

Permit

Environmental Protection Act 1994

Environmental authority BRID0013

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

Environmental authority number: BRID0013

Environmental Authority takes effect when your related development application takes effect. Prior to the commencement of the activity the administering authority must be given written notice of the proposed date of commencement.

Environmental authority holder

Name	Registered address
Barro Group Pty Ltd	191 Drummond Street CARLTON SOUTH VIC 3053

Environmentally relevant activity and location details

Environmentally relevant activities	Location
ERA 16 2(c) – Extracting, other than by dredging, in a year, more than 1,000,000t	Beerburum-Woodford Road BEERBURRUM QLD 4517 (Part of Lot 589 Plan FTY1876)
ERA 16 3(c) – Screening, in a year, more than 1,000,000t	

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).



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Contaminated land

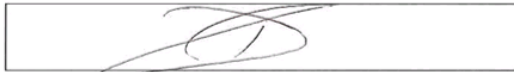
It is a requirement of the EP Act that an owner or occupier of contaminated land give written notice to the administering authority if they become aware of the following:

- 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.

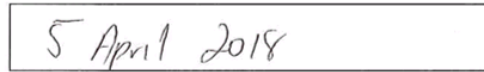
For further information, including the form for giving written notice, refer to the Queensland Government website www.qld.gov.au, using the search term 'duty to notify'.

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

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



Date

Enquiries:
 Energy and Extractive Resources
 GPO Box 2454
 BRISBANE QLD 4001
 Phone: (07) 3330 5609
 Fax: (07) 3330 5634
 Email: energyandextractive@des.qld.gov.au

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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)

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 Natural Resources and Mines (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 www.dnrm.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. Please contact the Department of Environment and Heritage Protection to ensure that you have the most current version of the environmental authority relating to this site.

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Conditions of environmental authority

The environmentally relevant activities conducted at the location as described above must be conducted in accordance with the following site specific conditions of approval.

Agency interest: General	
Condition number	Condition
G1	Activities under this environmental authority must be conducted in accordance with the following limitations: <ol style="list-style-type: none"> a. Environmentally relevant activity 16(2)(c) – extracting, other than by dredging, in a year, more than 1,000,000t b. Environmentally relevant activity 16(3)(c) – screening, in a year, more than 1,000,000t c. The Groundwork Plus Plans 1935.DRG.022 and 1935.DRG.024 (Appendix 1 and 2 of EA)
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	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 NATA certification, or an equivalent certification, for such analyses. The only exception to this condition is for in situ monitoring of pH and Electrical Conductivity (EC).
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 to the administering authority, or nominated delegate, within the required timeframe and in the specified format upon request.

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G9	The activity must be undertaken in accordance with written procedures that: <ol style="list-style-type: none"> 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>; and 6. ensure that reviews of environmental performance are undertaken at least annually.
G10	Storage of chemicals and fuels in bulk or in containers of greater than 15 litres must be within a secondary containment system.
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: <ol style="list-style-type: none"> 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 b) a concentration of particulate matter with an aerodynamic diameter of less than 10 micrometre (µm) (PM10) 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: 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 .

