

Permit

Environmental Protection Act 1994

Environmental authority EPML00383413

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

Environmental authority number: EPML00383413

Environmental authority takes effect on 5 September 2025

The anniversary date of this environmental authority is 14 March. The payment of the annual fee will be due each year on this day.

An annual return will be due each year on 01 April.

Environmental authority holder(s)

Name(s)	Registered address
Bogside Mining Industries Pty Ltd	132 Commercial Road, TENERIFFE QLD 4006

Environmentally relevant activity and location details

Environmentally relevant activity/activities	Location(s)
<i>Environmental Protection Regulation 2019</i> , Schedule 3, item 20(a) – clay pit mining, dimension stone mining or mining gemstones (including material from which gemstones are extracted) mining a quantity of material of at least 5,000t but not more than 100,000t in a year	Mining lease (ML) 4581, Patrick Street, Swanbank

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).

Mobile and temporary activities

If you operate a mobile and temporary environmentally relevant activity (ERA), other than regulated waste transport, you are required to maintain a work diary. You must:

- use the approved form for a work diary (ESR/2015/1696);
- keep the work diary records for 2 years after the last entry;
- inform the administering authority within 7 days of the work diary being lost or stolen;
- record the information required in the work diary for each location within 1 day of leaving the location.

Contaminated land

It is a requirement of the EP Act that an owner or occupier of land give written notice to the administering authority if they become aware of the following:

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

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. The payment of the annual fee will be due each year on this day. An annual return will be due each year on 01 April.

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



Signature

5 September 2025

Date

Rebecca McAuley
Department of the Environment, Tourism, Science and
Innovation
Delegate of the administering authority
Environmental Protection Act 1994

Enquiries:
Minerals Business Centre
PO Box 7230, Cairns QLD 4870
Phone: (07) 4222 5352
Email: ESCairns@detsi.qld.gov.au

Obligations under the *Environmental Protection Act 1994*

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

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

Other permits required

This permit only provides an approval under the *Environmental Protection Act 1994*. In order to lawfully operate you may also require permits / approvals from your local government authority, other business units within the department, and other State and Federal 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 Natural Resources and Mines, Manufacturing, and Regional and Rural Development (to clear vegetation), and the Department of Primary Industries (to clear marine plants or to obtain a quarry material allocation).

Obligations under the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act)

Matters of national environmental significance (MNES) are regulated under the Commonwealth EPBC Act rather than under state legislation. You may need to submit a referral if your project potentially impacts any matters protected under the EPBC Act. For more information on self-assessments, and referral and assessment processes please visit the Department of Climate Change, Energy, the Environment and Water webpage, <https://www.dcceew.gov.au/environment/epbc/advice>.

Obligations under the *Aboriginal Cultural Heritage Act 2003* and *Torres Strait Islander Cultural Heritage Act 2003* (the Cultural Heritage Acts)

The Cultural Heritage Acts require anyone who carries out a land-use activity to exercise a duty of care. This 'duty of care' means land users must take all reasonable and practicable measures to ensure their activity does not harm Aboriginal or Torres Strait Islander cultural heritage, and applies to any activity where Aboriginal or Torres Strait Islander cultural heritage is located. For more information on your obligations under this legislation, please visit the Department of Women, Aboriginal and Torres Strait Islander Partnerships and Multiculturalism webpage at, <https://www.dwatsipm.qld.gov.au/>.

Conditions of environmental authority

The environmental authority incorporates the following schedules:

Schedule A – General

Schedule B – Air

Schedule C – Water

Schedule D – Noise and Vibration

Schedule E – Waste

Schedule F – Land

Schedule G – Definitions

Agency interest: General

- A1** The operator of this activity must provide a financial assurance in the amount and form required by the administering authority prior to the commencement of activities proposed under this environmental authority.

NOTE: The calculation of financial assurance for condition A1 must be in accordance with "Guideline 17 — Calculating financial assurance for mining projects" and may include a performance discount. The amount is defined as the maximum total rehabilitation cost for complete rehabilitation of all disturbed areas, which may vary on an annual basis due to progressive rehabilitation. The amount required for the financial assurance must be the highest Total Rehabilitation Cost calculated for any year of the Plan of Operations and calculated using the formula: (Financial Assurance = Highest Total Annual Rehabilitation Cost x Percentage Required)

- A2** The financial assurance is to remain in force until the administering authority is satisfied that no claim on the assurance is likely.

