Permit

Environmental Protection Act 1994

Environmental authority EPPR03587215

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

Environmental authority number: EPPR03587215

Environmental authority takes effect on 04-02-2021

Environmental authority holder(s)

Name(s)	Registered address
WATERFORD OPERATIONS PTY LTD	42 Barkly St ST KILDA VIC 3182 Australia

Environmentally relevant activity and location details

Environmentally relevant activity/activities	Location(s)
ERA 16 - Extraction and Screening 2: Extracting, other than by dredging, in a year, the following quantity of material (b) more than 100,000t but not more than 1,000,000t	Lot 319 on MAR6115
ERA 16 - Extraction and Screening 3: Screening, in a year, the following quantity of material (b) more than 100,000t but not more than 1,000,000t	Lot 319 on MAR6115

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'.

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.

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

Date issued: 05 February 2021

Enquiries:
Extraction, Energy and Chemical Industries Assessment
Department of Environment and Science

Phone: 1300 130 372
Email: palm@des.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)

Conditions of environmental authority

Agency interest: General	
Condition number	**Condition**
G1	In carrying out the ERA, prevent or minimise the likelihood of environmental harm being caused.
G2	From commencement of the ERA, a Site Based Management Plan (SBMP) must be implemented. The SBMP must identify all sources of environmental harm, including but not limited to the actual and potential release of contaminants, the potential impact of these sources and what actions will be taken to prevent the likelihood of environmental harm being caused. The SBMP must also provide for the review and 'continual improvement' in the overall environmental performance of all ERAs that are carried out. The report must address the following matters: (a) Environmental Commitments - a commitment by senior management to achieve specified and relevant environmental goals; (b) the permit holder's commitment to achieve specified and relevant environmental goals; (c) Identification of environmental issues and potential impacts; (d) Control measures for routine operations to minimise likelihood of environmental harm; (e) Contingency plans and emergency procedures for non-routine situations which may cause environmental harm; (f) Organisational structure and responsibility; (g) Effective communication; (h) Monitoring of contaminant releases; (i) Conducting environmental impact assessments; (j) Staff training; (k) Record keeping; and (l) Periodic review of environmental performance and continual improvement.
G3	The SBMP must not be implemented or amended where such implementation or amendment would result in a contravention of any condition of this approval.
G4	A copy of the SBMP must be kept at the authorised place.
G5	A stand of riparian vegetation at least 60 metres wide is to be reinstated, developed and maintained immediately adjacent to the waterway, and reflect the species composition, structure

	and zonation typical of riparian vegetation for that locality. Plantings are to occur within four months of issue of this permit and employ seed or plants derived locally.
G6	Ensure that: (a) all measures, plant and equipment necessary to ensure compliance with the conditions of this approval are installed; and (b) such measures, plant and equipment are operated and maintained in a proper condition.
G7	Record, compile and keep for a minimum of five years all monitoring results or other information required by or under this approval and make those records available for inspection upon request by the administering authority.
G8	Where monitoring is required by or under this approval, ensure that a competent and qualified person conducts all such monitoring.
G9	All instruments, equipment and measuring devices used for measuring or monitoring in accordance with any condition of this approval must be calibrated, and appropriately operated and maintained.
G10	A competent and suitably qualified person(s) must conduct any monitoring required by this approval.
G11	The only area permitted to be extracted under this approval are those shown in: Figure 1-3 of the Information Request Response by Jensen Bowers Town Planners Pty Ltd entitled Proposed Extraction Area — Deer Lane, Waterford.
G12	Provide to the administering authority written notification of the date when extraction will commence at least seven days prior thereto.
G13	All complaints received by the operator of the ERA, to which this approval relates, must be recorded including investigations undertaken, conclusions formed and action taken. This information must be made available to the administering authority on request.
S1	The operator of the ERA must record the following details for all complaints received and provide this information to the administering authority on request: (a) time, date, name and contact details of the complainant; (b) reasons for the complaint; (c) any investigations undertaken; (d) conclusions formed; and (e) any actions taken.

