work will be necessary if the rehabilitation of disturbed areas is to the satisfaction of the administrating authority. Note 42 - The rehabilitation of some disturbed areas may not be required if the workings have a recognised historic value. Consult with the administrating authority regarding rehabilitation requirements for such sites.
B12: 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.
B13: For underground mine workings, the holder of the environmental authority must determine the need and design of bat gates by consulting the administering authority. If bat gates are required, install the appropriate structures. Where a bat gate is not required by the administrating authority prevent access to underground workings.
B14: The holder of the environmental authority must complete the rehabilitation of areas disturbed by mining activities to the satisfaction of the administrating authority.
Note 43 - **Condition B14** is a requirement of the Environmental Protection Act 1994. The holder of the environmental authority must submit a Final Rehabilitation Report (FRR) and a compliance statement, prior to the cancellation or expiry of the mining claim. The surrender of the environmental authority will not be granted until the administrating authority has approved the FRR and the compliance statement.

Appendix 1: General obligations under the *Environmental Protection Act 1994*

Responsibilities under the Environmental Protection Act 1994

Separate to the requirements of standard conditions, the holder of the environmental authority must also meet their obligations under the *Environmental Protection Act 1994*, and the regulations made under that Act. For example, the holder must be aware of the following provisions of the *Environmental Protection Act 1994.*

General environmental duty

Section 319 of the *Environmental Protection Act 1994* states that we all have a general environmental duty. This means that we are all responsible for the actions we take that affect the environment. We must not carry out any activity that causes or is likely to cause environmental harm unless we take all reasonable and practicable measures to prevent or minimise the harm. To decide what meets your general environmental duty, you need to think about these issues:

- the nature of the harm or potential harm
- the sensitivity of the receiving environment
- the current state of technical knowledge for the activity
- the likelihood of the successful application of the different measures to prevent or minimise environmental harm that might be taken
- the financial implications of the different measures as they would relate to the type of activity.

It is not an offence not to comply with the general environmental duty, however maintaining your general environmental duty is a defence against the following acts:

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

(b) an act that contravenes a noise standard

(c) a deposit of a contaminant, or release of stormwater run-off, mentioned in section 440ZG. More information is available on the Department of Environment and Heritage Protection website www.ehp.qld.gov.au.

Duty to notify

Section 320 of the *Environmental Protection Act 1994* explains the duty to notify. The duty to notify applies to all persons and requires a person or company to give notice where serious or material environmental harm is caused or threatened. Notice must be given of the event, its nature and the circumstances in which the event happened. Notification can be verbal, written or by public notice depending on who is notifying and being notified.

The duty to notify arises where:

- a person carries out activities or becomes aware of an act of another person arising from or connected to those activities which causes or threatens serious or material environmental harm
- while carrying out activities a person becomes aware of the happening of one or both of the following events:
    - the activity negatively affects (or is reasonably likely to negatively affect) the water quality of an aquifer
    - the activity has caused the unauthorised connection of 2 or more aquifers.

For more information on the duty to notify requirements refer to the department's *Guideline: Duty to notify of environmental harm (EM467)*.

Notifiable activities

It is a requirement under the *Environmental Protection Act 1994* that if an owner or occupier of land

becomes aware that a Notifiable Activity (as defined by Schedule 4 of the *Environmental Protection Act 1994*) is being carried out on the land or that the land has been affected by a hazardous contaminant, they must, within 22 business days after becoming so aware, give notice to the administering authority.

Some relevant offences under the *Environmental Protection Act 1994*

Non-compliance with a condition of an environmental authority (section 430)

Section 430 of the *Environmental Protection Act 1994* requires that a person who is the holder of, or is acting under, an environmental authority must not wilfully contravene, or contravene a condition of the authority.

Environmental authority holder responsible for ensuring conditions complied with (section 431)

Section 431 of the *Environmental Protection Act 1994* requires that the holder of an environmental authority must ensure everyone acting under the authority complies with the conditions of the authority. If another person acting under the authority commits an offence against section 430, the holder also commits an offence, namely, the offence of failing to ensure the other person complies with the conditions.

