# Permit

***Environmental Protection Act 1994***

## Environmental authority EPPR00510013

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

### Environmental authority number: EPPR00510013

**Environmental authority takes effect on 19 April 2023.**

The anniversary date of this environmental authority remains as 30 July. An annual return and the payment of the annual fee will be due each year on this day.

### Environmental authority holder(s)

| Name(s) | Registered address |
|---|---|
| Blackwater Quarries Pty Ltd | 2403 Blackwater-Cooroorah Road, QLD 4717 |

### Environmentally relevant activity and location details

| Environmentally relevant activity/activities | Location(s) |
|---|---|
| ERA 16(2)b - extracting, other than by dredging, in a year more than 100,000t but no more than 1,000,000t<br><br>ERA 16(3)b screening, in a year more than 100,000t but no more than 1,000,000t | Lot 10 Plan SP308968 |



ABN 46 640 294 485



Queensland Government

**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.

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

**19 April 2023**

Date

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

**Enquiries:**
Energy and Extractive Resources Business Centre
GPO Box 2454, BRISBANE QLD 4001
Phone: (07) 3330 5715
Email: EnergyandExtractive@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.

**Conditions of environmental authority**

| **Agency interest: Activity** | |
|---|---|
| **Condition number** | **Condition** |
| G1 | Activities under this environmental authority must be conducted in accordance with the following limitations:<br>1. Extraction must only occur within the proposed extraction area in Appendix A - Bedford Weir Quarry Approved Area Plan;<br>2. The activity must only occur within the existing operational area in Appendix A - Bedford Weir Quarry Approved Area Plan;<br>3. The amount of material extracted per year must not exceed 1,000,000 tonnes per annum;<br>4. The amount of material screened per year must not exceed 1,000,000 tonnes per annum;<br>5. The depth of extraction must not exceed 71m AHD and must not intercept groundwater. |
| G2 | All reasonable and practicable measures must be taken to prevent or minimise environmental harm caused by the activities. |
| G3 | Any breach of a condition of this environmental authority must be reported to the administering authority as soon as practicable within 24 hours of becoming aware of the breach. Records must be kept including full details of the breach and any subsequent actions taken. |
| G4 | Other than as permitted by this environmental authority, the release of a contaminant into the environment must not occur. |
| G5 | Environmental monitoring results must be kept until surrender of this environmental authority. All other information and records that are required by the conditions of this environmental authority must be kept for a minimum of five (5) years. All information and records required by the conditions of this environmental authority must be provided to the administering authority, or nominated delegate upon request, within the required timeframe and in the specified format. |
| G6 | 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. |
| G7 | All analyses required under this environmental authority must be carried out by a laboratory that has National Association of Testing Authorities (NATA) certification, or an equivalent certification, for such analyses. The only exception to this condition is the in-situ monitoring of turbidity, pH, electrical conductivity and dissolved oxygen. |
| G8 | When required by the administering authority, monitoring must be undertaken in the manner prescribed by the administering authority, to investigate a complaint of environmental nuisance arising from the activity. The monitoring results must be provided within 10 business days to the administering authority upon its request. |

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|---|---|
| G9 | The activity must be undertaken in accordance with written procedures that:<br>1. identify potential risks to the environment from the activity during routine operations, closure and an emergency<br>2. establish and maintain control measures that minimise the potential for environmental harm<br>3. ensure plant, equipment and measures are maintained in a proper and effective condition<br>4. ensure plant, equipment and measures are operated in a proper and effective manner<br>5. ensure that staff are trained and aware of their obligations under the *Environmental Protection Act 1994*<br>6. ensure that reviews of environmental performance are undertaken at least annually. |
| G10 | Chemicals and fuels in containers of greater than 15 litres must be stored within a secondary containment system. |
| G11 | The holder of this environmental authority must ensure where practicable, that a substantial undisturbed buffer zone is maintained between Mackenzie River and any extracting and screening operations. |