S2	In consultation with the administering authority, cooperate with and participate in any community environmental liaison committee established in respect of either the premises to which this approval relates, or the area(s) where the premises to which this approval is located.
L8	Telephone the administering authority's Pollution Hotline on 1300 130 372 or local office as soon as practicable after becoming aware of any release of contaminants not in accordance with the conditions of this approval.
L9	A written notice detailing the following information must be provided to the administering authority within 14 days of any advice provided in accordance with condition L8: (a) the name of the operator, including their approval/registration number; (b) the name and telephone number of a designated contact person; (c) quantity and substance released; (d) vehicle and registration details; (e) person(s) involved (driver and any others); (f) the location and time of the release; (g) the suspected cause of the release; (h) a description of the effects of the release; (i) the results of any sampling performed in relation to the release; (j) actions taken to mitigate any environmental harm caused by the release; and (k) proposed actions to prevent a recurrence of the release
L10	An appropriate spill kit, personal protective equipment and relevant operator instructions/emergency procedure guides for the management of wastes and chemicals associated with the ERA must be kept at the site, and in each vehicle used if the activity is a mobile ERA
Agency interest: Waste	
Condition number	**Condition**
W1	All regulated waste removed from the site must be by a person who holds a current authority to do so under the *Environmental Protection Act 1994.*
W2	Procedures must be implemented to ensure that wastes generated on the site are minimised, recycled, stored, handled and transferred in a proper and efficient manner. Disposal of such waste must be at a facility lawfully able to accept such waste.
Agency interest: Air	

Condition number	Condition
A1	The release of dust and/or other particulate matter resulting from the ERA must not cause an environmental nuisance at any nuisance sensitive or commercial place.
A2	Notwithstanding condition (A1), dust and particulate matter must not exceed the following levels when measured at any sensitive or commercial place: (a) dust deposition of 120 milligrams per square metre per day, when monitored in accordance with Australian Standard 3580.10.1 of 2003 (or more recent editions); or (b) a concentration of particulate matter with an aerodynamic diameter of less than 10 micrometres (µm) (PM10) suspended in the atmosphere of 150 micrograms per cubic metre over a 24 hour averaging time, at a nuisance sensitive or commercial place downwind of the site, when monitored in accordance with: i. Australian Standard AS 3580.9.6 of 2003 (or more recent editions) "Ambient air - Particulate Matter - Determination of suspended particulate matter - PM10 high-volume sampler with size-selective inlet - Gravimetric Method; or ii. Any alternative method of monitoring PM10 which may be permitted by the 'Air Quality Sampling Manual' as published from time to time by the administering authority.
A3	When requested by the administering authority, dust and particulate monitoring must be undertaken to investigate any complaint or environmental nuisance caused by dust and/or particulate matter, and the results notified within 14 days to the administering authority following completion of monitoring. Monitoring must be carried out at a place(s) relevant to the potentially affected dust sensitive place and at upwind control sites and must include: (a) for a complaint alleging dust nuisance, dust deposition; and (b) for a complaint alleging adverse health effects caused by dust, the concentration per cubic metre of particulate matter with an aerodynamic diameter of less than 10 micrometres (PM10) suspended in the atmosphere over a 24hr averaging period.
A4	Trafficable areas must be maintained to prevent or minimise the release of wind blown or traffic generated dust to the atmosphere.
A5	Stockpiles must be maintained to prevent or minimise the release of wind blown dust to the atmosphere.
A6	Prevent or minimise the release of dust from vehicles used for transporting aggregates extracted from the site.
A7	Prevent or minimise the release of dust to the atmosphere from crushing and screening equipment and material conveyor systems.

Agency interest: Land	
Condition number	**Condition**
L1	The site (including all disturbed areas such as slopes, borrow pits, stockpile and screening areas) must be rehabilitated in a manner such that: (a) suitable vegetation endemic to the location is planted and established to achieve a species composition and density to that of the surrounding undisturbed areas where practicable and relevant to possible post extraction landuse; (b) potential for erosion of the site is minimised; (c) the quality of stormwater, other water and seepage released from the site is such that releases of contaminants including but not limited to suspended solids, turbidity, total dissolved salts, pH, total iron, total aluminium, and total manganese are not likely to cause environmental harm; (d) the likelihood of environmental nuisance being caused by release of dust is minimised; (e) the water quality of any residual water body meets relevant criteria for subsequent uses and does not have potential to cause environmental harm; (f) the final landform is stable and not subject to slumping; and (g) any actual and potential acid sulfate soils in or on the site are either not disturbed, or are submerged or treated, so as to not be likely to cause environmental harm.
L2	The operator of the environmentally relevant activities must prepare, submit and implement, within three months from the approval of the development approval, a Detailed Rehabilitation Plan that will enhance the riparian corridor within the buffer zone and connect the northern and southern areas. The contents for the Detailed Rehabilitation Plan should address the following: 1) Introduction 2) Rehabilitation Objective 3) History of the Site 4) History of Rehabilitation 5) Rehabilitation Plan 6) Implementation Strategies 6.1) Creation of the Landscape 6.2) Surface Preparation 6.3) Use of Fertilisers 6.4) Revegetation (including species lists) 6.5) Planting 6.6) Watering

