

Permit

Environmental Protection Act 1994

Environmental authority MC70543

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

Environmental authority number: MC70543

Environmental authority takes effect on 01 May 2019

Environmental authority holder(s)

Name(s)	Registered address
Brenden James O'Shea	19 Beverley Hill St MOOROOKA QLD 4105 Australia
Kerrie Leanne Hughes	19 Beverley Hill St MOOROOKA QLD 4105 Australia

Environmentally relevant activity and location details

Environmentally relevant activity/activities	Location(s)
Resource Activity, Non-Scheduled, Mining Activity, Mining Claim - MC	MC70543

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:

Environmental authority

- 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 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.

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

Enquiries:
Minerals Business Centre
Department of Environment and Science
Phone: 07 4222 5352
Email: ESCairns@des.qld.gov.au

Date issued: 09 May 2019

Environmental authority

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)

Conditions of environmental authority

With the exception of any variations, the conditions of approval for this environmental authority are the standard conditions contained within the attached documents:

- Code of Environmental Compliance for Mining Claims and Prospecting Permits - Version 0 – EM587

END OF ENVIRONMENTAL AUTHORITY

Attachments

- Code of Environmental Compliance for Mining Claims and Prospecting Permits - Version 0 – EM587

Code of environmental compliance

Mining claims and prospecting permits

This code of environmental compliance (code) has been made under of the Environmental Protection Regulation 2008. It contains the standard environmental conditions approved by the Minister, under section 549 of the Environmental Protection Act 1994, for carrying out an environmental authority for a mining exploration or mineral development project which meets the prescribed eligibility criteria in schedule 3A of the Environmental Protection Regulation 2008.

Code of environmental compliance for mining claims and prospecting permits

Version 1.1

Environmental Protection Act 1994 - changes as at 31 March 2013

The criteria, referred to as eligibility criteria from 31 March 2013, for determining whether mining claim project can be considered a standard environmental authority have been set out below. The following eligibility criteria are found in schedule 3A of the Environmental Protection Regulation 2008:

- 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 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 wild river 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 wild river high preservation area, wild river nominated waterway or wild river special floodplain management 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 wild river high preservation area or wild river special floodplain management area.

A nominated waterway means a nominated waterway under the Wild Rivers Act 2005.

- e) the mining activity does not, or will not, at any one time, cause more than 5000m² of land to be disturbed at a campsite;
- f) no more than 20m³ of any substance is, or will be, extracted from each kilometre of a riverine area affected by the mining activity in a year.

Any new mining claims commencing from 31 March 2013 that meets the eligibility criteria outlined above and that can meet all of the standard conditions can apply for a standard approval to carry out this activity. The conditions that apply to the standard approval will be the standard conditions.

From 31 March 2013, the standard environmental conditions of this code are taken to be the standard conditions for the mining activity until new standard conditions are developed.

Where the mining activity cannot meet all the standard conditions of this code, a variation application for an environmental authority can be made. The environmental authority will include the standard conditions and any variation that is approved by the administering authority.

Information on applying for an approval is at www.business.qld.gov.au.

In the near future, the department will be developing a contemporary set of eligibility criteria and standard conditions that reflects changes to standards of environmental management required for mining activities and more recent legislation implementation.

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.

Contents

Contents	4
1.0 INTRODUCTION	5
2.0 STANDARD ENVIRONMENTAL CONDITIONS	7
2.1 GENERAL CONDITIONS	7
Financial Assurance	7
Land Disturbance	7
Air Quality	8
Noise Emissions	8
Erosion and Sediment Control	8
Topsoil and Overburden Management	9
Hazardous Contaminants	10
Nature Conservation	11
Other Level 2 Environmentally Relevant Activities	12
2.2 ACTIVITY-BASED CONDITIONS	13
Waste Management	13
Service, Maintenance and Storage Areas	14
Monitoring, Reporting and Emergency Response Procedures	15
Rehabilitation	15
3.0 DEFINITIONS	18
4.0 TECHNICAL GUIDELINES	28
5.0 RELEVANT LEGISLATION	29
APPENDIX A - ENVIRONMENTALLY SENSITIVE AREAS	30
APPENDIX B FORMS	34
FORM 1 MONITORING AND RECORD KEEPING SUMMARY	34
FORM 2 Emergency Response Table	35

1.0 INTRODUCTION

Note: The key terms and/or phrases used in this Code are *highlighted in italics* followed by an (*). They are defined in Section 4.