NOTE: Where progressive rehabilitation is completed and acceptable to **the** administering authority, progressive reductions to the amount of financial assurance will be applicable.

- A3** In carrying out an activity to which this approval relates, all reasonable and practicable measures must be taken to prevent or to minimise the likelihood of environmental harm being caused.

- A4** The operator of an activity to which this approval relates must:

- a) install all measures, plant and equipment necessary to ensure compliance with the conditions of this approval; and
- b) maintain such measures, plant and equipment in a proper and efficient condition; and
- c) operate such measures, plant and equipment in a proper and efficient manner.

- A5** At all times while the activity is operating, at least one person must be present who is responsible for the control and operation of the facility and whose duties must include but not be limited to:

- a) maintaining the facility;
- b) controlling all employees working in the facility; and
- c) supervising all persons entering the facility.

- A6** Record, compile and keep all monitoring results required by this approval and present this information to the administering authority or an authorised person when requested.

- A7** All records required by this approval must be kept for 5 years.

- A8** Measures must be taken to prevent unauthorised access to the site to which this approval relates.

- A9** Telephone the administering authority's Pollution Hotline or district office as soon as practicable after becoming aware of any release of contaminants not in accordance with the conditions of this approval or any environmental nuisance complaints received.

- A10** A written notice detailing the following information must be provided to the DERM within 14 days of any advice provided in accordance with condition **A9**:
- a) the name of the operator, including their approval / registration number;
 - b) the name and telephone number of a designated contact person;
 - c) quantity and substance released;
 - d) vehicle and registration details;
 - e) person/s involved (driver and any others);
 - f) the location and time of the release;
 - g) the suspected cause of the release;
 - h) a description of the effects of the release;
 - i) the results of any sampling performed in relation to the release;
 - j) actions taken to mitigate any environmental harm caused by the release; and
 - k) proposed actions to prevent a recurrence of the release.
- A11** The person undertaking the activity to which this approval relates must record the following details for all complaints received and provide this information to the administering authority or an authorised person on request:
- a) time, date, name and contact details of the complainant;
 - b) reasons for the complaint;
 - c) any investigations undertaken;
 - d) conclusions formed; and
 - e) any actions taken.
- A12** A suitably qualified person(s) must conduct any monitoring required by this approval.
- A13** All instruments, equipment and measuring devices used for measuring or monitoring in accordance with any condition of this approval must be calibrated, and appropriately operated and maintained.
- A14** All instruments, equipment and measuring devices used for measuring or monitoring in accordance with any condition of this approval must be readily available at any given time.
- A15** An appropriate spill kit, personal protective equipment and relevant operator instructions/emergency procedure guides for the management of wastes and chemicals associated with the activity to which this approval relates must be kept at the site and accessible to all operators.
- A16** Anyone operating under this approval must be trained in the use of the spill kit.

END OF CONDITIONS FOR SCHEDULE A

Agency interest: Air

- B1** The release of noxious or offensive odours or any other noxious or offensive airborne contaminants resulting from the activity must not cause a nuisance at any nuisance sensitive or commercial place.
- B2** The release of dust or particulate matter resulting from the activities must not cause an environmental nuisance at any nuisance sensitive or commercial place.
- B3** When requested by the administering authority, monitoring must be undertaken to investigate any environmental nuisance complaint caused by a release to the atmosphere from the approved site.
- B4** Subject to condition B5, the dust deposition rate and concentration of PM₁₀ and PM_{2.5} must not exceed the limits specified in 'Table 1 — Dust deposition rate and concentration of particulate matter limits' for the contaminant when measured from a nuisance sensitive or commercial place.

Table 1 - Dust deposition rate and concentration of particulate matter limits

Contaminant	Measure	Maximum Limit	Measurement method
Dust	Deposition rate	120mg/m ² /day	Australian Standard (AS) AS3580.10.1 of 2003 (or more recent editions)
PM ₁₀	Concentration	50µg/m ³ averaged over 24 hours	Either of the following: (a) AS 3580.9.6 of 2003 (or more recent editions); or (b) AS3580.9.7 of 2009 or more recent editions).
PM _{2.5}	Concentration	25µg/m ³ averaged over 24 hours	Either of the following: (a) AS 3580.9.10 of 2006 (or more recent editions); (b) AS3580.9.7 of 2009 or more recent editions).

