

Permit

Environmental Protection Act 1994

Environmental authority EPML00550913

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

Environmental authority number: EPML00550913

Environmental authority takes effect on 14 June 2018.

The anniversary date of this environmental authority is 14 January 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.

Environmental authority holder(s)

Name(s)	Registered address
Bogside Mining Industries Pty Ltd	132 Commercial Road TENERIFFE QLD 4005

Environmentally relevant activity and location details

Environmentally relevant activity/activities	Location(s)
Schedule 3 - 20(a) - Clay pit mining, dimension stone mining or mining gemstones (including the material from which gemstones are extracted) - at least 5,000t but not more than 100,000t in a year	ML4585

Additional information for applicants

Environmentally relevant activities

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

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

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

Contaminated land

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

- the happening of an event involving a hazardous contaminant on the contaminated land (notice must be given within 24 hours); or
- a change in the condition of the contaminated land (notice must be given within 24 hours); or
- a notifiable activity (as defined in Schedule 3) having been carried out, or is being carried out, on the contaminated land (notice must be given within 20 business days)

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

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

Take effect

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

- a) if the authority is for a prescribed ERA and it states that it takes effect on the day nominated by the holder of the authority in a written notice given to the administering authority - on the nominated day; or
- b) if the authority states a day or an event for it to take effect-on the stated day or when the stated event happens; or
- c) otherwise on the day the authority is issued.

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

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

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

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

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

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

Privacy statement

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

Obligations under the *Environmental Protection Act 1994*

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

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

Other permits required

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

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

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

Development Approval

This permit is not a development approval under the *Planning Act 2016*. The conditions of this environmental authority are separate, and in addition to, any conditions that may be on the development approval. If a copy of this environmental authority is attached to a development approval, it is for information only, and may not be current. If you are unsure that you have the most current version of the environmental authority relating to this site please visit <https://apps.des.qld.gov.au/env-authorities/> to access all environmental authorities currently approved.

Legislative Requirements and Conditions of Environmental Authority

Condition

General

G1 Provide a financial assurance in the amount and form required by the administering authority prior to the commencement of the mining activities.

G2 The financial assurance is to remain in force until the administering authority is satisfied that no claim on the assurance is likely.

G3 In carrying out the mining activities the holder must take reasonable and practicable measures to prevent or minimise the likelihood of environmental harm being caused. Any mining activities that, if carried out incompetently or negligently may cause environmental harm, shall be carried out in a proper manner in accordance with the conditions of this authority.

Note. This authority authorises the mining activities. It does not authorise environmental harm unless a condition hereof explicitly authorises that harm. Where there is no such condition or the authority is silent on a matter, the lack of a condition or silence shall not be construed as authorising harm.

G4 The holder must:
a) install all measures, plant and equipment necessary to ensure compliance with the conditions of this authority;
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.

G5 Record, compile and keep for a minimum of five years the results of monitoring required by or under this authority and make those records available for inspection upon request by the administering authority.

- G6 A competent person must conduct any monitoring required by or under this authority.
- G7 Spillage of any chemicals or petroleum products must be contained on the site and rectified whereby environmental harm other than of a trivial nature is not caused.
- G8 All petroleum product storage must be designed, constructed and maintained in accordance with Australian Standard 1940 - Storage and Handling of Flammable or Combustible Liquids.

Condition

Air

- A1 The release of dust or other particulate matter resulting from the mining activities must not cause an environmental nuisance at any sensitive place.
- A2 For the purposes of condition A1 and without limiting the applicability of other criteria relevant in particular circumstances, the mining activities would cause environmental nuisance where dust or other particulate matter resulting from the mining activities exceeds the following limits when measured at a sensitive place:
- a) dust deposition of 120 milligrams per square meter per day or 4 grams per square meter per month, when monitored in accordance with Australian Standard 3580.10.1 Methods for sampling and analysis of ambient air - Determination of particulates - Deposited matter - Gravimetric method; or
 - b) a concentration of suspended particulate matter with an aerodynamic diameter of less than 10 micrometres (μm) (PM10) of 150 micrograms per cubic meter over a 24 hour averaging time at a sensitive place downwind, when monitored in accordance with:
 - i) Australian Standard AS 3580.9.6 Methods for sampling and analysis of ambient air - Determination of particulate matter - PM (sub) 10 high-volume sampler with size-selective inlet - Gravimetric method; or
 - ii) any alternative method of monitoring PM10 which may be permitted by the 'Air Quality Sampling Manual' as published from time to time by the administering authority.