Causing serious or material environmental harm (sections 437–39)

Material environmental harm is environmental harm that is not trivial or negligible in nature. It may be great in extent or context or it may cause actual or potential loss or damage to property. The difference between material and serious harm relates to the costs of damages or the costs required to either prevent or minimise the harm or to rehabilitate the environment. Serious environmental harm may have irreversible or widespread effects or it may be caused in an area of high conservation significance. Serious or material environmental harm excludes environmental nuisance.

Causing environmental nuisance (section 440)

Environmental nuisance is unreasonable interference with an environmental value caused by aerosols, fumes, light, noise, odour, particles or smoke. It may also include an unhealthy, offensive or unsightly condition because of contamination.

Depositing a prescribed water contaminant in waters (section 440ZG)

Prescribed contaminants include a wide variety of contaminants listed in Schedule 9 of the *Environmental Protection Act 1994*.

It is your responsibility to ensure that prescribed contaminants are not left in a place where they may or do enter a waterway, the ocean or a stormwater drain. This includes making sure that stormwater falling on or running across your site does not leave the site contaminated. Where stormwater contamination occurs you must ensure that it is treated to remove contaminants. You should also consider where and how you store material used in your processes onsite to reduce the chance of water contamination.

Placing a contaminant where environmental harm or nuisance may be caused (section 443)

A person must not 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.

Some relevant offences under the Waste Reduction and Recycling Act 2011

Littering (section 103)

Litter is any domestic or commercial waste and any material a person might reasonably believe is refuse, debris or rubbish. Litter can be almost any material that is disposed of incorrectly. Litter includes cigarette butts and drink bottles dropped on the ground, fast food wrappers thrown out of the car window, poorly secured material from a trailer or grass clippings swept into the gutter. However, litter does not include any gas, dust, smoke or material emitted or produced during, or because of, the normal operations of a building, manufacturing, mining or primary industry.

Illegal dumping of waste (section 104)

Illegal dumping is the dumping of large volumes of litter (200L or more) at a place. Illegal dumping can also

include abandoned vehicles.

Responsibilities under other legislation

An environmental authority pursuant to the *Environmental Protection Act 1994* does not remove the need to obtain any additional approval for the activity that might be required by other State and/or Commonwealth legislation. Other legislation for which a permit may be required includes but is not limited to the:

- *Aboriginal Cultural Heritage Act 2003*
- contaminated land provisions of the *Environmental Protection Act 1994*
- *Fisheries Act 1994*
- *Forestry Act 1959*
- *Nature Conservation Act 1992*
- *Petroleum and Gas (Production and Safety) Act 2004 / Petroleum Act 1923*
- *Queensland Heritage Act 1992*
- *Sustainable Planning Act 2009*
- *Water Supply (Safety and Reliability) Act 2008*
- *Water Act 2000*

Applicants are advised to check with all relevant statutory authorities and comply with all relevant legislation.

An environmental authority for petroleum activities is not an authority to negatively impact on water levels or pressure heads in groundwater aquifers in or surrounding formations. There are obligations to minimise or mitigate any such negative impact under other Queensland Government and Commonwealth Government legislation.

Appendix 2: Definitions

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
Alluvial mining	means excavating, in any way, unconsolidated or waterborne or weathered materials (whether or not it is in a watercourse) and processing it by chemical methods or gravity separation to extract minerals from the material.
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.
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.
Bend of a watercourse	For the purposes of this ERA standard, a bend is considered to be any change in the direction of the flood flow (i.e. within the flood flow channel) in a watercourse that is greater than 30 degrees.
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.
Clay pit mining	Means excavating waterborne or weathered material (whether or not it is in a watercourse) and processing it by a non-crushing method.

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.
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.
Dimension stone mining	Is the extraction of rock and the processing of this material by further cutting and shaping, mostly for use in building applications such as walls, floor tile, cladding and roofing (e.g. granite, marble, slate, sandstone and limestone).

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 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.
Hard rock mining	The extraction of ore from underground or open cut pits and the processing of this ore by crushing and or milling, and the use of gravity separation or chemical methods to extract minerals.
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. (6) A regulation under subsection (4)(c) may prescribe an activity by reference to the quantities of minerals extracted or to any other specified circumstances.