**Agency interest: Air**

| Condition number | Condition |
|---|---|
| A1 | Other than as permitted within this environmental authority, odours or airborne contaminants must not cause environmental nuisance to any sensitive place **or** commercial place. |
| A2 | Dust and particulate matter emissions must not exceed the following concentrations at any sensitive place or commercial place:<br>(a) dust deposition of 120 milligrams per square metre per day, when monitored in accordance with Australian Standard AS 3580.10.1 (or more recent editions), or<br>(b) a concentration of particulate matter with an aerodynamic diameter of less than 10 micrometre (µm) ($PM_{10}$) suspended in the atmosphere of 50 micrograms per cubic metre over a 24 hour averaging time, when monitored in accordance with Australian Standard AS 3580.9.6 (or more recent editions) or any other method approved by the administering authority. |

**Agency interest: Land**

| Condition number | Condition |
|---|---|
| L1 | Treatment and management of acid sulfate soils must comply with the guidance provided in the current edition of the *Queensland Acid Sulfate Soil Technical Manual.* |
| L2 | Other than as permitted within this environmental authority, contaminants must not be released to land. |

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| L3 | Land that has been disturbed for activities conducted under this environmental authority must be rehabilitated in a manner such that:<br>1. suitable native species of vegetation for the location are established and sustained for earthen surfaces;<br>2. potential for erosion is minimised;<br>3. the quality of water released from the site, including seepage, does not cause environmental harm;<br>4. potential for environmental nuisance caused by dust is minimised;<br>5. the water quality of any residual water body does not have potential to cause environmental harm;<br>6. the final landform is stable and protects public safety. |
| L4 | Rehabilitation of disturbed areas required under condition L3 must take place progressively as works are staged and new extraction areas are commenced. |

**Agency interest: Noise**

| Condition number | Condition |
|---|---|
| N1 | Other than as permitted within this environmental authority, noise generated by the activity must not cause environmental nuisance to any sensitive place or commercial place. |
| N2 | Noise from the activity must not exceed the levels identified in *Table - Noise limits* when measured in accordance with the associated monitoring requirements. |

**Table - Noise limits**

| Noise level measured in | Monday to Saturday | | | Sundays and public holidays | | |
|---|---|---|---|---|---|---|
| | 7am - 6pm | 6pm - 10pm | 10pm - 7am | 9am - 6pm | 6pm -10pm | 10pm – 9am |
| | **Noise measured at a nearest sensitive place*** | | | | | |
| $L_{Aeq, adj, T}$ | 45 | 35 | 30 | 40 | Not audible | Not audible |
| $Max_{LpA,T}$ | - | - | 49 | - | - | 49 |
| | **Noise measured at a commercial place** | | | | | |
| $L_{Aeq, adj, T}$ | 55 | 55 | 55 | 55 | 55 | 55 |

* A residential dwelling at the location is not considered to be a sensitive place, so long as a contractual arrangement exists between you and the owner of the dwelling

**Associated monitoring requirements**

1. All monitoring devices must be calibrated and maintained according to the manufacturer's

<table>
<tr><td></td><td>instruction manual.<br>2. Any monitoring must be in accordance with the most recent version of the administering authority's Noise Measurement Manual.<br>3. Any monitoring of noise emissions from the activity must be undertaken when the activity is in operation.</td></tr>
<tr><td>N3</td><td>When required by the administering authority, noise monitoring must be undertaken in accordance with the associated monitoring requirements of Table - Noise Limits, and the results notified within 14 days to the administering authority. Monitoring must include:<br>1. LAeq, adj, T<br>2. Background noise (Background) as LA 90, adj, T<br>3. MaxLpA,T<br>4. the level and frequency of occurrence of any impulsive or tonal noise<br>5. atmospheric conditions including wind speed and direction<br>6. effects due to extraneous factors such as traffic noise<br>7. recording of location, date and time of measurements.</td></tr>
<tr><td>N4</td><td>Generation of substantial low frequency noise is not permitted.</td></tr>
<tr><td>N5</td><td>Blasting activities must not exceed the limits for peak particle velocity and air blast overpressure in Table – Blasting noise limits when measured at any sensitive place or commercial place in accordance with the associated monitoring requirements.<br>Table - Blasting noise limits
<table>
<tr><th>Blasting criteria</th><th>Blasting limits</th></tr>
<tr><td>Airblast overpressure</td><td>115 dB (Linear) Peak for 9 out of 10 consecutive blasts initiated and not greater than 120 dB (Linear) Peak at any time.</td></tr>
<tr><td>Ground vibration peak particle velocity</td><td>5 mm/s peak particle velocity for 9 out of 10 consecutive blasts and not greater than 10 mm/s peak particle velocity at any time.</td></tr>
</table>
Associated monitoring requirements<br>1. Monitoring must be performed in accordance with the most recent edition of the administering authority's Noise and Vibration from Blasting guideline and Noise Measurement Manual and any relevant Australian Standard.</td></tr>
<tr><td>N6</td><td>Blasting must be carried out in accordance with the current edition of the administering authority's Noise and vibration from blasting guideline and with Australian Standard 2187.</td></tr>
<tr><td>N7</td><td>Unless prior approval is obtained from the administering authority:<br>1. blasting is only permitted during the hours of 9am to 3pm Monday to Friday, and from 9am to 1pm on Saturdays.</td></tr>
</table>