Note:

- Australian Standard AS3580.10.1 of 2003 (or more recent editions) Methods for sampling and analysis of ambient air — Determination of particulate matter — Deposited matter — Gravimetric method.
- Australian Standard AS 3580.9.6 of 2003 (or more recent editions) Ambient air — Particulate matter — Determination of suspended particulate matter PK* high volume sampler with size-selective inlet — Gravimetric method. Australian Standard AS 3580.9.10 of 2006 (or more recent editions) Ambient air — Particulate matter — Determination of suspended particulate matter PM_{2.5} low-volume sampler — Gravimetric method.
- Australian Standard AS3580.9.7 of 2009 (or more recent editions) Ambient air — Particulate matter — Determination of suspended particulate matter — Dichotomous sampler (Phi₁₀ and PM_{2.5}) — Gravimetric method.

B5 The method of measurement and reporting of dust or particulate matter must comply with the most recent edition of the Queensland Government's Air Quality Sampling Manual or Australian Standards Measurement methods mentioned in condition B4 'Table 1 — Dust deposition rate and concentration of particulate matter limits'.

Note: Any dust or particulate monitoring must also include an 'upwind' sample to determine the contribution of other dust and particulate sources in the area.

B6 The results of monitoring undertaken in accordance with conditions B4 and B5 and a report which details an interpretation by a competent person of monitoring results must be submitted to the administering authority within 14 days after the monitoring has been completed.

B7 If monitoring indicates exceedance of the relevant limits in 'Table 1 — Dust deposition rate and concentration of particulate matter limits', then the environmental authority holder must:

- address the complaint including the use of appropriate dispute resolution if required; or
- immediately implement dust abatement measures so that emissions of dust from the activity do not result in further environmental nuisance.

B8 Stockpiles must be maintained in such a manner as to prevent the release of wind blown dust and particulate matter to the atmosphere. Such measures may include but not be limited to:

- use of water spraying devices;
- use of dust-suppressant shielding/wind breaks/screens; and
- stockpiles located in bunkers.

B9 The only material that is permitted to be applied to exposed surfaces for the purposes of dust suppression is water either sourced from the external sources (i.e. water recycling plants) or from internal water sources (i.e. water collected from the open pit located within ML4581 & ML 4573)

- B10** Trafficable areas must be maintained in such a manner as to prevent the release of wind blown dust or traffic generated dust to the atmosphere. Such measures may include but not be limited to:
- a) use of water spraying devices;
 - b) sealing any high trafficable areas;
 - c) adopting and adhering to speed limits; and
 - d) use of dust suppressant shielding/wind breaks/screens.
- B11** Measures must be implemented to prevent release of windblown dust and loss of material from trucks leaving the approved place. Such measures may include but not be limited to:
- a) wetting down the load prior to transport;
 - b) the entire load covered appropriately such as a tarpaulin prior to departure;
 - c) cleaning of any spillages on side rails, tail gates and draw bars of trucks prior to departure; and
 - d) driving over rumble drains prior to leaving the approved place.

END OF CONDITIONS FOR SCHEDULE B

Agency interest: Water

- C1** Contaminants must not be released from the site to any waters or to the bed or banks of any waters.
- C2** Suitable banks or diversion drains must be installed and maintained so that stormwater falling up gradient from any disturbed areas, including extraction and storage areas, is diverted away from entering any ponds or other structures used for the storage or treatment of contaminants or waste.
- C3** All waters flowing over disturbed areas, including but not limited to the extraction area and stockpiling areas, must be subject to an onsite sediment control system.
- C4** Minimum design specifications for onsite sediment control measures are as follows:
- a) the minimum size of any sedimentation basin must be sufficient to contain the contaminated runoff expected from a 24 hour storm with an average recurrence interval of 1 in 10 years;
 - b) water retaining structures must be designed to prevent the influx of surface water from adjacent water courses from a 24 hour storm with an average recurrence interval of 1 in 10 years;
 - c) drainage structures must be sufficient to convey the runoff from a 24 hour storm with an average recurrence interval of 1 in 10 years;
 - d) in the event of site flooding, flow paths must be designed to minimise re-suspension of fines or slimes; and
 - e) all stormwater flow paths must be constructed in such a way as to prevent erosion and scouring.
- C5** Any sedimentation basins used for the storage or treatment of stormwater at the approved site must be maintained:
- a) to ensure no release of contaminated water through the bed or banks of the basin to any waters (including ground water);
 - b) so that a freeboard of not less than 0.5 metres is maintained; and
 - c) ensure the stability of the basins' construction.
- C6** In the event of a discharge of contaminated water from the areas disturbed by the activity to the creek, the person undertaking the activity to which this approval relates must undertake monitoring of the quality characteristics, at the monitoring point locations described and at the frequency specified in 'Table 2 — Water monitoring program'.