Prospecting Permits and Mining Claims

A Mining Claim allows a miner to prospect for specified minerals and to mine them by hand methods. A range of light machinery is permitted, together with moderate blasting, temporary structures and delivery of materials to the site. The initial term of a claim cannot exceed ten years but a holder can apply for renewals. The maximum area for a claim is one hectare and a person cannot hold more than two.

Prospecting Permits entitle the holder to determine the existence, quantity and quality of a mineral in or under land using metal detectors or similar hand held instruments and hand held implements for sampling. In certain cases hand mining for minerals is permitted. A holder may also carry out activities necessary to preparing an application for a mining claim or a mining lease.

A District Prospecting Permit has a term of up to one year and the holder can prospect on all land within a Mining District. A Parcel Prospecting Permit has a term of three months and applies to a specified parcel of land owned by one owner.

Mining or exploration activities carried out under a prospecting permit or a mining claim will always be standard mining activities. A *Standard Mining Activity* is an activity that has a low risk of causing *Serious Environmental Harm*.

About this Code

This Code of Environmental Compliance:

- sets the environmental performance requirements as *Standard Environmental Conditions* which will be the compliance requirements of an *Environmental Authority* issued for standard mining activities (see section 2);
- provides advisory notes on how to achieve compliance with the standard environmental conditions. These are not compliance requirements and are contained in the boxes associated with the relevant standard environmental condition;
- provides definitions of terms used in this code (see section 3);
- provides references to Technical Guidelines for information on best practice environmental management (see section 4).

Additional Conditions for Mining Claims

The holder of the environmental authority may apply for additional conditions at any time. The request must be made on the *Approved For** and the applicant must supply enough information to allow the *Administering Authority** to decide whether or not to impose the condition/s.

The administering authority may also set additional conditions on the environmental authority. However, the administering authority may only set additional conditions if the relevant mining claim would remain a standard mining activity. In deciding whether to set an additional condition, the administering authority must comply with any relevant *Environmental Protection Policy** requirements and consider the *Standard Criteria**.

If an application for an additional condition is granted, the additional condition will override the relevant standard environmental condition and the activity will remain a standard mining activity in accordance with section 151 of the *Environmental Protection Act 1994*.

Compliance Requirement

The compliance requirements of a standard environmental authority issued under the *Environmental Protection Act 1994* for a standard mining activity are the standard environmental conditions in this code, plus any additional conditions. Failure to comply with the standard environmental conditions, or any additional conditions, is a breach of the environmental authority and the holder is liable to various compliance enforcement actions under the *Environmental Protection Act 1994*. Refer to section 430 of the Environmental Protection Act 1994 - 'offence to contravene condition of environmental authority'.

Note: Additional permits and/or licences for activities carried out on the mining claims may be required under other legislation (e.g. sale of gravel or sand). Seek advice from the administering authority before carrying out any additional activities.

Public Notification

Draft environmental authorities for mining claims will be publicly advertised as part of the application process. Any person may object to the conditions of the draft environmental authority and the objections will be heard through the Land and Resources Tribunal. The findings of the Land and Resources Tribunal will be considered by the Minister for Environment and Heritage Protection, who must seek advice from the Minister for Natural Resources and Mines, in setting the final environmental conditions.

For More Information

Contact the District Manager at the Department of Environment and Heritage Protection or the Mining Registrar at the Department of Natural Resources and Mines at the following locations.

Department of Environment and Heritage Protection

EHP Advisory Service - 1800 501087
Brisbane and Toowoomba - (07) 3224 6161
Maryborough and
Rockhampton - (07) 4936 0511
Mackay and Emerald - (07) 4982 4555
Townsville- (07) 4722 5350
Mt Isa- (07) 4744 7888
Cairns - (07) 4046 6730

Department of Natural Resources and Mines

Brisbane (Spring Hill) - (07) 3227 1972
Quilpie – (07) 4656 1266
Emerald - (07) 4982 4011
Winton – (07) 4657 1727
Mt Isa – (07) 4747 2103
Mareeba – (07) 4092 4211
Charters Towers - (07) 4787 1266
Townsville – (07) 4760 7406
Georgetown – (07) 4062 1204
Rockhampton – (07) 4938 4440

2.0 STANDARD ENVIRONMENTAL CONDITIONS

2.1 GENERAL CONDITIONS

Financial Assurance

Condition 1

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 the application form.