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N2	<p>Noise from the activity must not exceed the levels identified in <i>Table 1—Noise limits</i> when measured in accordance with the associated monitoring requirements.</p> <p>Table 1—Noise limits</p> <table border="1"> <thead> <tr> <th>Noise descriptor</th> <th>6am -7am</th> <th>7am–6pm</th> <th>6pm–7am</th> </tr> </thead> <tbody> <tr> <td colspan="4">Noise measured at any sensitive place or commercial place</td> </tr> <tr> <td>LAeq, adj, T</td> <td>38dBA</td> <td>41 dBA</td> <td>30 dBA</td> </tr> </tbody> </table> <p>Associated monitoring requirements</p> <ol style="list-style-type: none"> All monitoring devices must be calibrated and maintained according to the manufacturer's instruction manual; Any monitoring must be in accordance with the most recent version of the administering authority's <i>Noise Measurement Manual</i>; and Any monitoring of noise emissions from the activity must be undertaken when the activity is in operation. 	Noise descriptor	6am -7am	7am–6pm	6pm–7am	Noise measured at any sensitive place or commercial place				LAeq, adj, T	38dBA	41 dBA	30 dBA
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N3	<p>When required by the administering authority, noise monitoring must be undertaken in accordance with the associated monitoring requirements of <i>Table 1—Noise Limits</i>, and the results notified within 14 days to the administering authority.</p> <p>Monitoring must include:</p> <ol style="list-style-type: none"> LAeq, adj, T; Background noise (Background) as LA 90, adj, T; MaxLpA,T; the level and frequency of occurrence of any impulsive or tonal noise; atmospheric conditions including wind speed and direction; effects due to extraneous factors such as traffic noise; and recording of location, date and time of measurements. 												
N4	<p>Blasting activities must not exceed the limits for peak particle velocity and air blast overpressure in <i>Table 2—Blasting noise limits</i> when measured at any sensitive place or commercial place in accordance with the associated monitoring requirements.</p> <p>Table 2—Blasting noise limits</p> <table border="1"> <thead> <tr> <th>Blasting criteria</th> <th>Blasting limits</th> </tr> </thead> <tbody> <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> </tbody> </table> <p>Associated monitoring requirements</p> <ol style="list-style-type: none"> Monitoring must be performed in accordance with the most recent edition of the administering authority's <i>Noise and Vibration from Blasting guideline</i> and <i>Noise Measurement Manual</i> and any relevant <i>Australian Standard</i>. 	Blasting criteria	Blasting limits	Airblast overpressure	115 dB (Linear) Peak for 9 out of 10 consecutive blasts initiated and not greater than 120 dB (Linear) Peak at any time.	Ground vibration peak particle velocity	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.						
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N5	Blasting must be carried out in accordance with the current edition of the administering authority's Noise and vibration from blasting guideline and with <i>Australian Standard 2187</i> .
N6	Unless prior approval is obtained from the administering authority: <ol style="list-style-type: none"> 1. blasting is only permitted during the hours of 9 am to 5 pm Monday to Friday; and 2. blasting is not permitted at any time on Saturdays, Sundays or public holidays.
N7	When required by the administering authority , a blast monitoring program must be developed and implemented to monitor compliance with <i>Table 2 - Blasting noise limits</i> at any sensitive place or commercial place .
Agency interest: Land	
Condition number	Condition
L1	Land that has been disturbed for activities conducted under this environmental authority must be rehabilitated in a manner such that: <ol style="list-style-type: none"> 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 released from the site, including seepage, 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; and 6. the final landform is stable and protects public safety.
L2	Rehabilitation of disturbed areas required under condition L1, must take place progressively as works are staged and new extraction areas are commenced.

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Agency interest: Water																							
Condition number	Condition																						
W1	<p>Contaminants must only be released to surface waters in accordance with <i>Table 3 – Contaminant release points and release limits</i> and the associated requirements.</p> <p>Table 3 – Contaminant release points and release limits</p> <table border="1"> <thead> <tr> <th>Monitoring and Release Point Description</th> <th>Quality Characteristic</th> <th>Limit</th> <th>Limit Type</th> <th>Minimum Monitoring Frequency</th> </tr> </thead> <tbody> <tr> <td rowspan="4">RP1 and RP2 spillways as shown in <i>Appendix 2– Release Point Locations</i></td> <td>pH</td> <td>6.5-8</td> <td>Range</td> <td rowspan="4">Prior to each release and then daily during release events</td> </tr> <tr> <td>Dissolved Oxygen (DO)</td> <td>85-110% saturation</td> <td>Range</td> </tr> <tr> <td>Electrical Conductivity (EC)</td> <td>125µS/cm</td> <td>Maximum</td> </tr> <tr> <td>Total Suspended Solids (TSS)</td> <td>50mg/L</td> <td>Maximum</td> </tr> </tbody> </table> <p>Associated monitoring requirements</p> <ol style="list-style-type: none"> Monitoring location and release points must be situated and maintained at RP1 and RP2 spillways in accordance with plan <i>Appendix 2– Release Point Locations</i> attached; Monitoring must be in accordance with the methods prescribed in the current edition of the Department of Environment and Heritage Protection <i>Monitoring and Sampling Manual</i>; Water and sediment samples must be representative of the general condition of the water body or sediments; 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; and All monitoring devices must be calibrated and maintained according to the manufacturer's instruction manual. 				Monitoring and Release Point Description	Quality Characteristic	Limit	Limit Type	Minimum Monitoring Frequency	RP1 and RP2 spillways as shown in <i>Appendix 2– Release Point Locations</i>	pH	6.5-8	Range	Prior to each release and then daily during release events	Dissolved Oxygen (DO)	85-110% saturation	Range	Electrical Conductivity (EC)	125µS/cm	Maximum	Total Suspended Solids (TSS)	50mg/L	Maximum
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W2	The release to waters permitted under W1 must not produce any slick or other visible evidence of oil or grease, scum, litter or other visually objectionable matter.																						
W3	The release to waters permitted under W1 must not contain any other properties at a concentration capable of causing environmental harm.																						
W4	Erosion and sediment control measures must be implemented and maintained to minimise erosion and the release of sediment.																						

