

Permit¹

Environmental Protection Act 1994

Environmental authority

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

Permit¹ number: EPVL00603713

The Environmental Authority takes effect on the day the relevant development permit for a material change of use takes effect under the *Sustainable Planning Act 2009*. The administering authority must be given written notification within 20 business days of the Environmental Authority taking effect.

The first annual fee is payable within 20 business days of the effective date.

The anniversary date of this environmental authority is the same day each year as the effective date. An annual return and the payment of the annual fee, which is currently \$42 564.00, will be due each year on this day.

Environmental authority holder

Name	Registered address
Earth Commodities Bundaberg Pty Ltd	C/- Darren Wardle 23 Chapman Place EAGLE FARM QLD 4009

Environmentally relevant activity and location details

Environmentally relevant activities	Location(s)
Resource Activity – Mining mineral sand 16-(2a) Extractive >5000t but <100000t yr 16-(3a) Screening >5000t but <100000t yr	ML1228 ML1229

Additional information for applicants

Environmentally relevant activities

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

¹ Permit includes licences, approvals, permits, authorisations, certificates, sanctions or equivalent/similar as required by legislation

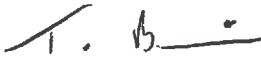


An environmental authority authorises the carrying out of an ERA and does not authorise any environmental harm unless a condition stated by the authority specifically authorises environmental harm.

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 if an owner or occupier of land becomes aware a notifiable activity (as defined in Schedule 3 and Schedule 4) is being carried out on the land, or that the land has been, or is being, contaminated by a hazardous contaminant, the owner or occupier must, within 22 business days after becoming so aware, give written notice to the chief executive.



Signature

Tim Brain
Department of Environment and Heritage Protection
Delegate of the administering authority
Environmental Protection Act 1994



Date

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Obligations under the *Environmental Protection Act 1994*

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

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

Conditions of environmental authority

Schedule 1 – General conditions

GC1	Activities conducted under this environmental authority may only be undertaken within the areas of existing Mining Lease 1228 and Mining Lease 1229 occurring on Lot 120 AP17589 and Lot 121 AP17589 as indicated in Diagram 1.				
GC2	Mining activities and extractive activities (ERA 16) undertaken independently or in combination must not cause more than 10ha of significantly disturbed land at any one time.				
GC3	Mining and extraction must not disturb the coffee rock (indurated sand layer).				
GC4	Monitoring must be undertaken and records kept of groundwater at monitoring bore locations for the quality characteristics and not less frequently than specified in Table 1 – Groundwater Monitoring. Table 1 - Groundwater Monitoring				
	Monitoring Well ID	Easting (GDA94 – Zone 56)	Northing (GDA94- Zone 56)	Quality Characteristic	Frequency
	MW01	449115	7234874	Standing Water Level, pH, Electrical Conductivity (EC) and Total Dissolved Solids (TDS)	Monthly
	MW02	449280	7234492		
	MW03	449508	7234021		
	MW04	449614	7233775		
	MW05	449891	7233894		
	MW06	449652	7234448		
	MW07	449518	7234701		
	MW08	449392	7234993		
GC5	An appropriately qualified person(s) must monitor, record and interpret all parameters that are required to be monitored by this environmental authority and in the manner specified by this environmental authority.				