Note 2 - Section 364 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 366 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 Mines and Energy. 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. Environmental Protection Agency 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 Mines and Energy component).

Land Disturbance

Condition 2

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

Condition 3

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

Condition 4

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

Condition 5

The holder of a 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.

Condition 6

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.

Condition 7

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 1997*.

Topsoil and Overburden Management

Condition 8

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 prior to mining;
- store topsoil and overburden in separate stockpiles;
- install silt fences or bunding around the stockpiles;
- establish and maintain a temporary cover crop on the topsoil stockpiles;
- limit the height of topsoil stockpiles to 2 m; and
- where practical, reuse stockpiled topsoil within 12 months of storage.

Hazardous Contaminants

Condition 9

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.

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 3 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 administering authority that this activity is being carried out. Refer to section 371 of the *Environmental Protection Act 1994*.

Condition 10

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 384 of the *Environmental Protection Act 1994*.

Note 16 - A *Site Management Plan** approved under Part 413 of the *Environmental Protection Act 1994*, may be required by the administering 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.

Condition 11

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

Condition 12

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 - Section 35 (a) of the Mineral Resources Regulation 1990, requires that 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 *Rural Lands Protection Act 1985*, as a result of mining or as a result of access to the area of the mining claim.

Note 19 - The Department of Natural Resources 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 Mines and Energy, Department of Natural Resources or your Local Shire Council.

Condition 13

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 Environmental Protection Agency. 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 A.

Condition 14

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

Note 21 - With regard to cultural heritage issues refer to the *Cultural Record (Landscapes Queensland and Queensland Estate) Act 1987* and the *Queensland Heritage Act 1992*. Prior to carrying out any activities on the mining claim, the holder of the environmental authority should consult with the administering authority if a site has the potential to be designated as a historical, archaeological or ethnographic site.

Other Level 2 Environmentally Relevant Activities

Condition 15

The holder of the environmental authority must not carry out the following Level 2 *Environmentally Relevant Activities* (ERA) on site:

- ERA (7) Chemical Storage - storage of chemicals (other than crude oil, natural gas and petroleum products), including ozone depleting substances, gases or dangerous goods under the dangerous goods code in containers with a design storage volume of more than 10m³ but less than 1000m³;
- ERA (76) Incinerating waste – operating a waste incineration facility for incinerating –
 - a) vegetation;
 - b) clean paper or cardboard;
- ERA (77) Battery Recycling - operation of a facility for receiving and recycling or reprocessing any kind of battery; and
- ERA (80) Tyre Recycling - operation of a facility for receiving and commercially recycling or reprocessing tyres (other than retreading tyres).

2.2 ACTIVITY-BASED CONDITIONS

Waste Management

Condition 16

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

Condition 17

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 1997.

Condition 18

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.

Condition 19

The holder of the environmental authority must ensure that:

- (1) all chemical, fuel and oil storage facilities of more than 10 000 L on a mining claim, must be banded 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, 000 L, together with ten percent of the storage capacity beyond 10, 000 L; 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

Condition 20

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 can not 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 administering 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 Rescue Authority Act 1990* and the *Mine Regulation Act 1985*.

Rehabilitation

Condition 21

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.

Condition 22

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 25.

Condition 23

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 *Guidelines 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.

Condition 24

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.

Condition 25

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'.

Condition 26

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 administering authority.

Note 42 - The rehabilitation of some disturbed areas may not be required if the workings have a recognised historic value. Consult with the administering authority regarding rehabilitation requirements for such sites.

Condition 27

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.

Condition 28

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 administering authority prevent access to underground workings.

Condition 29

The holder of the environmental authority must complete the rehabilitation of areas disturbed by mining activities to the satisfaction of the administering authority.

Note 43 - Condition 29 does not apply to Prospecting Permits.

Note 44 - Condition 29 is a requirement of the *Environmental Protection Act 1994*. The holder of the environmental authority must submit a Final Rehabilitation Report* (FRR) and an Environmental Audit Statement* (EAS), prior to the cancellation or expiry of the mining claim. The surrender of the environmental authority will not be granted until the administering authority has approved the FRR and the EAS.

3.0 DEFINITIONS

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 Environmental Protection Agency; or
- (c) another State Government Department, Authority, Storage Operator, Board or Trust, who's role is to administer provisions under other enacted legislation (e.g. the Department of Natural Resources licence referable dams under the *Water Act 2000*).