Table 2 – Water monitoring program

Monitoring point	Quality characteristics	Units	Frequency
MP1 - Bundamba Creek at a location point more than 50m upstream of the discharge	pH	pH	Daily as soon as practicable after any discharge event for the duration of the discharge event
	Dissolved Oxygen	mg/L	
	Suspended Solids	mg/L	
	Turbidity	NTU	
	Electrical Conductivity	µs/cm	
MP2 - At the point from which the material is discharged from the mining lease	pH	pH	Daily as soon as practicable after any discharge event for the duration of the discharge event
	Dissolved Oxygen	Mg/L	
	Suspended Solids	mg/L	
	Turbidity	NTU	
	Electrical Conductivity	µs/cm	
MP3 - Bundamba Creek at a location point more than 50m downstream of the discharge	pH	pH	Daily as soon as practicable after any discharge event for the duration of the discharge event
	Dissolved Oxygen	mg/L	
	Suspended Solids	mg/L	
	Turbidity	NTU	
	Electrical Conductivity	µs/cm	

- C7** Should the interpretation of the water monitoring results described in 'Table 2 — Water monitoring program' and conclusions by a suitably qualified and experienced person in the field of surface water indicate environmental harm has occurred, or that there is an change of greater than 10% of the quality characteristics at the downstream monitoring point over the upstream sampling point, then the person undertaking the activity to which this approval relates must undertake a Water Contaminant Investigation Program (WCIP) within 7 days of becoming aware of the discharge. The WCIP must incorporate but not be limited to the following:
- ensure all onsite stormwater diversion measures are intact;
 - ensure the integrity of any onsite bunding;
 - investigate possible points of discharge of stormwater from the area disturbed by the activity;
 - investigate the remaining capacity of sediment basin and determine if removal of sediment is necessary;
 - determine the remaining freeboard of the sediment basin; and
 - investigate stockpiles of material for release to stormwater.
- C8** A complete and final report addressing the items identified in condition **C7** and the outcome and actions taken as a result of the WCIP must be supplied to the administering authority within 14 days of the investigation taking place.
- C9** The environmental authority holder must implement a groundwater monitoring program to monitor the impacts on surrounding groundwater.
- C10** The groundwater monitoring program required by condition **C9** must:
- Be designed by a person possessing appropriate qualifications and experience in groundwater hydrology and groundwater monitoring program design, and be able to competently analyse monitoring data and make recommendations about these matters.

- i Monitor groundwater quality, at monitoring bores BS01 and BS03 as described in Table 3 – Groundwater monitoring locations, for the parameters and at the frequency described in Table 4 – Groundwater Characteristics to be monitored and monitoring frequency.
- b) Incorporate a desktop study to characterise site hydrogeological regime. This study should include sufficient details which can be used as the basis for groundwater impact assessment and monitoring when future activities on the site are defined.

Table 3 – Groundwater monitoring locations

Groundwater bore	Easting	Northing
BS01	481485	6942046
BS03	481182	6942382

Table 4 – Groundwater Quality Characteristics to be monitored and monitoring frequency

Quality Characteristic	Units	Monitoring Frequency
Boron (total)	mg/L	Quarterly
Molybdenum (total)	mg/L	Quarterly
Vanadium (total)	mg/L	Quarterly
Selenium (total)	mg/L	Quarterly
Chloride	mg/L	Quarterly
Fluoride	mg/L	Quarterly
Sulphate	mg/L	Quarterly
Total Dissolved Salts (calculated)	mg/L	Quarterly
Electrical Conductivity	µS/cm	Quarterly
pH	Unit	Quarterly

- C11** The holder of the environmental authority must conduct monitoring and keep records of groundwater quality for the sample locations and maintain the groundwater monitoring program required by condition **C10** using persons of suitable experience. All determinations of groundwater quality must be:
- a) followed by an annual assessment of whether there has been any change. made in accordance with methods prescribed in the latest edition of the Administering Authority's Water Quality Sampling Manual; and
 - b) analysed at a laboratory that holds the appropriate accreditation from the National Association of Testing Authorities.
- C12** On any occasion that samples are obtained in accordance with condition **C10**, the standing water levels in the monitoring bores described in Table 3 – Groundwater monitoring locations, must be measured and recorded to an accuracy of 0.01 metres relative to Australian Height Datum (AHD).