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W5	If groundwater is intercepted onsite, appropriate monitoring and management of the groundwater must be implemented to ensure that there is no adverse impact on the quality or level of the groundwater.
W6	Stormwater runoff from disturbed areas of the site, generated by (up to and including) a 24 hour storm event with an average recurrence interval of 1 in 5 years must be retained on site or managed to remove contaminants prior to release.
Agency interest: Waste	
Condition number	Condition
WS1	All waste generated in carrying out the activity must be reused, recycled or removed to a facility that can lawfully accept the waste.

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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 Heritage Protection 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 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 $L_{A90,adj,T}$ being the Aweighted 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.

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.

$L_{Aeq,adj,T}$ means the adjusted A weighted equivalent continuous sound pressure level measures 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.

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

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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.

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.

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:

- 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.

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 2008.

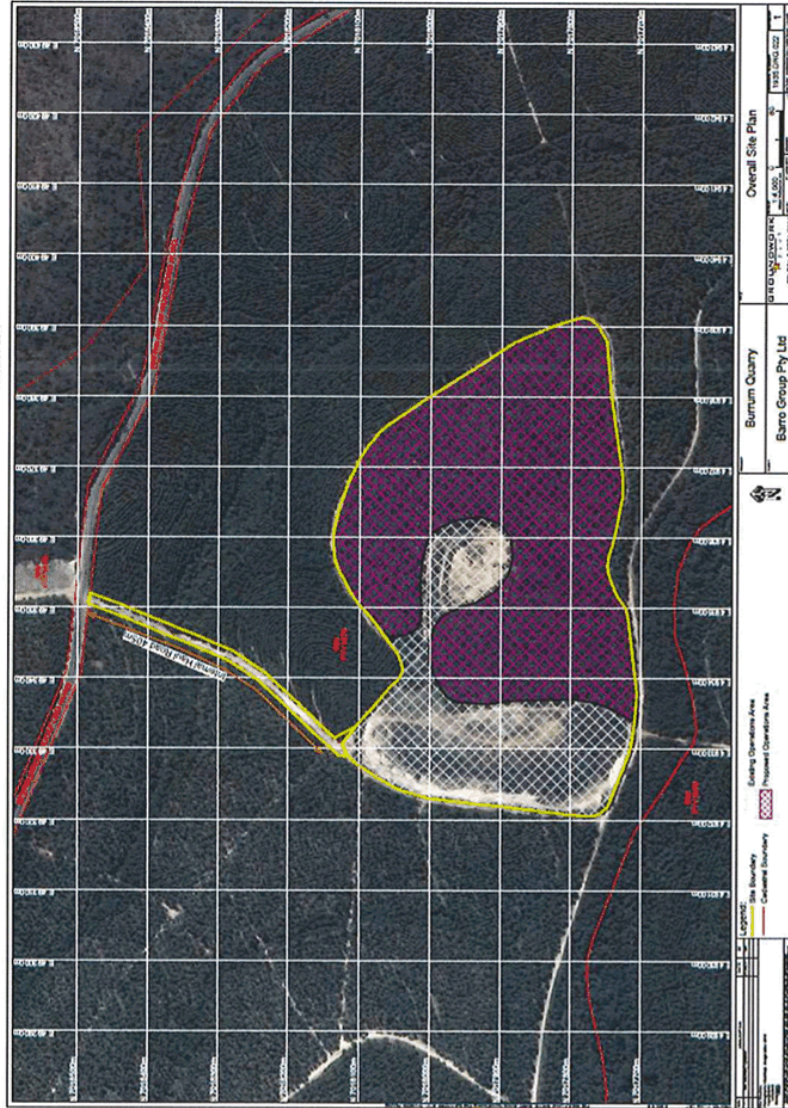
Vibration is the oscillating or periodic motion of a particle, group of particles, or solid object about its equilibrium position.