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 administering 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 Code, 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 as the release (whether by act or omission) of a contaminant into the environment.

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

Contaminated land register - Means the register kept by the administering 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 Natural Resources or Local Government as areas infested with plants declared under section 69 of the *Rural Lands Protection Act 1985* (section 70 (3) lists the categories of declared plants).

Declared plant - A plant that has been declared under the *Rural Lands Protection Act 1985*.

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

Environmental authority - Means a licence or approval issued by the administering authority under the *Environmental Protection Act 1994*.

Environmental management register - Means the register kept by the administering 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) noise, dust, odour, light; 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 A.

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

- (a) a quality or physical characteristic of the environment that is conducive to ecological health or public amenity or safety; or
- (b) another quality of the environment identified and declared to be an environmental value under an Environmental Protection Policy or Regulation (e.g. water suitable for swimming in or drinking)

Ethnographic site - An archaeological site of particular importance to the study of a cultural group.

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

Financial assurance - Means a security deposit, either cash or a bank guarantee, that is held by the administering 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 9 of the *Environmental Protection Regulation 1998* 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.

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 3 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. (eg: 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 3 of the *Environmental Protection Act 1994* defines the owner of the land as –

1. The “**owner**” of land is—

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

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

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

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

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

Material environmental harm - Section 16 of the *Environmental Protection Act 1994* defines material environmental harm as:

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

In this section

“maximum amount” means the threshold amount for serious environmental harm.

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

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 a mineral in connection with, or waste substances resulting from, the winning or extraction.
- (2) For subsection (2), 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, carbin-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)(c), 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 –

- (1) a dwelling;
- (2) a library, childcare centre, kindergarten, school, college, university or other educational institution;
- (3) a hospital, surgery or other medical institution;
- (4) 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*;
- (5) a marine park under the *Marine Parks Act 1982*; and
- (6) 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 2 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 - Schedule 9 of the Environmental Protection Regulation 1998 defines regulated waste as non-domestic waste mentioned in schedule 7 (whether or not it has been treated or immobilised), and includes—

- (a) for an element - any chemical compound containing the element; and
 - (b) anything that has contained the waste.
- (e.g. Regulated waste commonly generated from mining projects include tyres, oils, cyanide, mercury and batteries)

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) environmental harm (other than environmental nuisance)
 - (a) that causes actual or potential harm to environmental values that is irreversible, of a high impact or widespread; or
 - (b) that causes actual or potential harm to environmental values of an area of high conservation value or special significance; or
 - (c) that causes actual or potential loss or damage to property of an amount of, or amounts totalling, more than the threshold amount; or
 - (d) that results in costs of more than the threshold amount being incurred in taking appropriate action to—
 - i. prevent or minimise the harm; and

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

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

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 not included:

- areas off lease (e.g. roads or tracks which provide access to the tenement); -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 EPA;
- 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 3 of the *Environmental Protection Act 1994*. They are:

- (a) the principles of ecological sustainable development; and
- (b) any applicable environmental protection policy; and
- (c) any applicable Commonwealth, State or local government plans, standards, agreements or requirements; and
- (d) any applicable environmental impact study, assessment or report; and
- (e) the character, resilience and values of the receiving environment; and
- (f) all submissions made by the applicant and interested parties; and
- (g) best practice environmental management; and
- (h) financial implications; and
- (i) the public interest; and
- (j) any applicable site management plan; and
- (k) any other matter prescribed under a regulation.

Standard environmental conditions – For an environmental authority, means the standard environmental conditions approved for the authority under section 549 of the *Environmental Protection Act 1994*.

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.

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.

4.0 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).

5.0 RELEVANT LEGISLATION

State Legislation (published by Go Print, Queensland):

Aboriginal Lands Act 1991

Cultural Record (Landscapes Queensland and Queensland Estate) Act 1987

Environmental Protection Act 1994

Environmental Protection Regulation 1998

Fire and Rescue Authority Act 1990

Fisheries Act 1994

Land and Resources Tribunal Act 1999

Land Act 1994

Mineral Resources Act 1989

Mineral Resources Regulation 1990

Mines Regulation Act 1985

Nature Conservation Act 1992

Queensland Heritage Act 1992

Torres Strait Islander Land Act 1991

Water Act 2000

Water Resources Act 1989

Commonwealth Legislation:

Native Title Act 1993 Environment

Protection and Biodiversity Conservation Act 1999

APPENDIX A - ENVIRONMENTALLY SENSITIVE AREAS

Category A - Environmentally Sensitive Areas

LAND AREA CLASSIFICATION	ADMINISTERING LEGISLATION	ADMINISTRATING AUTHORITY
National Parks (Scientific); National Parks; National Parks (Aboriginal Land); National Parks (Torres Strait Islander Land); National Parks (Recovery);and Conservation Parks	<i>Nature Conservation Act 1992</i>	Environmental Protection Agency
Wet Tropics	<i>Wet Tropics World Heritage Protection and Management Act 1993</i>	Wet Tropics Management Authority
Restricted Areas (includes Constructed Water Reservoirs)	<i>Mineral Resources Act 1989</i>	Department of Mines and Energy
Great Barrier Reef Marine Park Region	<i>Great Barrier Reef Marine Park Act 1975 (Cwlth)</i>	Great Barrier Reef Marine Park Authority
Marine Parks (other than general use zones)	<i>Marine Parks Act 1982 (Qld)</i>	Environmental Protection Agency

Category B - Environmentally Sensitive Areas

LAND AREA CLASSIFICATION	ADMINISTERING LEGISLATION	ADMINISTRATING AUTHORITY
Coordinated Conservation Areas; Wilderness Areas; World Heritage Management Areas; International Agreement Areas; An area of Critical Habitat or Major Interest identified under a Conservation Plan; Areas subject to an Interim Conservation Order; and Forest Reserves.	<i>Nature Conservation Act 1992</i>	Environmental Protection Agency
An area subject to following conventions: (a) Convention on the Conservation of Migratory Species of Wild Animals (Bonn, 23 June 1979); (b) Convention on Wetlands of International Importance, especially as Waterfowl Habitat (Ramsar, 2 February 1971); and (c) Convention Concerning the Protection of the World Cultural and Natural Heritage (Paris, 16 November 1972).	International Conventions	Environmental Protection Agency
General Use Zones of a Marine Park	<i>Marine Parks Act 1982</i>	Environmental Protection Agency
An Area to the Seaward Side of the Highest Astronomical Tide	Nil	Environmental Protection Agency
Place of Cultural Heritage Significance; Protected Areas; Registered Places; and Restricted Zones.	<i>Queensland Heritage Act 1992</i> <i>Queensland Heritage Act 1992</i>	Environmental Protection Agency

Category B - Environmentally Sensitive Areas (continued)

LAND AREA CLASSIFICATION	ADMINISTERING LEGISLATION	ADMINISTRATING AUTHORITY
Designated Landscape Area (other than the area known as the 'Stanbroke Pastoral Holding')	<i>Cultural Record (Landscapes Queensland and Queensland Estate) Act 1987</i>	Environmental Protection Agency
Feature Protection Area, State Forest Park or a Scientific Area	<i>Forestry Act 1959</i>	Department of Natural Resources
Fish Habitat Area; and A place in which a Marine Plant is situated	<i>Fisheries Act 1994</i>	Department of Primary Industries
Endangered Regional Ecosystems; and An area of High Nature conservation Value	Nil	Environmental Protection Agency

Category C - Environmentally Sensitive Areas

LAND AREA CLASSIFICATION	ADMINISTERING LEGISLATION	ADMINISTRATING AUTHORITY
Nature Refuges; and Resource Reserves	<i>Nature Conservation Act 1992</i>	Environmental Protection Agency
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/or Relevant Storage Operator or Board
River Improvement Areas	<i>River Improvement Trust Act 1940</i>	Department of Natural Resources and the Relevant River Trust
Designated Landscape Area - Stanbroke	<i>Cultural Record (Landscapes Queensland and Queensland Estate) Act 1987</i>	Environmental Protection Agency
Historic Mining Sites	Nil (Inter Departmental Notifications)	Environmental Protection Agency and the Department of Mines and Energy
State Forest or Timber Reserves	<i>Forestry Act 1959</i>	Department of Natural Resources
DPI Research Sites	Nil (Inter Departmental Agreement)	Department of Primary Industries
Critical Areas and Public Purpose Reserves	<i>Land Act 1994</i>	Department of Natural Resources
Areas under Coastal Management Plans and Control Districts	<i>Coastal Protection and Management Act 1995</i>	Environmental Protection Agency
An area subject to a State Planning Policy that the policy declares is in need of environmental protection.	<i>Sustainable Planning Act 2009</i>	Environmental Protection Agency
Erosion Prone Areas and Coastal Management Control Districts	<i>Beach Protection Act 1968</i>	Environmental Protection Agency
Areas of land occupied by the Bureau of Sugar Experiment Stations to conduct research	<i>Sugar Industry Act 1999</i>	Department of Primary Industries