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GC6	All instruments and devices used for the measurement or monitoring of any parameter under any condition of this environmental authority must be calibrated, appropriately operated and maintained.
GC7	No dewatering of pits is to be undertaken at any time.
GC8	No blasting activities may occur at any time.
GC9	An appropriately qualified person(s) must undertake a targeted survey within twelve (12) months of the effective date of this permit to detect the presence or absence of the Wallum froglet (<i>Crinia tinnula</i>) within the wetland area immediately to the west of ML1228 and ML1229. The targeted survey must occur during suitable conditions (i.e. following suitable rainfall events and during known breeding periods).
GC10	Should monitoring required by condition GC9 detect the presence of the Wallum froglet, the holder of the environmental authority must prepare and implement a species management plan to mitigate or minimise potential impacts of authorised activities on the Wallum froglet and Wallum froglet habitat.
GC11	The holder of this environmental authority must develop and implement a Final Land Use and Rehabilitation Plan to ensure that all areas disturbed by activities conducted under this environmental authority will be suitably rehabilitated. The Plan must include, but is not limited to the following: i. disturbance type; ii. disturbance area; iii. pre and post mine land descriptions; iv. reference site(s) identification; v. a description of rehabilitation management techniques incorporating works and monitoring programs and timetables; vi. indicators for success/acceptance criteria (taking into consideration pre-mining land use and reference site(s)); and vii. keeping of appropriate records of rehabilitation measures implemented including taking of photographs demonstrative of rehabilitation achieved and the preparation of annual rehabilitation progress reports. A summary of the annual rehabilitation progress report must be submitted to the administering authority with each annual return. <i>NOTE: The Final Land Use and Rehabilitation Plan is to be managed through the Plan of Operations.</i>
GC12	Areas that are to be progressively rehabilitated must comply with, but not be limited to, the following outcomes; i. All areas disturbed by mining activities must be rehabilitated to the landform design criteria defined in the Final Land Use and Rehabilitation Plan required by condition GC11. ii. Progressive rehabilitation of areas must result in a final landform that is: a. safe to humans and wildlife; b. non-polluting; c. stable; and d. able to sustain an agreed post-mining land use. iii. Promote a self-sustaining land use, with the establishment of endemic native vegetation species of a type and density determined by research of appropriate reference sites situated in the locality of the site. iv. These vegetation species must be listed in the Final Land Use and Rehabilitation Plan.
GC13	Any activities within mining lease (ML) 1228 and ML 1229 must not impact on the Groundwater Dependant Ecosystem (GDE) outside of ML 1228 and ML 1229 as indicated in Diagram 1.

Schedule 2 – Mining activities

A1	The conditions of this environmental authority are in force until a surrender of the authority is accepted pursuant to the <i>Environmental Protection Act 1994</i> . The conditions apply unless an amendment is approved pursuant to the <i>Environmental Protection Act 1994</i> .
A2	The environmental authority holder is to give the administering authority a financial assurance in the amount and form and at a time required by the administering authority.
A3	The environmental authority holder must comply with each of the Standard Environmental Conditions contained in the <i>Code of Environmental Compliance for Mining Lease Projects</i> dated January 2001.
A4	The environmental authority holder is authorised to carry out activities on Mining Lease 1228 and Mining Lease 1229 despite the leases being within 2km of a category A and within 1km of a category B environmentally sensitive area¹. ¹Condition A4 is an additional condition that overrides Standard Environmental Condition 14 which prohibits the holder of the environmental authority from carrying out activities within 2km of a category A environmentally sensitive area and within 1km of a category B environmentally sensitive area. Burrum Coast (Kinkuna) National Park is a category A area. An area to the seaward side of the highest astronomical tide is a category B area.

Schedule 3 – Extractive and screening activities (ERA 16)

GENERAL	
G1	Activities conducted under this environmental authority must not be conducted contrary to any of the following limitations: - Extractive activities conducted under this environmental authority must be conducted within the following thresholds – • ERA 16 Extractive and screening activities Threshold 2(b) - extracting other than by dredging in a year 5000t to 100,000t of material. • ERA 16 Extractive and screening activities Threshold 3(a) - screening in a year 5000t to 100,000t of material.
G2	All reasonable and practicable measures must be taken to minimise the likelihood of environmental harm being caused.
G3	Any breach of a condition of this environmental authority, must be reported to the administering authority as soon as practicable, or at most, within 24 hours of you becoming aware of the breach. Records must be kept including full details of the breach and any subsequent actions undertaken.
G4	Other than as permitted by this environmental authority, the release of a contaminant into the environment must not occur.
G5	All information and records that are required by the conditions of this environmental authority must be kept for a minimum of five (5) years. Environmental monitoring results must be kept until surrender of this environmental authority. All information and records required by the conditions of this environmental authority must be provided to the administering authority upon request.
G6	When required by the administering authority , monitoring must be undertaken in the manner prescribed by the administering authority , to investigate a complaint that is not considered by the administering authority to be frivolous or vexatious, of environmental nuisance arising from the activity . The monitoring results must be provided to the administering authority upon request.