Mine excavation	The void resulting from the removal of earth for the purpose of obtaining ore or materials (e.g. gravel for road construction) used for mining related activities.
Miner's common	A sapphire mining area (3920 hectares) in the Emerald District, mined since the late 19th Century and set aside by the Queensland Government in September 1941 as the Miners' Common.
Mining project	All activities permitted to be performed under mining claims (including excavation, transportation and processing of ore). A mining project may include more than one mining claim.
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*.
Opal mining	Is the extraction of opal from underground or open cut pits and the processing of this ore by manual separation of opal rock or by using gravity separation methods to extract the opal.
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.
Project area	The total area of the mining claim/s.
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 regulated waste 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. 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: - removing all unwanted infrastructure; - backfilling mine excavations (e.g. pits) and capping drill holes;

	- reshaping the land surface to a stable landform similar to that of surrounding undisturbed areas; - spreading of topsoil; - spreading seed or planting seedlings to promote revegetation; - 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".
Scrub lead	A Designated Fossicking Land (DFL) within the Miners' Common. Machine mining on mining leases up to 20ha in area is permitted within Scrub Lead DFL.
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.
Shallow pit mining	Means extracting and processing material from open cut pits no more than 5 m deep.
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 & 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 <u>not</u> 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 (b) any applicable Commonwealth or State government plans, standards, agreements or requirements about environmental protection or ecologically sustainable development; and (d) any applicable environmental impact study, assessment or report; and (e) the character, resilience and values of the receiving environment; and (f) all submissions made by the applicant and submitters; and (g) 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 (h) 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 (i) the public interest; and (j) any applicable site management plan; and (k) any relevant integrated environmental management system or proposed integrated environmental management system; and (l) 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.
Tailings dams	A dam used to collect the solid residues resulting from mineral ore

	processing.
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.
Turkey's nest dam	A dam constructed outside a watercourse, wetland or waterway by excavating a pit and constructing a wall around the pit with the excavated material. Natural surface flow is excluded from the dam.
Uneven state	In reference to ground, means ground that has not been compressed, made smooth or returned to a flat profile. The ground is left with small mounds and shallow pits of a small diameter to facilitate the catching of wind blown seed and the pooling of water after rain, to promote natural revegetation.
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.
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.

Appendix 3: Environmentally Sensitive Areas

Category A Environmentally Sensitive Areas

Category A Environmentally sensitive areas are defined in Schedule 12, Part 1 of the *Environmental Protection Regulation 2008* and reproduced below.

A ***category A environmentally sensitive area*** means any of the following—

(a) any of the following under the *Nature Conservation Act 1992*—

(i) a national park;

(ii) a national park (Aboriginal land);

(iii) a national park (Torres Strait Islander land);

(iv) a national park (Cape York Peninsula Aboriginal land);

(v) a regional park (general);

(vi) a forest reserve;

(b) the wet tropics area under the *Wet Tropics World Heritage Protection and Management Act 1993*;

(c) the Great Barrier Reef Region under the *Great Barrier Reef Marine Park Act 1975* (Cwlth);

(d) a marine park under the *Marine Parks Act 2004*, other than a part of the park that is a general use zone under that Act.

Category B Environmentally Sensitive Areas

Category B Environmentally sensitive areas are defined in Schedule 12, Part 1 of the Environmental Protection Regulation 2008 and reproduced below.

A ***category B environmentally sensitive area*** means any of the following—

(a) any of the following areas under the *Nature Conservation Act 1992*—

(i) a coordinated conservation area;

(ii) an area of critical habitat or major interest identified under a conservation plan;

(iii) an area subject to an interim conservation order;

(b) an area subject to the following conventions to which Australia is a signatory—

(i) the 'Convention on the Conservation of Migratory Species of Wild Animals' (Bonn, 23 June 1979);

(ii) the 'Convention on Wetlands of International Importance, especially as Waterfowl Habitat' (Ramsar, Iran, 2 February 1971);

(iii) the 'Convention Concerning the Protection of the World Cultural and Natural Heritage' (Paris, 23 November 1972);

(c) a zone of a marine park under the *Marine Parks Act 2004*;

(d) an area to the seaward side of the highest astronomical tide;

(e) the following under the *Queensland Heritage Act 1992*—

(i) a place of cultural heritage significance;

(ii) a Queensland heritage place, unless there is an exemption certificate issued under that Act;

(f) an area recorded in the Aboriginal Cultural Heritage Register established under the *Aboriginal Cultural Heritage Act 2003*, section 46, other than the area known as the 'Stanbroke Pastoral Development Holding', leased under the Land Act 1994 by lease number PH 13/5398;

(g) a feature protection area, State forest park or scientific area under the *Forestry Act 1959*;

(h) a declared fish habitat area under the *Fisheries Act 1994*;

(i) a place in which a marine plant under the *Fisheries Act 1994* is situated;

(j) an endangered regional ecosystem identified in the database known as the 'Regional ecosystem

description database' kept by the department.