| | |
|---|---|
| | 2. blasting is not permitted at any time on Sundays or public holidays. |
| N8 | When required by the administering authority, a blast monitoring program must be developed and implemented to monitor compliance with *Table - Blasting noise limits* at any sensitive place or commercial place. |
| **Agency interest: Waste** | |
| **Condition number** | **Condition** |
| W1 | All waste generated in carrying out the activity must be reused, recycled or removed to a facility that can lawfully accept the waste. |
| **Agency interest: Water** | |
| **Condition number** | **Condition** |
| WA1 | Other than as permitted within this environmental authority, contaminants must not be released to any waters. |
| WA2 | Erosion protection measures and sediment control measures must be implemented and maintained to minimise erosion and the release of sediment. |
| WA3 | Suitable banks and/or diversion drains must be installed and maintained so that all stormwater falling up gradient from the quarry and storage areas is diverted away from those areas. |
| WA4 | Stormwater that is not contaminated by the activity must be diverted away from areas where it may become contaminated by the activity. Stormwater that is contaminated by the activity must be directed to a treatment system. |
| WA5 | The only contaminants to be released to surface waters is settled treated stormwater runoff from areas of the site not likely to be contaminated with waste materials to waters described as Mackenzie River in accordance with *Table - Surface water release limits* and the associated monitoring requirements, and as depicted in Appendix B - Bedford Weir Quarry Drainage Plan.<br>**Table - Surface water release limits** |

| **Release Point(s) Description** (**Latitude; Longitude** GDA2020 decimal degrees) | **Monitoring Point(s) Description** (**Latitude; Longitude** GDA2020 decimal degrees) | **Quality characteristic** (units) | **Limit** | **Limit Type** | **Minimum Monitoring Frequency** |
|---|---|---|---|---|---|
| 23.3812°S; 148.8316°E | M1 | pH | 6.0 – 8.5 | range | Twice Daily until overflow or release has ceased |
| | | Suspended Solids (mg/L) | 50 | maximum | |

| | |
|---|---|
| | <table><tr><td></td><td></td><td>Dissolved Oxygen (mg/L)</td><td>6.0</td><td>minimum</td><td></td></tr></table><br>**Associated monitoring requirements**<br>1. Monitoring must be in accordance with the methods prescribed in the current edition of the administering authority's *Monitoring and Sampling Manual.*<br>2. Water and sediment samples must be representative of the general condition of the water body or sediments.<br>3. All determinations must employ analytical practical quantification limits of sufficient sensitivity to enable comparisons to be made against water quality objectives/triggers/limits relevant to the particular water or sediment quality characteristic.<br>4. Monitoring must be undertaken during a release and at the frequency stated.<br>5. All monitoring devices must be calibrated and maintained according to the manufacturer's instruction manual. |
| WA6 | The holder of this environmental authority must implement a flood mitigation plan. |
| WA7 | The holder of this environmental authority must construct flood protection levies to withstand a 1:100 year ARI flood event. |
| WA8 | Subject to condition WA7, the holder of this environmental authority must construct flood protection levies out of appropriate structural material, to prevent collapse/failure occurring. |

**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.

**24 hour storm event with an average recurrence interval of 1 in 5 years** means the maximum rainfall depth from a 24 hour duration precipitation event with an average recurrence interval of once in 5 years. *For example, an Intensity-Frequency-Duration table for a 24 hour duration event with an average recurrence interval of 1 in 5 years, identifies a rainfall intensity of 7.09mm/hour. The rainfall depth for this event is therefore 24 hour x 7.09mm/hour = 170.16mm.*

**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 Science or its successor or predecessors.

**Airblast overpressure** is the energy transmitted from the blast site within the atmosphere in the form of pressure waves. As these waves pass a given position, the pressure of the air rises very rapidly then falls more slowly then returns to the ambient value after a number of oscillations. The pressure wave consists of both audible (noise) and inaudible (concussion) energy. The maximum excess pressure in this wave is known as the peak air overpressure, generally measured in decibels using the linear frequency-weighting.