- A3 Dust or other particulate monitoring must be undertaken as directed by the administering authority to investigate any complaint about dust nuisance being caused by the mining activities, which complaint in the opinion of an authorised person is not frivolous, vexatious nor based on mistaken belief, and the results thereof notified to the administering authority within 14 days following completion of monitoring. For the purposes of this condition, monitoring must be carried out by a competent person at a site relevant to the potentially affected sensitive place and at upwind control site(s) and must include:
- a) for a complaint alleging dust nuisance, dust deposition rate; and
 - b) for a complaint alleging adverse health effects caused by dust, the concentration per cubic metre of suspended PM10 over a 24 hr averaging time.
- A4 If an authorised person's opinion is that monitoring results indicate environmental nuisance is being caused by dust or other particulate matter from the mining activities, the holder must
- a) address the complaint including the use of appropriate dispute resolution if required; or
 - b) immediately implement abatement measures so that emission of dust or other particulate matter from the ERAs does not result in further environmental nuisance.
- A5 The release of noxious or offensive odour or any other noxious or offensive airborne contaminant resulting from the mining activities must not cause an environmental nuisance at any sensitive place.

Condition

Water

- WA1 Waters affected by the mining activities must be monitored at the locations and frequencies prescribed in Table 3 Water quality monitoring locations and frequency, and those waters discharged from those locations must comply with the contaminant limits prescribed by Table 4 Water discharge contaminant release limits for SW2.
- WA2 Reasonable and practicable erosion protection measures and sediment control measures must be implemented and maintained to minimise erosion and the release of sediment.

- WA3 Water monitoring must comply with that set out in the latest edition of the Adminstrating Authority Water Quality Sampling Manual.
- WA4 If quality characteristics obtained from the downstream monitoring point identified in Table 3 Water quality monitoring locations and frequency exceed any of the trigger levels specified in Table 5 Contaminant trigger value investigation during a release event, the environmental authority must:
- a) where the trigger values are not exceeded then no action is to be taken; or
 - b) where the downstream monitoring point results exceed the trigger values specified in Table 5 Contaminant trigger value investigation for any quality characteristic, compare the results of the downstream monitoring site to the background monitoring site in Table 3 Water quality monitoring locations and frequency and;
 - 1. If the result is less than the background monitoring site data, then no action is to be taken; or
 - 2. If the result is greater than the background monitoring site data, complete an investigation into the potential for environmental harm and provide a written report to the administering authority within 90 days of receiving the result, outlining:
 - i. details of the investigation carried out; and
 - ii. actions taken to prevent environmental harm.

Condition

Acoustic

- N1 Noise from the mining activities must not cause an environmental nuisance at any sensitive place.
- N2 Noise monitoring must be undertaken as directed by the administering authority to investigate any complaint about noise nuisance being caused by the mining activities, which complaint in the opinion of an authorised person is not frivolous, vexatious nor based on mistaken belief, and the results thereof notified to the administering authority within 14 days following completion of monitoring. For the purposed of this condition, noise monitoring must be done by a competent person in accordance with the latest edition of the Adminstrating Authority Noise Measurement Manual and include:
- a) LA max adj, T;
 - b) relevant background sound level;
 - c) the level and frequency of occurrence of impulsive or tonal noise;

- d) atmospheric conditions including wind speed and direction; and
- e) location, date and time of measurements.

- N3 For the purposes of condition N1, the mining activities will not cause environmental nuisance where noise from the mining activities does not exceed the limits specified in Table 2 Noise limits.
- N4 If an authorised person's opinion is that monitoring results indicate environmental nuisance is being caused by noise from the mining activities, the holder must:
- a) address the complaint including the use of appropriate dispute resolution if required; or
 - b) immediately implement noise abatement measures so that emissions of noise from the mining activities do not result in further environmental nuisance.

Condition

Land

- L1 Effective measures must be implemented to prevent spontaneous combustion of land surface prior to surrender of this authority. Such measures may include capping prone areas with at least one metre of fine-grained inert fill.
- L2 Land disturbed by the mining activities must be rehabilitated in accordance with Table 1 Final land use and rehabilitation schedule.
- L4 Complete or partial surrender of this authority will not be approved by the administering authority unless requisite development and other statutory approvals have been issued in relation to industrial use of the site, or otherwise an alternative rehabilitation outcome must be nominated and application made to amend this authority accordingly.
- L3 Subject to conditions L4 and L5, disturbed land nominated for an industrial rehabilitation outcome will be satisfactorily rehabilitated when the land is stabilised and does not or will not have potential to cause harm.