Category C Environmentally Sensitive Areas

LAND AREA CLASSIFICATION	ADMINISTERING LEGISLATION	ADMINISTERING AUTHORITY
Nature Refuges; and Resource Reserves	*Nature Conservation Act 1992*	Department of Environment and Heritage Protection
Declared Catchment Areas; Declared Irrigation and Irrigation Project Areas; and Water Reservoirs and Drainage Areas.	*Water Act 2000*, various Water Board Acts	Department of Natural Resources and Mines and/or Relevant Storage Operator or Board
River Improvement Areas	*River Improvement Trust Act 1940*	Department of Natural Resources and Mines and the Relevant River Trust
Designated Landscape Area (e.g. Stanbroke Pastoral Holding)	*Aboriginal Cultural Heritage Act 2003*	Department of Aboriginal and Torres Strait Islander Partnerships
Historic Mining Sites	Nil (Inter Departmental Notifications)	Department of Environment and Heritage Protection and the Department of Natural Resources and Mines
State Forest or Timber Reserves	*Forestry Act 1959*	Department of National Parks, Sport and Racing
DPI Research Sites	Nil (Inter Departmental Agreement)	Department of Agriculture and Fisheries
Critical Areas and Public Purpose Reserves	*Land Act 1994*	Department of Natural Resources and Mines
Areas under Coastal Management Plans and Control Districts	*Coastal Protection and Management Act 1995*	Department of Environment and Heritage Protection
An area subject to a State Planning Policy that the policy declares is in need of environmental protection.	*Sustainable Planning Act 2009*	Department of State Development, Infrastructure and Planning
Erosion Prone Areas and Coastal Management Control Districts	*Coastal Protection and Management Act 1995*	Department of Environment and Heritage Protection
Areas of land occupied by the Bureau of Sugar Experiment Stations to conduct research	*Sugar Industry Act 1999*	Department of Agriculture and Fisheries
Nature Refuges; and Resource Reserves	*Nature Conservation Act 1992*	Department of Environment and Heritage Protection
Declared Catchment Areas; Declared Irrigation and Irrigation	*Water Act 2000*, various Water Board Acts	Department of Natural Resources and Mines and/or

Project Areas; and Water Reservoirs and Drainage Areas.		Relevant Storage Operator or Board
River Improvement Areas	*River Improvement Trust Act 1940*	Department of Natural Resources and Mines and the Relevant River Trust

Appendix 4: Forms

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

Form 1: Monitoring and record keeping summary

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					

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			

Form 3: Schedule of financial assurance

Total area of disturbance/proposed disturbance	Previously mined area	All other areas
Up to 0.1 hectare	$200	$400
0.1 to 0.5 hectares	$400	$800
0.5 to 1 hectares	$1,000	$2,000
1 to 2 hectares	$2,000	$4,000

Appendix 5: Watercourse figures

Figure 1: Cross section through a watercourse

Figure 1

(not to scale)

Cross section through a watercourse

showing sections of the banks of the flood flow channel where mining is not permitted.