**Appropriately qualified person(s)** means a person or persons who has professional qualifications, training, skills or experience relevant to the EA requirement and can give authoritative assessment, advice and analysis in relation to the EA requirements using the relevant protocols, standards, methods or literature.

**Background** means noise, measured in the absence of the noise under investigation, as $\mathbf{L_{A\ 90,\ adj,\ T}}$ 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.

**Blasting** is the use of explosives 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 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.

**Disturbed areas** includes areas:

1. that are susceptible to erosion;
2. that are contaminated by the activity; and/or
3. upon which stockpiles of soil or other materials are located.

**Environmental nuisance** as defined in Chapter 1 of the *Environmental Protection Act 1994*.

**Environmental value –**

- a quality or physical characteristic of the environment that is conducive to ecological health or public amenity or safety; or
- another quality of the environment identified and declared to be an environmental value under an environmental protection policy or regulation.

**Groundwater** means water that occurs naturally in, or is introduced artificially into, an aquifer.

**Land** means any land, whether above or below the ordinary high-water mark at spring tides (i.e. includes tidal land).

$\mathbf{L_{Aeq,\ adj,\ T}}$ means the adjusted A weighted equivalent continuous sound pressure level measured on fast response, adjusted for tonality and impulsiveness, during the time period T, where T is measured for a period no less than

15 minutes when the activity is causing a steady state noise, and no shorter than one hour when the approved activity is causing an intermittent noise.

**$Max_{LpA,T}$** 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:

- Procedural measures such as standard operating procedures for dredging operations, environmental risk assessment, management actions, departmental direction and competency expectations under relevant guidelines
- Physical measures such as plant, equipment, physical objects (such as bunding, containment systems etc.), ecosystem monitoring and bathymetric surveys.

**NATA** means National Association of Testing Authorities.

**Nominated delegate** means another government agency that provides services to the administering authority.

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

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

**Prescribed water contaminants** means contaminants listed within Schedule 10 of the Environmental Protection Regulation 2019.

**Priority ports**

Each of the following ports is a priority port as per the *Sustainable Ports Development Act 2015*—

(a) Port of Abbot Point;
(b) Port of Gladstone;
(c) the ports of Hay Point and Mackay;
(d) Port of Townsville.

**Records** include breach notifications, written procedures, analysis results, monitoring reports and monitoring programs required under a condition of this authority.

**Release of a contaminant into the environment** means to:

1. deposit, discharge, emit or disturb the contaminant
2. cause or allow the contaminant to be deposited, discharged, emitted or disturbed
3. fail to prevent the contaminant from being deposited, discharged emitted or disturbed
4. allow the contaminant to escape
5. fail to prevent the contaminant from escaping.

**Restricted area** means an area that is within the Great Barrier Reef World Heritage Area but outside the Commonwealth marine park.

Note—See the Commonwealth *Marine Park Act* for prohibitions relating to the Commonwealth marine park and Great Barrier Reef Region under that Act.

**Secondary containment system** means a system designed, installed and operated to prevent any release of contaminants from the system, or containers within the system, to land, groundwater, or surface waters.

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

1. a dwelling, residential allotment, mobile home or caravan park, residential marina or other residential premises; or
2. a motel, hotel or hostel; or
3. a kindergarten, school, university or other educational institution; or

4. a medical centre or hospital; or
5. a protected area under the *Nature Conservation Act 1992*, the *Marine Parks Act 2004* or a World Heritage Area; or
6. a public park or garden; or
7. for noise, a place defined as a sensitive receptor for the purposes of the Environmental Protection (Noise) Policy 2019.

**Stormwater that is not contaminated by the activity** includes stormwater runoff from external or undisturbed catchments.

**Substantial low frequency noise** means a noise emission that has an unbalanced frequency spectrum shown in a one-third octave band measurement, with a predominant component within the frequency range 10 to 200 Hz. It includes any noise emission likely to cause an overall sound pressure level at a sensitive place exceeding 55 dB(Z).