APPENDIX B FORMS

FORM 1 MONITORING AND RECORD KEEPING SUMMARY

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

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

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			

FIGURE 1 Cross section through a watercourse

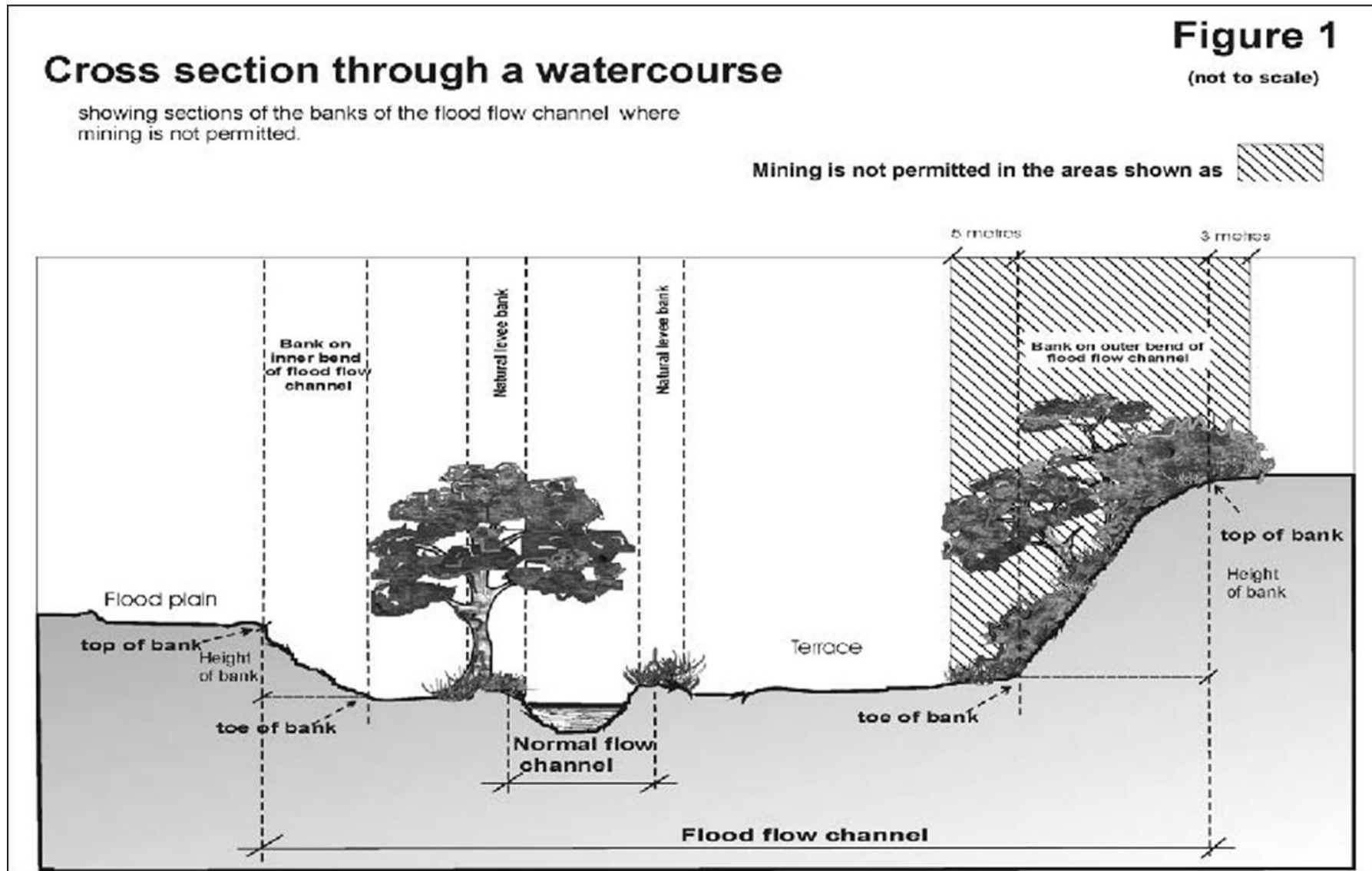


FIGURE 2 Plan view of watercourse