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G7	The activity must be undertaken in accordance with written procedures that: 1. identify potential risks to the environment from the activity during routine operations, closure and an emergency 2. establish and maintain control measures that minimise the potential for environmental harm 3. ensure plant, equipment and measures are maintained in a proper and effective condition 4. ensure plant, equipment and measures are operated in a proper and effective manner 5. ensure that staff are trained and aware of their obligations under the <i>Environmental Protection Act 1994</i> 6. ensure that reviews of environmental performance are undertaken at least annually.
AIR	
A1	Odours or airborne contaminants which are noxious or offensive or otherwise unreasonably disruptive to public amenity or safety must not cause nuisance to any sensitive place or commercial place .
NOISE	
N1	Noise from the activity must not cause environmental nuisance to any sensitive place or commercial place .
N2	Noise monitoring must be undertaken when required by the administering authority and the results notified within 14 days to the administering authority. Monitoring must include: 1. $L_{Aeq, adj, T}$ 2. Background noise (Background) as $L_{A 90, adj, T}$ 3. $MaxL_{pA, T}$ 4. the level and frequency of occurrence of any impulsive or tonal noise 5. atmospheric conditions including wind speed and direction 6. effects due to extraneous factors such as traffic noise 7. location, date and time of recording.
WATER	
WT1	Contaminants that will, or have the potential to cause environmental harm must not be released directly or indirectly to any waters.
WT2	Erosion and sediment control measures must be implemented and maintained to minimise erosion and the release of sediment.
LAND	
L1	Treatment and management of acid sulfate soils must comply with the current edition of the <i>Queensland Acid Sulfate Soil Technical Manual</i> .
L2	Land that has been disturbed for activities conducted under this environmental authority must be rehabilitated in accordance with the Final Land Use and Rehabilitation Plan required by condition GC11 and in a manner such that: 1. suitable native species of vegetation for the location are established and sustained for earthen surfaces. 2. potential for erosion is minimised. 3. the quality of water, including seepage, released from the site does not cause environmental harm. 4. potential for environmental nuisance caused by dust is minimised.

	5. the water quality of any residual water body does not have potential to cause environmental harm. 6. the final landform is stable and protects public safety.
L3	Rehabilitation of disturbed areas required under condition L2, must take place progressively as works are staged and new areas of extraction are commenced.
WASTE	
WS1	All waste generated in carrying out the activity must be reused, recycled or removed to a facility that can lawfully accept the waste.

Definitions

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.

Activity means the environmentally relevant activities, whether resource activities or prescribed activities, to which the environmental authority relates.

Administering authority means the Department of Environment and Heritage Protection or its successor or predecessors.

Appropriately qualified person(s) means a person or persons who has professional qualifications, training, skills or experience relevant to the nominated subject matter and can give authoritative assessment, advice and analysis to performance relative to the subject matter using the relevant protocols, standards, methods or literature.

Background means noise, measured in the absence of the noise under investigation, as L A90,T being the A-weighted sound pressure level exceeded for 90 per cent of the time period of not less than 15 minutes, using Fast response.

Commercial place means a place used as a workplace, an office or for business or commercial purposes and includes a place within the curtilage of such a place reasonably used by persons at that place.

Max_{LpA,T} means the maximum A-weighted sound pressure level measured over a time period T of not less than 15 minutes, using Fast response.

Measures has the broadest interpretation and includes plant, equipment, physical objects, bunding, containment systems, monitoring, procedures, actions, directions and competency.

NATA means National Association of Testing Authorities.

Noxious means harmful or injurious to health or physical well-being.

Offensive means causing offence or displeasure; is unreasonably disagreeable to the sense; disgusting, nauseous or repulsive.

Prescribed contaminants means contaminants listed within Schedule 9 of the Environmental Protection Regulation 2008.

Release of a contaminant into the environment means to:

- deposit, discharge, emit or disturb the contaminant
- cause or allow the contaminant to be deposited, discharged, emitted or disturbed
- fail to prevent the contaminant from being deposited, discharged emitted or disturbed
- allow the contaminant to escape
- fail to prevent the contaminant from escaping.

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Sensitive place includes the following and includes a place within the curtilage of such a place reasonably used by persons at that place:

- a dwelling, residential allotment, mobile home or caravan park, residential marina or other residential premises; or
- a motel, hotel or hostel; or
- a kindergarten, school, university or other 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 thoroughfare, park or gardens; or
- for noise, a place defined as a sensitive receptor for the purposes of the Environmental Protection (Noise) Policy 2008.