END OF CONDITIONS FOR SCHEDULE C

Agency interest: Noise and Vibration

- D1** Notwithstanding any other conditions of this environmental authority, noise from activities must not cause an environmental nuisance at any existing noise sensitive place or any commercial place.
- D2** When requested by the administering authority in writing, noise monitoring must be undertaken within a reasonable and practicable timeframe nominated by the administering authority to investigate any complaint (which is neither frivolous nor vexatious nor based on mistaken belief in the opinion of an authorised officer) of environmental nuisance at any sensitive place, and the results must be notified within 14 days to the administering authority following completion of monitoring.
- D3** Noise Monitoring must include:
- a) background noise level;
 - b) L_{Amax} , adj, 15 mins or where they can be justified as appropriate as appropriate, L_{A10} , adj, 15 mins and L_{A1} adj, 15 mins,
 - c) the level and frequency of occurrence of impulsive or tonal noise;
 - d) atmospheric conditions including wind speed and direction;
 - e) effects due to extraneous factors such as traffic noise; and
 - f) location, date and time of recording.
- D4** In the event of a complaint about noise environmental nuisance that the administering authority considers is not frivolous or vexatious then a noise management plan is to be developed within one (1) month of the environmental authority holder being advised in writing of the complaint. The noise management plan must address at least, but not be limited to, the following matters:
- a) identification of component noise sources and activities at the place(s) which impact on noise sensitive areas;
 - b) the measured and/or predicted level of these noise sources and activities at noise sensitive places;
 - c) the reasonable and practicable control or abatement measures that can be undertaken to reduce identified intrusive noise sources;
 - d) the level of noise at noise sensitive places that would be achieved from implementing these measures.
 - e) the handling of future noise complaints;
 - f) community liaison and consultation; and
 - g) training of staff in noise management practices.
- D5** Upon the completion of the noise management plan it must be submitted to the administering authority within 14 days for its review and comment.
- D6** After the Administering Authority has provided comment on the noise management plan, the holder of this authority must implement the plan as soon as practicable.
- D7** The method of measurement and reporting of noise levels must comply with the latest edition of the Administering Authority's 'Noise Measurement Manual.'
- D8** The use of explosives is not permitted to be undertaken as part of this activity.

END OF CONDITIONS FOR SCHEDULE D

Agency interest: Waste

- E1** Any loss or spillage of regulated wastes must be cleaned up immediately.
- E2** Regulated waste must be handled and transferred in a proper and efficient manner to prevent any leakage or spillage of waste.
- E3** Tyres stored onsite awaiting collection must be maintained in stockpiles less than 200 m² in area and less than 3 meters high. These stockpiles must be and at least 10m from any other tyre storage area.

- E4** All reasonable and practicable fire prevention measures must be implemented, including removal of grass and other materials within a 10m radius of the scrap tyre storage area.