- L5 Nomination of a final land use in Table 1 Final land use and rehabilitation schedule does not negate any local or state government planning or approval requirements for any development of that land.
- L6 All infrastructure for the mining activities and residual voids, including water storage structures, must be removed from the site prior to mining lease surrender, except where otherwise agreed to in writing by the Mining Registrar and land owner.

Condition

General

- W1 Tyres stored awaiting disposal or transport for take-back and recycling, or waste-to-energy options, should be stockpiled in volumes less than 3 metres in height and 200 square metres in area and at least 10 metres from any other tyre storage area.
- W2 Reasonable and practicable fire prevention measures must be implemented including removal of grass and other materials within a 10 metre radius of the scrap tyre storage area.
- W3 Scrap tyres must not be disposed of within the mining lease area.

Condition

Social

- S1 All complaints received by the holder must be recorded including details of the complainant, reasons for the complaint, investigations undertaken, conclusions formed and actions taken. This information must be made available for inspection by the administering authority upon request.

Condition

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General

G9 Please refer to EPML00550913 Definitions and EPML00550913 Map located in the Documents section of the permit Summary.

Condition

Condition

T1 Table 1 Final land use and rehabilitation schedule

Tenure ID	Cadastre reference	Disturbance type	Disturbance area (ha)	Rehabilitation outcome
ML4585	Lot 1 on RP103506 Lot 1 on RP104683 Lot 15 on RR855343 Lot 3 on RP222015 Lot 1 on SP121057 	Clay pit	3.0	Industrial land
		Chitters stockpiles	3.5	Industrial land
		Topsoil stockpiles	0.05	Industrial land
		Overburden stockpiles	0.1	Industrial land
		Truck parking and storage area	0.3	Industrial land
		Product storage areas	0.2	Industrial land
		Tailings Dams	0.4	Industrial land
		Roads	0.1	Industrial land
		Settlement dams	0.1	Industrial land
Total disturbance area			7.75	

T2 Table 2 Noise limits*

Noise level dB(A) measured as	Monday to Saturday			Sundays and public holidays		
	7am – 6pm	6pm – 10pm	10pm – 7am	9am – 6pm	6pm – 10pm	10pm – 9am
	Noise measured at a 'Noise sensitive place'					
LA, max adj, T	Background + 5 db(A)	Background + 5 db(A)	Background + 3 db(A)	Background + 3 db(A)	No audible noise	No audible noise
	Noise measured at a 'Commercial place'					
LA, max adj, T	Background + 10 db(A)	Background + 10 db(A)	Background + 5 db(A)	Background + 5 db(A)	Background + 3 db(A)	Background + 3 db(A)

Where "T" is 10 minutes and "Background" means background sound pressure level measured in accordance with the latest edition of the Administering Authority Noise Measurement Manual.

* Table 2 does not purport to set operating hours for the mining activities.

T3 Table 3 Water quality monitoring locations and frequency

Monitoring point	Location	Latitude	Longitude	Monitoring frequency/trigger
SW1 (background)	Southern boundary of ML4585 in an unnamed tributary to Bremer River. Access via culvert under the Warrego Highway	27.5904	152.8284	Within one hour of any sample taken at SW3
SW2	Spillway of sediment dam	37.5874	152.829	Any discharge water from the sediment dam off lease and thereafter daily for 3 days, then weekly, during a continuous discharge event
SW3 (downstream monitoring point)	Confluence of unnamed tributary and Bremer River	TBA by 30 July 2015	TBA by 30 July 2015	Commencement of release from SW2 and thereafter weekly during release.

Note: See Map 1

T4 Table 4 Water discharge contaminant release limits for SW2

Parameter	Minimum	Maximum
pH (range)	6.5	8
Conductivity ($\mu\text{S}/\text{cm}$)	-	1500
Total Suspended Solids (mg/L)	-	50

T5 Table 5 Contaminant trigger value investigation

Parameter	Trigger value (maximum)
Total Suspended Solids (mg/l)	25*

*Based on value derived from Mid Estuary aquatic ecosystem value, Table 2a, in the Bremer River environmental values and water quality objectives, 2010.

Definitions

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

Interpretation

"EMOS" means the environmental management overview strategy report titled Environmental Management Overview Strategy for ML4858 at Riverview dated 5 August 2004. Where required, interpretation of this authority should be in the context of the EMOS

Word definitions

"acceptance criteria" means the standards by which the actions implemented to rehabilitate land are deemed to be complete. The acceptance criteria relate to the success of the rehabilitation outcome or remediation of areas which have been significantly disturbed. Acceptance criteria may include information regarding:

- 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 re-colonisation of specific fauna groups such as collembolan, mites and termites which are involved in these processes;
- microbiological studies including re-colonisation 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; and
- vegetation water use and effects on ground water levels and catchment yields.