Mining is not permitted in the areas shown as

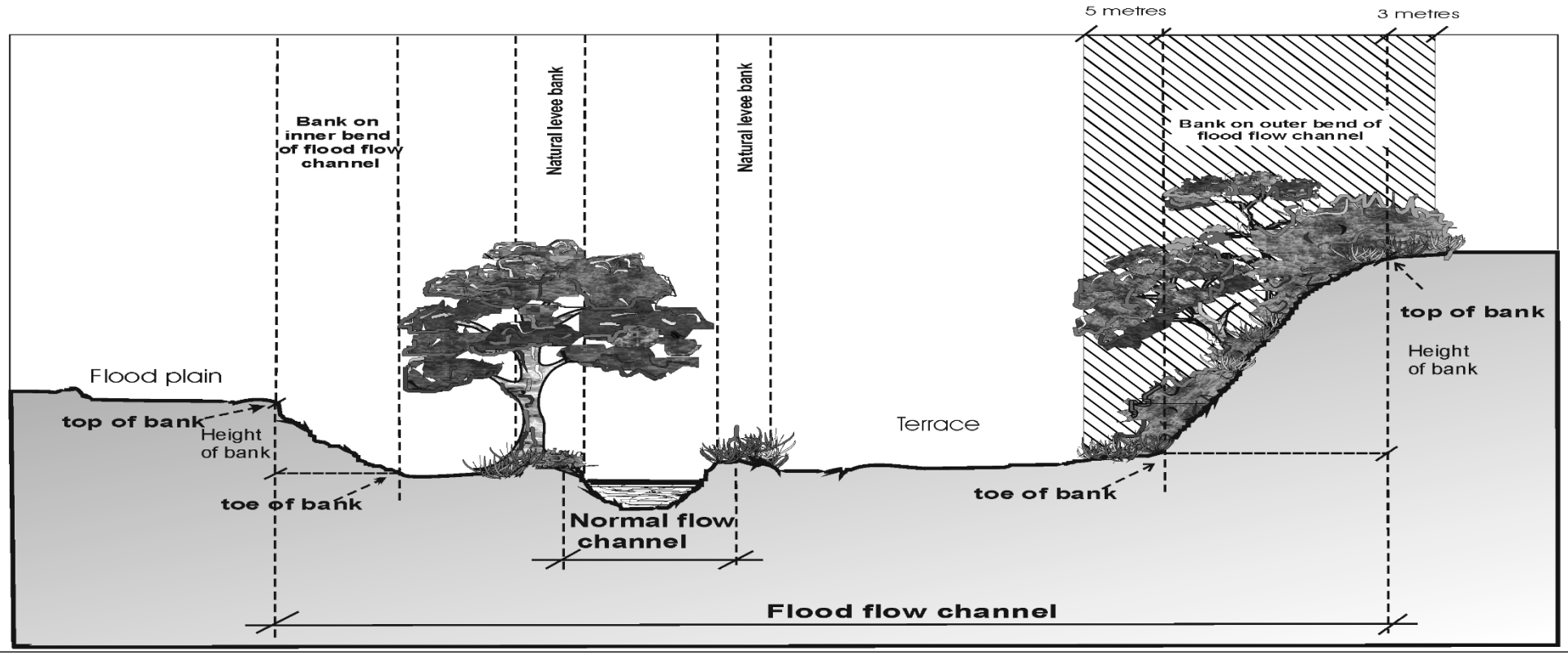
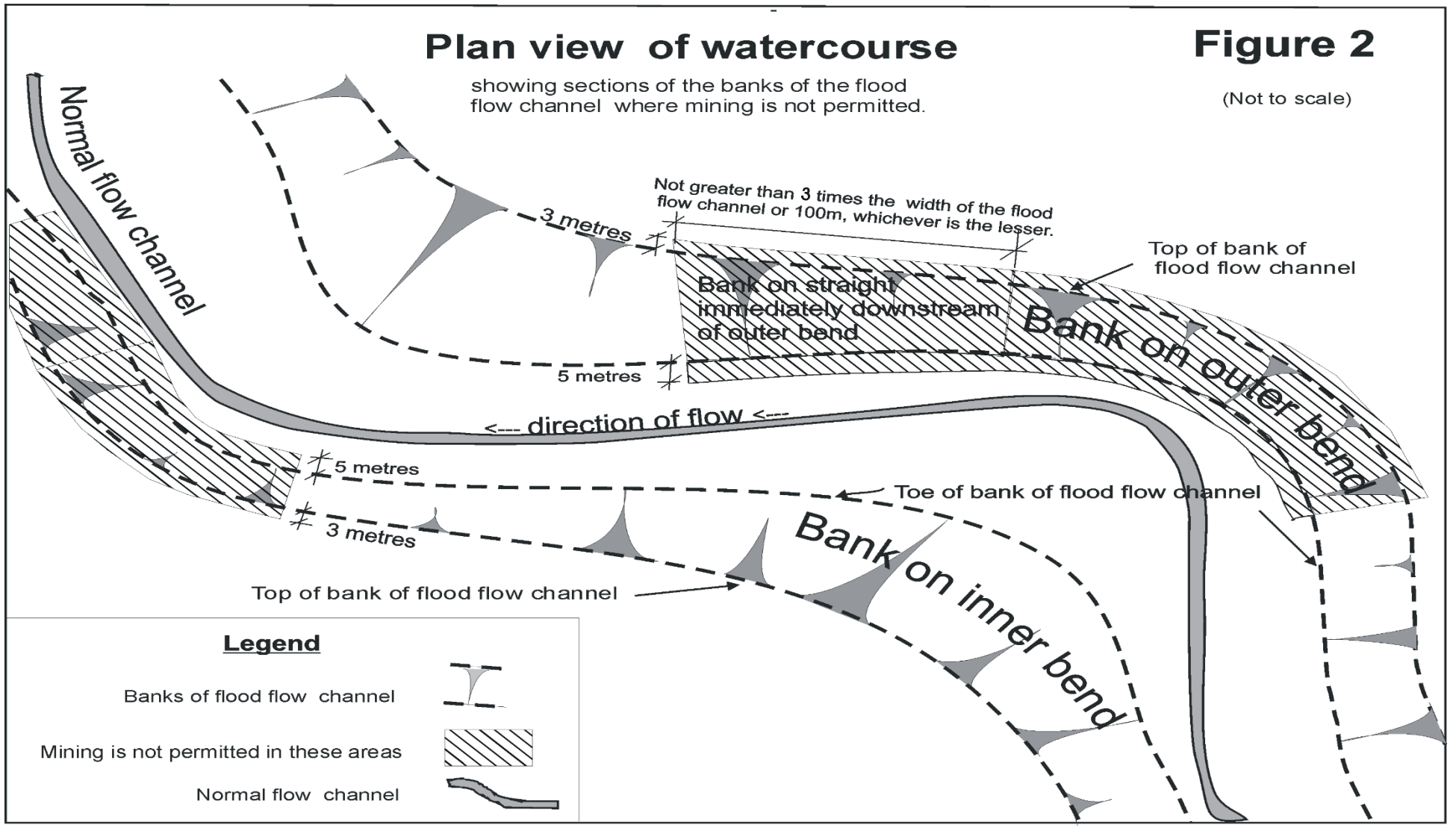