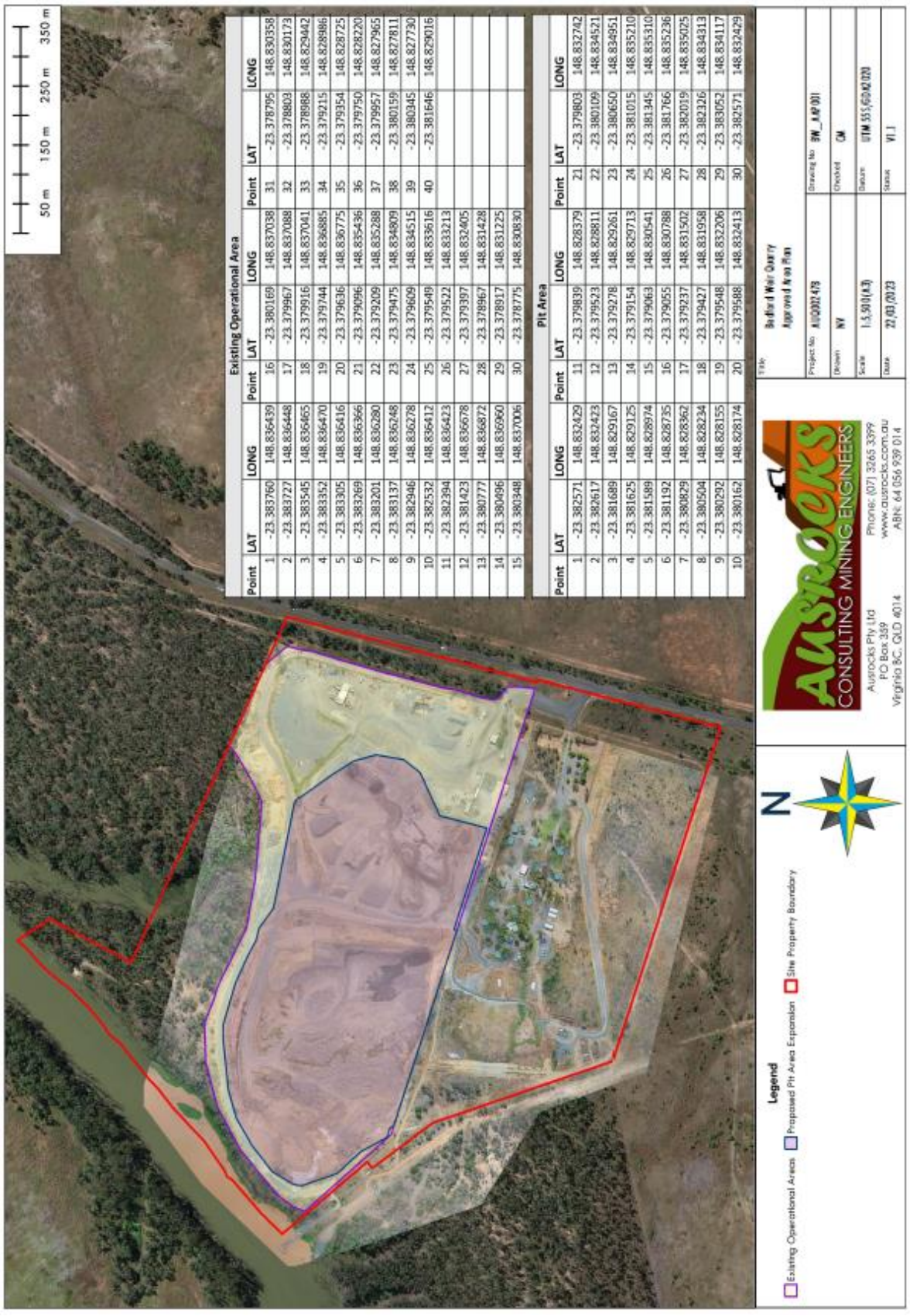
**Tidal land** means land that is submerged at any time by tidal water.

**Vibration** is the oscillating or periodic motion of a particle, group of particles, or solid object about its equilibrium position.

