Permit

Environmental Protection Act 1994

Environmental authority EA0001106

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

Environmental authority number: EA0001106

Environmental authority takes effect on 18 January 2018

Environmental authority holder(s)

Name(s)	Registered address
Shamrock Quarry Pty Ltd	2 Thomas Ct BULGUN QLD 4854 Australia

Environmentally relevant activity and location details

Environmentally relevant activity/activities	Location(s)
Prescribed ERA, ERA 16 - Extraction and Screening, 2: Extracting, other than by dredging, in a year, the following quantity of material, (a) 5,000t to 100,000t	Lot 8/RP747511
Prescribed ERA, ERA 16 - Extraction and Screening, 3: Screening, in a year, the following quantity of material, (a) 5,000t to 100,000t	Lot 8/RP747511

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.

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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.

Kylie Breaker
Department of Environment and Heritage Protection
Delegate of the administering authority
Environmental Protection Act 1994

Date issued: 19 January 2018

Enquiries:
Extraction, Energy and Chemical Industries Assessment
Department of Environment and Heritage Protection
Phone: 1300 130 372
Email: palm@ehp.qld.gov.au

Obligations under the Environmental Protection Act 1994

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

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

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Legislative Requirements and Conditions of Environmental Authority

General

G1 Any record or document required to be kept by a condition of this environmental authority must be kept at the licensed place for a period of at least five (5) years and be available for examination by an authorised person. For daily and weekly records, the record retention requirements of this condition will be satisfied if any daily and weekly records are kept for a period of at least three (3) years and these records are then kept in the form of annual summaries after that period.

G2 No change, replacement or operation of any plant or equipment is permitted if the change, replacement or operation of the plant or equipment increases, or is likely to substantially increase, the risk of environmental harm above that expressly provided by this environmental authority.

G3 All complaints received by the holder of this environmental authority relating to releases of contaminants from operations at the licensed place must be recorded and kept with the following details:

a) time, date and nature of the complaint;

b) type of communication (telephone, letter, personal etc.);

c) name, contact address and contact telephone number of the complainant (Note: if the complainant does not wish to be identified then "Not identified" is to be recorded);

d) response and investigation undertaken as a result of the complaint;

e) name of the person responsible for investigating the complaint; and

f) action taken as a result of the complaint investigation and signature of the responsible person.

G4 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.

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G5 All determinations of the quality of contaminants released to the environment and all measurement and reporting of noise levels that are required by this environmental authority must be undertaken by a person or body possessing appropriate experience and qualifications to perform the required determinations and the required measurements.

G6 All instruments and devices used for the measurement or monitoring of any parameter under any condition of this environmental authority must be calibrated and appropriately operated and maintained.

G7 The holder of this authority must develop and implement an Integrated Environmental Management System which provides for the following functions:

i. the monitoring of releases of contaminants into the environment and an environmental assessment of the releases; and

ii. staff training and awareness of environmental issues; and

iii. the conduct of environmental and energy audits; and

iv. waste prevention, treatment and disposal.

G8 A copy of the Integrated Environmental Management System must be kept in a location readily accessible to personnel carrying out the activity.

G9 Storage of chemicals and fuels in bulk or in containers of greater than 15 litres must be within a secondary containment system and releases from the containment system controlled in a manner that prevents environmental harm.

WS1 The holder of this environmental authority must not:

a) allow waste to burn or be burned at or on the licensed place; nor

b) remove waste from the licensed place and burn such wastes elsewhere.

WS2 Where regulated waste is removed from the licensed place (other than by a release as permitted under another condition of this environmental authority), the holder of this environmental authority must monitor and keep records of the following:

a) the date, quantity and type of waste removed; and

b) name of the waste transporter and/or disposal operator that removed the waste; and

c) the intended treatment/disposal destination of the waste.

Air

A1 Odours and 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.

A2 Trafficable areas within the boundary of each quarry lease must be sealed with bitumen or an equivalent hard surface, or otherwise maintained in a condition which minimises the release of wind-blown or traffic generated dust.

Water

W1 Other than as permitted within this authority, contaminants must not be released from the site to any waters or the bed and banks of any waters.

W2 The holder of this environmental authority must develop and implement an erosion and sediment control plan for each quarry site. Each plan must have at least the following elements, with clear timeframes identified for their construction and implementation:

a) diversion of upstream stormwater from disturbed areas;

b) methods of containing and/or filtering stormwater runoff from product stockpiles, internal roads and all other disturbed areas;

c) retention of sediment on-site for each stage of the quarry's development; and

d) an inspection and maintenance program for erosion and sediment control features.