Significantly disturbed land means

- (a) contaminated land; or
- (b) land that 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 authorised 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 authorised activities have 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 mining lease);
- areas previously significantly disturbed which have achieved the rehabilitation outcomes;

Waters includes river, stream, lake, lagoon, pond, swamp, wetland, unconfined surface water, unconfined water, natural or artificial watercourse, 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 and any part thereof.

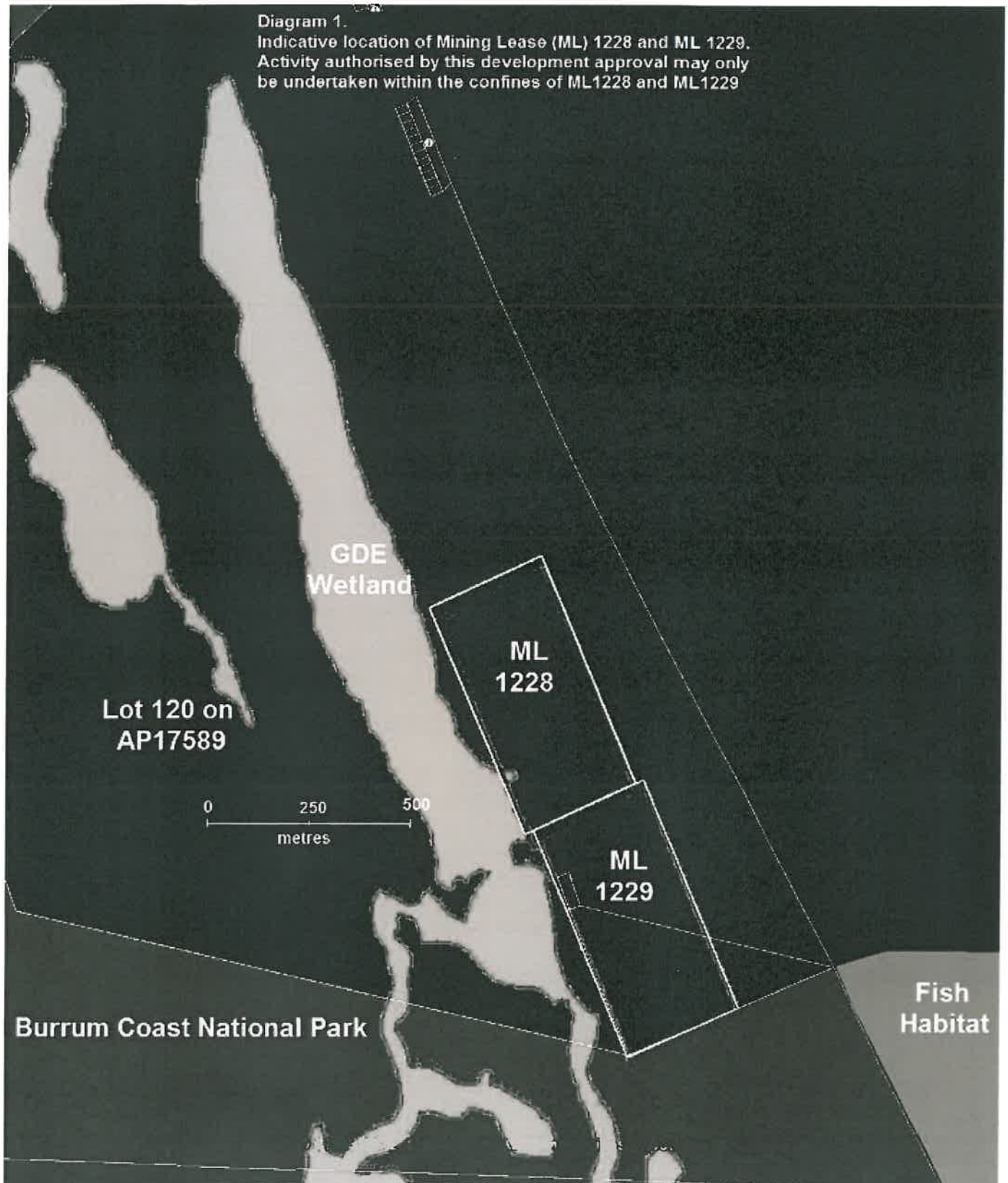
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Attachments

Diagram 1 – indicative location of Mining Lease (ML) 1228 and ML 1229.

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Diagram 1 – Indicative location of Mining Lease (ML) 1228 and ML 1229 and Groundwater Dependant Ecosystem (GDE).



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