"administering authority" means the Administering Authority or its successor.

"approval" means development permit or preliminary approval decision notice or referral agency response under the *Integrated Planning Act 1997*.

"authorised person" means a person holding office as an authorised person under an appointment under the *Environmental Protection Act 1994* by the chief executive.

"authorised place" means the place, premises or land authorised under this authority or approval for the carrying out of the specified environmentally relevant activities.

"authority" means level 1 licence (with or without development approval), provisional licence, level 1 approval (with or without development approval), level 2 approval, environmental authority (mining activities) or a constituent part of an integrated authority under the *Environmental Protection Act 1994*.

"commercial place" means a place used as an office or for business or commercial purposes.

"competent person" means a person with sufficient demonstrated skill, knowledge and qualifications required to carry out a task to a necessary standard for protection of the environment.

"disturbed land" or word to that effect means -

- a) contaminated land; or
- b) land that has been disturbed and human intervention is needed to rehabilitate it;
- i) including
 - mining or quarrying areas including processing plant, stockpiles and tailings areas;
 - 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 is susceptible to erosion;
 - areas where land use suitability or capability has been diminished;
 - areas within waters where mining/quarry activities occur;
 - areas under temporary infrastructure eg: roads, tracks, bridges, culverts, dams, bores, buildings, fixed machinery, hardstand areas, airstrips, helipads which area to be lawfully left on the site after cessation of mining/quarrying.

"dwelling" means any of the following structures or vehicles that is principally used as a place for human habitation:

- a house, unit, motel, nursing home or other building or part of a building;
- a structure on land; and
- a water craft in a marina.

"intrusive noise" means a noise that can, because of its frequency, duration, level, tonal characteristics, impulsiveness or vibration:

- is clearly audible to, or can be felt by, an individual; and
- annoys the individual.

In determining whether a noise annoys an individual and is unreasonably intrusive, regard must be had to Australian Standard 1055.2 - 1997 Acoustics - Description and Measurement of Environmental Noise Part 2 - Application to Specific Situations.

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

" $L_{A,max,dJ,T}$ " means the average maximum A-weighted sound pressure level, adjusted for tonal or impulsive noise character, and measured over any 10 minute period, using Fast response.

"mining activities" has the meaning given in the *Environmental Protection Act 1994* and the *Mineral Resources Act 1898*.

"noise sensitive place" means:

- a dwelling, mobile home or caravan park, residential marina or other residential premises;
 - a motel, hotel or hostel;
 - a kindergarten, school, university or other educational institution;
 - a medical centre or hospital;
 - a protected area under the *Nature Conservation Act 1992* or the *Marine Parks Act 1992*, or a World Heritage Area; and
 - a park or gardens;
- and includes that part of the curtilage or a building or structure used for purposes usually or reasonably associated with the building or structure.

"noxious" means harmful or injurious to health or physical well-being.

"progressive rehabilitation" means rehabilitation (defined below) undertaken progressively or in stages as mining or quarrying activities are ongoing.

"sensitive place" means:

- a dwelling, residential allotment, mobile home or caravan park, residential marina or other residential premises;

- a motel, hotel or hostel;
 - a kindergarten, school, university or other educational institution;
 - a medical centre or hospital;
 - a protected area under the *Nature Conservation Act 1992* or the *Marine Parks Act 1992*, or a World Heritage Area; and
 - a public thoroughfare, park or gardens;
 - a commercial place;
- and includes that part of the curtilage or a building or structure used for purposes usually or reasonably associated with the building or structure.

"offensive" means causing offence or displeasure, is disagreeable to a sense, disgusting, nauseous or repulsive.

"reference site" (or analogue site) may reflect an original location, adjacent area or another area where rehabilitation success has been completed for a similar biodiversity. Details of the reference site may be recorded as photographs, computer generated images and vegetation models etc.

"rehabilitation" means the process of reshaping and revegetating land to restore it to a stable post mining or quarry state and in accordance with acceptance criteria or rehabilitation conditions, and where relevant includes remediation or contaminated land.

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

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

"site" means the place or premises to which this authority or approval relates.

"stable" geotechnical stability of a rehabilitated landform where instability caused by settlement and subsidence has ceased.

"waters" includes any watercourse, lake, lagoon, pond, swamp, wetland, bed and bank or any waters, non-tidal or tidal waters (including the sea), stormwater channel, stormwater drain, roadside gutter, stormwater run-off or groundwater.

"you" or "holder" or "licensee" means the holder of an authority or approval or person acting under an authority or approval.

Map 1 Site Plan