END OF CONDITIONS FOR SCHEDULE E

Agency interest: Land

- F1** All areas disturbed by mining activities must be rehabilitated to achieve a landform that is:
- a) safe to humans and wildlife;
 - b) non-polluting;
 - c) self-sustaining;
 - d) stable; and
 - e) able to sustain the post-mining land use;
- F2** The holder of this environmental authority must take all reasonable and practicable measures to minimise the area of land, including spoil areas with post mine land slopes of greater than 17%.
- F3** Areas that are to be progressively rehabilitated to a native ecosystem, as required by a condition of this environmental authority, must comply with the following outcomes;
- (i) a self sustaining native ecosystem has been established and species composition and distribution is indicative of the endemic environment; and
 - (ii) landforms are stable with visible active rill and gully erosion no greater than undisturbed sites of similar soil and slope characteristics.
- F4** Residual voids must not cause any serious environmental harm to land, surface waters or any recognised ground water aquifer, other than the environmental harm constituted by the existence of the residual void itself, and subject to any other condition within this environmental authority.
- F5** Twelve months prior to the establishment of a final void on the mining lease the holder of this environmental authority must complete an investigation into the residual void and submit a report to the administering authority proposing acceptance criteria, including:
- (i) proposed landform design criteria for the competent and incompetent slopes;
 - (ii) the proposed surface area of the void; and
 - (iii) proposals to meet the requirements of condition.
- F6** The holder of the environmental authority must ensure that any remaining areas that contain coal fines is covered by a final cover system which effectively minimises:
- i) infiltration of water into the tailings deposition area; and
 - ii) the likelihood of any erosion occurring to the final cover system.
- F7** Should acid rock drainage be encountered during the operation of this activity measures must be implemented to prevent hazardous leachate being directly or indirectly released or likely to be released as a result of the activity to any ground water or the bed or banks of any waters.
- F8** Land disturbed by mining must be rehabilitated in accordance with Table F1 - Rehabilitation requirements.

Table F1 – Rehabilitation requirements

Mine domain	Mine feature name	Rehabilitation goal	Rehabilitation objectives	Indicators	Completion criteria
Void	TBA	1. Safe	TBA	TBA	TBA
Roads/ Tracks	TBA	2. Non-polluting	TBA	TBA	TBA
Infrastructure	TBA	3. Stable	TBA	TBA	TBA
Spol Areas	TBA	4. Self-sustaining	TBA	TBA	TBA

TBA — To be consistent with the requirements of the Guideline EM1122: *Rehabilitation requirements for mining resource activities (Version 2)*, and advised by the holder of the environmental authority to the administering authority by 31 August 2016.

END OF CONDITIONS FOR SCHEDULE F

Definitions

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

"acceptance criteria" means the measures by which actions implemented are deemed to be complete. The acceptance criteria indicate the success of the decommissioning and rehabilitation outcomes or remediation of areas which have been significantly disturbed by the environmentally relevant activities. Acceptance criteria may include information regarding:

- stability of final land forms in terms of settlement, erosion, weathering, pondage and drainage;
- control of geochemical and contaminant transport processes;
- quality of runoff waters and potential impact on receiving environment; vegetation establishment, survival and succession;
- vegetation productivity, sustained growth and structure development;
- fauna colonisation and habitat development;
- ecosystem processes such as soil development and nutrient cycling, and the recolonisation of specific fauna groups such as collembola, mites and termites which are involved in these processes; microbiological studies including recolonisation by mycorrhizal fungi, microbial biomass and respiration;
- effects of various establishment treatments such as deep ripping, topsoil handling, seeding and fertiliser application on vegetation growth and development;
- resilience of vegetation to disease, insect attack, drought and fire;
- vegetation water use and effects on ground water levels and catchment yields.

"ambient (or total) noise" at a place, means the level of noise at the place from all sources (near and far), measured as the Leq for an appropriate time interval.

"approval" means a development approval under the *Integrated Planning Act 1997* in relation to a matter that involves an environmentally relevant activity under the *Environmental Protection Act 1994*.

(a) has been based using the relevant data and facts, and the relevant criteria.

"authority" means this environmental authority (mining activities) under the *Environmental Protection Act 1994*.

"background noise level" means either:

$L_{A90, T}$ being the A-weighted sound pressure level exceeded for 90 percent of the time period not less than 15 minutes, using Fast response, or

$L_{avg, T}$ being the A-weighted sound pressure level obtained using Fast response and arithmetically averaging the lowest levels of the ambient sound pressure level during a representative time period of not less than 15 minutes.

"blasting" means the use of explosive materials to fracture-

- rock, coal and other minerals for later recovery; or
- structural components or other items to facilitate removal from a site or for reuse.

"commercial place" means a place used as an office or for business or commercial purposes, other than a place within the boundaries of the operational land.

"competent person" means a person with the demonstrated skill and knowledge required to carry out the task to a standard necessary for the reliance upon collected data or protection of the environment.

"environmental authority" means an environmental authority granted in relation to an environmentally relevant activity under the *Environmental Protection Act 1994*.

"environmental authority holder" means the holder of this environmental authority.

" $L_{A\ 10, \text{adj, 15 mins}}$ " means the A-weighted sound pressure level, (adjusted for tonal character and impulsiveness of the sound) exceeded for 10% of any 15-minute measurement period, using Fast response.