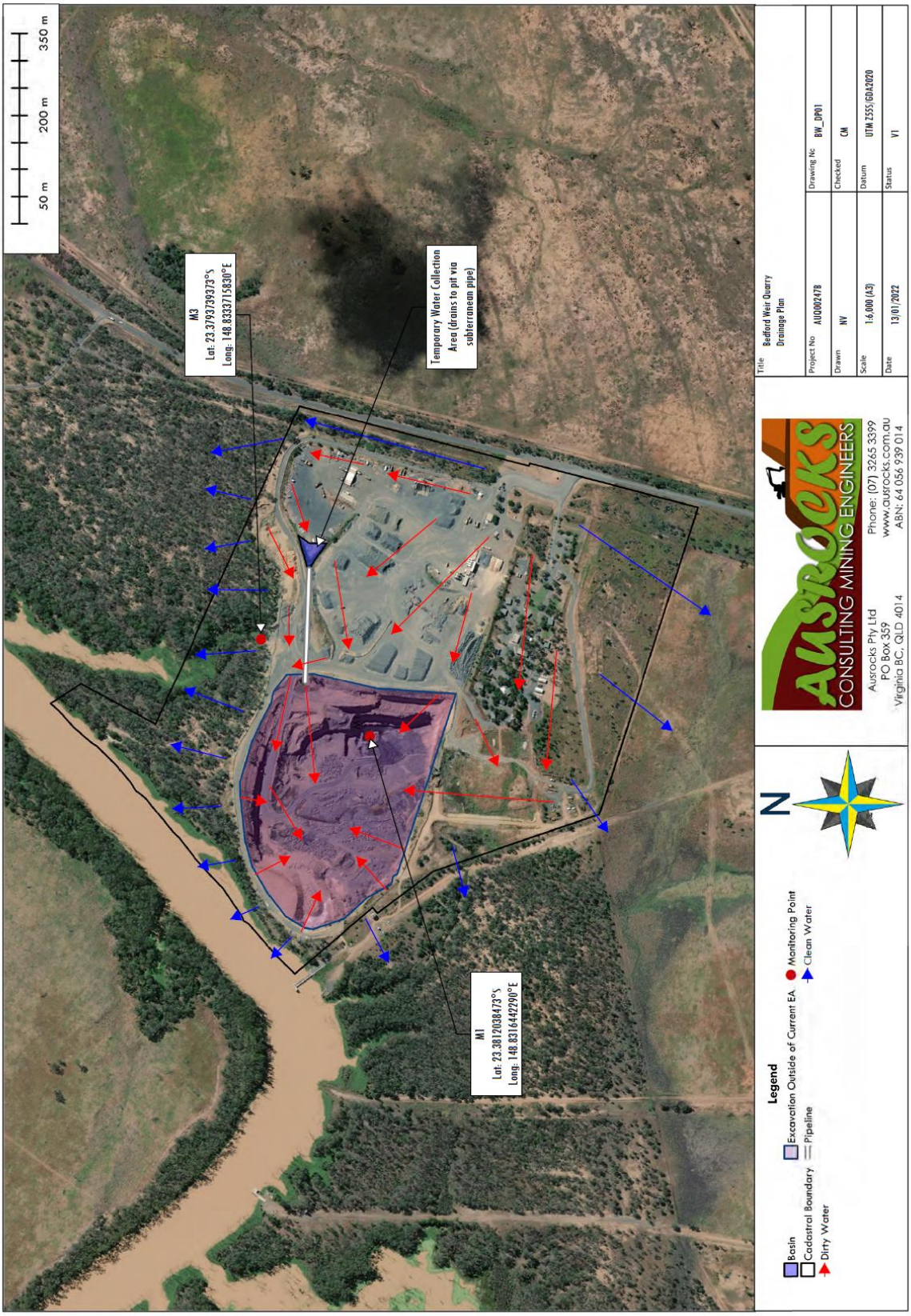
**Waters** includes river, stream, lake, lagoon, pond, swamp, wetland, unconfined surface water, unconfined water, natural or artificial watercourse, bed and bank of any waters, dams, non-tidal or tidal waters (including the sea), stormwater channel, stormwater drain, roadside gutter, stormwater run-off,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

**You** means the holder of the environmental authority.

## Appendix A - Bedford Weir Quarry Approved Area Plan



## Appendix B - Bedford Weir Quarry Drainage Plan



**END OF ENVIRONMENTAL AUTHORITY**