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.

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Appendix 1 – Site Boundary



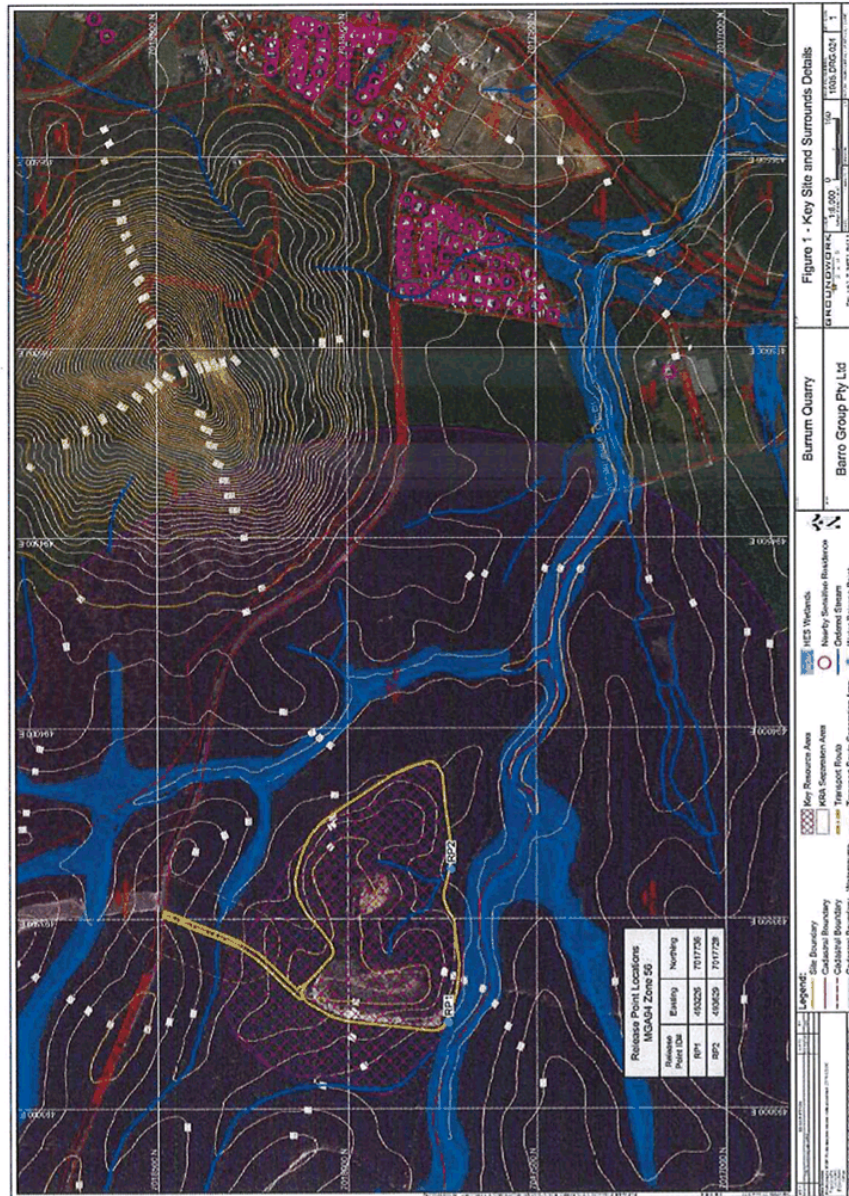
Department of Environment and Heritage Protection

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Appendix 2 – Release Point Locations



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