" $L_{A\ 1, \text{adj, 15 mins}}$ " means the A-weighted sound pressure level, (adjusted for tonal character and impulsiveness of the sound) exceeded for 1% of any 15-minute measurement period, using Fast response

" $L_{A, \text{max adj, 15 mins}}$ " means the average maximum A-weighted sound pressure level, adjusted for noise character and measured over any 15 minute period, using Fast response.

"land" in the "land schedule" of this document means land excluding waters and the atmosphere.

"land use" term to describe the selected post mining use of the land, which is planned to occur after the cessation of mining operations.

"leachate" means a liquid that has passed through or emerged from, or is likely to have passed through or emerged from, a material stored, processed or disposed of at the operational land which contains soluble, suspended or miscible contaminants likely to have been derived from the said material.

"noxious" means harmful or injurious to health or physical well being, other than trivial harm.

"non-standard" means a mining operation that if in the opinion of the administering authority does not have a low risk of serious environmental harm and the activities can not comply with the criteria for standard mining activities prescribed in schedule 1A of the Environmental Protection Regulation 1998. The standard mining activity trigger criteria are as follows;

- the mining activities do not or will not cause more than 10 ha of land to be significantly disturbed at any one time;
- the mining activities do not or will not cause more than 5 ha of land to be significantly disturbed at any one time;
 - a) in a riverine area;
 - b) because of mine workings;
- the mining activities are not or will not be carried out in, or within 2 km of a category A Environmentally Sensitive Area;
- the mining activities are not or will not be carried out in, or within 1 km of a category B environmentally sensitive area;
- the mining activities do not include a level 1 environmentally relevant activity
- no more than 20 persons are carrying out or will, at any one time, carry out the mining activities; "offensive" means causing reasonable offence or displeasure; is disagreeable to the sense; disgusting, nauseous or repulsive, other than trivial harm.

"protected area" means - a protected area under the Nature Conservation Act 1992; or

- a marine park under the Marine Parks Act 1992; or
- a World Heritage Area.

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

"rehabilitation" the process of reshaping and revegetating land to restore it to a stable landform and in accordance with the acceptance criteria set out in this environmental authority and, where relevant, includes remediation of contaminated land.

"representative" means a sample set which covers the variance in monitoring or other data either due to natural changes or operational phases of the mining activities.

"residual void" means an open pit resulting from the removal of ore and/or waste rock which will remain following the cessation of all mining activities and completion of rehabilitation processes.

"self sustaining" means an area of land which has been rehabilitated and has maintained the required acceptance criteria without human intervention for a period nominated by the administering authority.

"sensitive place" means;

- a dwelling, residential allotment, mobile home or caravan park, residential marina or other residential premises; or
- a motel, hotel or hostel; or
- an educational institution; or
- a medical centre or hospital; or
- a protected area under the Nature Conservation Act 1992, the Marine Parks Act 1992 or a World Heritage Area; or
- a public park or gardens; or
- a place used as a workplace, an office or for business or commercial purposes which is not part of the mining activity and does not include employees accommodation or public roads.

"stable" in relation to land, means land form dimensions are or will be stable within tolerable limits now and in the foreseeable future. Stability includes consideration of geotechnical stability, settlement and consolidation allowances, bearing capacity (trafficability), erosion resistance and geochemical stability with respect to seepage, leachate and related contaminant generation.

"tolerable limits" means a range of values used as acceptance criteria and regarded as being sufficient to meet the objective of protecting relevant environmental values. For example, a range of settlement for a tailings capping, rather than a single value, could still meet the objective of draining the cap quickly, preventing pondage and limiting infiltration and percolation.

"trivial harm" means environmental harm which is not material or serious environmental harm and will not cause actual or potential loss or damage to property of an amount of, or amounts totalling more than \$5,000.

"void" means any man-made, open excavation in the ground.

"waters" includes river, stream, lake, lagoon, pond, swamp, wetland, unconfined surface water, unconfined water in natural or artificial watercourses, bed and bank of any waters, dams, non-tidal or tidal waters (including the sea), stormwater channel, stormwater drain, roadside gutter, stormwater run-off, and groundwater or any part thereof.

END OF DEFINITIONS

END OF ENVIRONMENTAL AUTHORITY