Figure 2: Plan of a watercourse


Plan view of watercourse
showing sections of the banks of the flood flow channel where mining is not permitted.
Figure 2
(Not to scale)
Normal flow channel
3 metres
Not greater than 3 times the width of the flood flow channel or 100m, whichever is the lesser.
Top of bank of flood flow channel
Bank on straight immediately downstream of outer bend
Bank on outer bend
5 metres
<--- direction of flow <---
5 metres
Toe of bank of flood flow channel
3 metres
Bank on inner bend
Top of bank of flood flow channel
Legend
Banks of flood flow channel
Mining is not permitted in these areas
Normal flow channel

Appendix 6: Technical guidelines

Australian Standard 1940 - The storage and handling of flammable and combustible liquids. Standards Australia (1993).

Australian Water Quality Guidelines for Fresh and Marine Water Quality, Australian and New Zealand Environment and Conservation Council (1992).

Commonwealth Best Practice Environmental Management in Mining Guidelines, Environment Australia.

Dredging, Extraction and Spoil Disposal, Fish Habitat Management Operational Policy: FHMOP 004, Department of Primary Industries (1998).

Farm Water Supplies Design Manual, Department of Primary Industries, (1992).

Guidelines for Sampling and Analysis of Lowland Acid Sulfate Soils (ASS) in Queensland, Department of Natural Resources (1998).

Soil Erosion and Sediment Control - Engineering Guidelines for Queensland Construction Sites, The Institution of Engineers, Australia, Queensland Division (1996).

Technical Guidelines for Environmental Management of Exploration and Mining, Department of Mines and Energy, Queensland, 1995.

The Conservation Status of Queensland's Bioregional Ecosystems, Environmental Protection Agency (1999).

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