<table>
<tr><td></td><td>6.7) Weeds
6.8) Seed Collection and Dispersal
7) Monitoring
8) Performance Criteria
9) Remedial Actions
Table 1) Rehabilitation Schedule
Map 1) Conservation Buffer Zones
Map 2) Rehabilitation Areas
Appendix 1) Open Space Management Statement
Appendix 2) Landscape Intent Statement</td></tr>
<tr><td>L3</td><td>A copy of the rehabilitation progress report prepared pursuant to the Site Rehabilitation Plan for the twelve (12) months prior to the date of annual return must be submitted to the administering authority with that annual return.</td></tr>
<tr><td>L4</td><td>The top layer and sub layers of the soil profile must be removed, stockpiled separately and retained for the purpose of rehabilitation of disturbed areas.</td></tr>
<tr><td>L5</td><td>Contaminants must not be released to land.</td></tr>
<tr><td>L6</td><td>Spillage of all chemicals and fuels must be contained within an on-site containment system and controlled in a manner that prevents environmental harm. All petroleum product storage's must be designed, constructed and maintained in accordance with AS 1940 - Storage and Handling of Flammable and Combustible Liquids.</td></tr>
<tr><td colspan="2">Agency interest: Acoustic</td></tr>
<tr><td>Condition number</td><td>Condition</td></tr>
<tr><td>N1</td><td>Noise from the ERA must not cause an environmental nuisance at any noise sensitive place or commercial place.</td></tr>
<tr><td>N2</td><td>Notwithstanding Condition (N1), all noise from activities must not exceed the levels specified in Table 1 - Noise limits at any nuisance sensitive or commercial place.
Table 1 - Noise limits
<table>
<tr><th rowspan="2">Noise level dB(A) measured as</th><th colspan="2">Monday to Friday</th><th colspan="2">Saturdays</th><th>Sunday and Public Holidays</th></tr>
<tr><th>7am–</th><th>6pm–</th><th>7am–</th><th>12noon-</th><th>All day</th></tr>
</table></td></tr>
</table>

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		6pm	**7am**	**12noon**	**7am**	
		Noise measured at a 'noise sensitive place'				
	$L_{A10, adj, 10mins}$	Bg + 5	Bg + 0	Bg + 5	Bg + 0	Bg + 0
	$L_{A1, adj, 10mins}$	Bg + 10	Bg + 0	Bg + 10	Bg + 0	Bg + 0
		Noise measured at the 'commercial place'				
	$L_{A10, adj, 10mins}$	Bg + 10	Bg + 0	Bg + 10	Bg + 0	Bg + 0
	$L_{A1, adj, 10mins}$	Bg + 15	Bg + 0	Bg + 15	Bg + 0	Bg + 0

NOTE

Where "Bg" means background sound pressure level measured in accordance with the latest edition of the administering authority's *Noise Measurement Manual.*

Table 1 does not purport to set operating hours for the ERA.

N3

The operator of the environmentally relevant activities to which this approval relates must implement the noise mitigation works proposed in the document entitled *"Waterford Sand Mine: Detailed Noise Mitigation Study"* dated 3 September 2007, prior to the commencement of operational works and environmentally relevant activities.

N4

When requested by the administering authority, noise monitoring must be undertaken to investigate any complaint of noise nuisance, and the results notified within 14 days to the administering authority. Monitoring must include:

i. $L_{Amax, adj. T}$;
ii. $L_{Abg, T}$ (or $L_{A90, T}$);
iii. $L_{AN, T}$ (where N equals statistical levels of 1, 10, 50, 90 and 99);
iv. Max $L_{pA T}$;
v. $L_{Aeq, T}$;
vi. the level and frequency of occurrence of impulsive or tonal noise;
vii. atmospheric conditions including temperature, relative humidity and wind speed and direction;
viii. effects due to extraneous factors such as traffic noise;
ix. overpressure level (dB linear peak) (for blast monitoring only);
x. peak particle velocity (for ground vibration monitoring only); and
xi. location, dates and time of recording.