W3 Elements of the erosion and sediment control plan specified in condition number W2 must be clearly marked on a topographic map.

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W4 If the erosion and sediment control plan requires modification as quarry development occurs, then any such modifications must be in accordance with condition W2.

W5 Any spillages of wastes, contaminants or other materials must be cleaned up as quickly as practicable. Such spillages must not be cleaned up by hosing, sweeping or otherwise releasing such wastes, contaminants or material to any stormwater drainage system, roadside gutter or waters outside the site boundaries.

SW1 The holder of this environmental authority must ensure that levels of turbidity arising from quarrying activities results in the receiving waters complying with the following objective:

a) at a point described in condition number SW4 i.e. 100 metres downstream of each sediment pond, the release of contaminants from the carrying out of the environmentally relevant activity must not cause the following change to the water quality of each drainage line:

i. an increase of ten (10) Nephelometric Turbidity Units (NTU) above background levels.

SW2 For the purposes of checking compliance with condition number SW1, background sampling must be carried out at the locations specified in condition number SW4 of the environmental authority.

SW3 The holder of this environmental authority is responsible for the making of determinations and keeping of records of the quality of the contaminants released for the release points, quality characteristics and at the frequency specified in Table 2 – Release to waters.

SW4 Determinations of the quality of contaminant releases to waters to check conformity with the release quality characteristics specified in condition SW1 of this environmental authority must be undertaken at the sampling and in situ monitoring points described as:

For each drainage line* which reports to a sediment basin:

a) a representative point not exceeding 100 metres upstream of quarrying operations and

b) a point within not exceeding 100 metres downstream of a sediment basin.

*Note that, for a drainage line that has the lake constructed upstream of the quarry, sampling must be carried out upstream of the lake.

Table 2 – Release to waters.

Quality characteristic	Sample point	Frequency
Turbidity (NTU)	As specified in condition SW4	Every two (2) months

SW5 All sediment retention basins must be designed to contain runoff from at least a 1 in 10 year, one (1) hour rainfall event.

SW6 Sediment retention basins must be emptied of sediment on at least a quarterly basis to maintain their design capacity.

SW7 Sediment removed from the sediment basins must not be stored or used in a manner that would be likely to release such sediment to a watercourse.

Acoustic

N1 Noise from the activity must not exceed the levels identified in Table 1—Noise limits when measured in accordance with the associated monitoring requirements.

Table 1 – Noise limits

Noise Level dB(A) measured as	Monday to Sunday including public holidays		
	7am – 6pm	6pm – 10pm	10pm – 7am
	Noise measured at a sensitive place		
LAeq, adj T	45	35	30

Associated monitoring requirements:

1. All monitoring devices must be correctly calibrated and maintained.
2. Any monitoring must be in accordance with the most recent version of the administering authority's Noise Measurement Manual.
3. Any monitoring of noise emissions from the activity must be undertaken when the activity is in operation.

N2 Noise emanating from blasting operations must not exceed an over-pressure level of 115dB (linear peak) for four (4) out of any five (5) consecutive blasts when measured at any noise sensitive place.

N3 Ground vibration caused by blasting operations, when measured at the most exposed boundary of a noise-sensitive place, must not exceed:

a) 25mm/sec ground vibration, peak particle velocity, for ground vibrations near houses and low-rise residential buildings for frequencies above 35 Hz; or

b) 25mm/sec ground vibration, peak particle velocity, for ground vibrations near houses and low-rise residential buildings for frequencies less than or equal to 35 Hz.

N4 When required by the administering authority, a blast monitoring program must be developed and implemented to monitor compliance with conditions N2 and N3.

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Land

L1 With the exception of vertical walls, rehabilitation of all completed extraction areas must commence within six (6) months of completion of extraction. The rehabilitation must have the following aims:

a) to screen bare vertical walls from view outside of the quarry as much as practicable; and

b) to provide adequate groundcover to minimise erosion.

L2 For the purpose of compliance with condition L1, where vegetative regrowth has not adequately occurred (i.e. vegetation survival rate of less than 50% within six (6) months of planting), supplementary seeding/planting must be undertaken.

L3 For the purpose of compliance with condition L1, for the life of the extractive activity, the holder of this environmental authority must ensure that revegetation areas are monitored and maintained to have at least 50% vegetative ground cover.

L4 The holder of this environmental authority must provide a report to the administering authority with the annual return, explaining the progress of the revegetation program.

Definitions

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.

Blasting is the use of explosives to fracture:

1. rock, coal and other minerals for later recovery; or
2. 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.

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 1992* or a World Heritage Area; or
6. a park or gardens; 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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