N5

The method of measurement and reporting of noise levels must comply with the latest edition of the administering authority's Noise Measurement Manual.

N6	Where it is determined by an authorised person that monitoring results indicate environmental nuisance, the operator of the ERA to which this approval relates must: (a) address the complaint including the use of appropriate dispute resolution if required; or (b) immediately implement noise abatement measures so that emissions of noise from the ERA do not result in further environmental nuisance.
Agency interest: Water	
Condition number	**Condition**
W1	Erosion protection and sediment control measures must be implemented and maintained to minimise erosion and release of sediment.
W2	The size of any sedimentation dams must be sufficient to contain the run-off expected from a 24 hour storm with an average recurrence interval of 1 in 5 years.
W3	Diversion drains and/or contour banks must be designed, installed and maintained to minimise the potential for stormwater runoff to enter areas disturbed by the ERAs.
W4	The environmentally relevant activity must be carried out by such practicable means necessary to prevent and/or minimise the release or likelihood of release of contaminated runoff from the place to which this approval relates to any stormwater drain or waters or the bed or banks of any such waters. "Contaminated runoff' for the purposes of this condition means stormwater and/or stormwater runoff that contains contaminants that may cause environmental harm.

Definitions

Key terms and/or phrases in this environmental authority 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.

"administering authority" means the Department Environment and Science or its successor.

"annual return" means the return required by the annual notice (under section 316 of the *Environment Protection Act 1994*).

"approval" means this environmental authority.

"artificial waterway" means an artificial channel, lake or other body of water. Artificial waterway includes —

- an artificial channel that is formed because the land has been reclaimed from tidal water and is intended to allow boating access to allotments on subdivided land;
- other artificial channels subject to the ebb and flow of the tide; and
- any additions or alterations to an artificial waterway.

"authorised place" means the place authorised under this approval for the carrying out of the specified environmentally relevant activities.

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

"dredge spoil" means material taken from the bed or banks of waters by using dredging equipment or other equipment designed for use in extraction of earthen material.

"dwelling" means any of the following structures or vehicles that is principally used as a residence —

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

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

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

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

"$\mathbf{L_{A10,\ adj,\ 10mins}}$" means the A-weighted sound pressure level, (adjusted for tonal character and impulsiveness of the sound) exceeded for 10% of any 10 minute measurement period, using Fast response.

" $\mathbf{L_{A1,\ adj,\ 10mins}}$" means the A-weighted sound pressure level, (adjusted for tonal character and impulsiveness of the sound) exceeded for 1% of any 10 minute measurement period, using Fast response.

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

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

"mg/L" means milligrams per litre.

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

"NTU" mean nephelometric turbidity units.

"nuisance sensitive place" includes —

- 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
- 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.

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

"protected area" means —

- a protected area under the *Nature Conservation Act 1992*; or
- a marine park under the *Marine Parks Act 1992*; or
- a World Heritage Area.

"regulated waste" means non-domestic waste mentioned in Schedule 7 of the Environmental Protection Regulation 1998 (whether or not it has been treated or immobilised), and includes -

- for an element - any chemical compound containing the element; and
- anything that has contained the waste.

"site" means land or tidal waters on or in which it is proposed to carry out the d approved under this approval.

"tidal water" means the sea and any part of a harbour or watercourse ordinarily within the ebb and flow of the tide at spring tides.

"watercourse" means a river, creek or stream in which water flows permanently or intermittently-

- in a natural channel, whether artificially improved or not; or
- in an artificial channel that has changed the course of the watercourse.

"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.

"works" or "operation" means the development approved under this approval.

"you" means the holder of this approval or owner / occupier of the land which is the subject of this approval.

"50th percentile" means not more than three (3) of the measured values of the quality characteristic are to exceed the stated release limit for any six (6) consecutive samples for a release/monitoring point at any time during the environmental activity(ies) works.

"80th percentile" means not more than one (1) of the measured values of the quality characteristic is to exceed the stated release limit for any five (5) consecutive samples for a sampling point at any time during the environmental activity(ies) works

END OF ENVIRONMENTAL AUTHORITY