

Permit

Environmental Protection Act 1994

Environmental authority EPML00319713

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

Environmental authority number: EPML00319713

Environmental authority takes effect on 14 February 2020

Environmental authority holder(s)

Name(s)	Registered address
GRAYMONT (NSW) PTY LTD	Level 16, 111 Pacific Highway NORTH SYDNEY NSW 2060 Australia

Environmentally relevant activity and location details

Environmentally relevant activity/activities	Location(s)
Schedule 3 21: A mining activity that is an ineligible ERA, other than a mining activity mentioned in items 9 to 20	ML5764
Schedule 3 21: A mining activity that is an ineligible ERA, other than a mining activity mentioned in items 9 to 20	ML5763
Ancillary 41 - Cement manufacturing 2: Calcining 200t or more of limestone in a year	ML5764
Ancillary 41 - Cement manufacturing 2: Calcining 200t or more of limestone in a year	ML5763

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 *Sustainable Planning Act 2009* 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.

Filiz Tansley
Department of Environment and Science
Delegate of the administering authority
Environmental Protection Act 1994

Enquiries:
Minerals Business Centre
Department of Environment and Science

Phone: 07 4222 5352
Email: ESCairns@des.qld.gov.au

Date issued: 14 February 2020

It is noted that on 5 June 2019, mining lease (ML) 3614 was de-amalgamated to a new environmental authority, as such this environmental authority no longer has authorisation to those tenures and associated activities.

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, Mines and Energy (to clear vegetation), and the Department of Agriculture and Fisheries (to clear marine plants or to obtain a quarry material allocation).

Schedule of Conditions

The aforementioned description of the ERA for which this authority is issued is simply a restatement of the activity as prescribed in the legislation at the time of issuing this authority. Where there is conflict between the above description of the ERA for which this authority is issued and the conditions as specified in this authority as to the scale, intensity or manner of carrying out of the ERA, then such conditions prevail to the extent of the inconsistency.

This authority incorporates the following schedule of conditions relevant to various issues.

Schedule 3A – General Financial Assurance

- A1-1 Provide a financial assurance in the amount and form required by the administering authority prior to the commencement of activities proposed under this environmental authority.

Note: The calculation of financial assurance for condition (A1-1) must be in accordance with Guideline 17 and may include a performance discount. The amount is defined as the maximum total rehabilitation cost for complete rehabilitation of all disturbed areas, which may vary on an annual basis due to progressive rehabilitation. The amount required for financial assurance must be the highest Total Rehabilitation Cost calculated for any year of the Plan of Operations and calculated using the formula: (Financial Assurance = Highest Total Annual Rehabilitation Cost x Percentage Required)

- A1-2 The financial assurance is to remain in force until the administering authority is satisfied that no claim on the assurance is likely.

Note: Where progressive rehabilitation is completed and acceptable to the administering authority, progressive reductions to the amount of financial assurance will be applicable where rehabilitation has been completed in accordance with the acceptance criteria defined within this environmental authority.

Maintenance of measures, plant and equipment

- A2-1 The environmental authority holder must ensure:

- a) that all measures, plant and equipment necessary to ensure compliance with the conditions of this environmental authority are installed; and
- b) that such measures, plant and equipment are maintained in a proper condition; and
- c) that such measures, plant and equipment are operated in a proper manner.

Monitoring

- A3-1 Record, compile and keep all monitoring results required by this environmental authority and make available for inspection all or any of these records upon request by the administering authority.
- A3-2 Where monitoring is a requirement of this environmental authority, ensure that a competent person(s) conducts all monitoring.

Storage and handling of flammable and combustible liquids

- A4-1 Spillage of all flammable and combustible liquids must be contained within an on-site containment system and controlled in a manner that prevents environmental harm (other than trivial harm) and maintained in accordance with Section 5.9 of AS 1940 – Storage and Handling of Flammable and Combustible Liquids of 1993.

END OF CONDITIONS FOR SCHEDULE 3A

Schedule 3B – Air Quality

- B1-2 The release of noxious or offensive odours or any other noxious or offensive airborne contaminants resulting from the activity must not cause a nuisance at any odour sensitive place.

Dust Nuisance

- B2-1 The release of dust and/or particulate matter resulting from the activity must not cause an environmental nuisance at any dust sensitive place.
- B2-2 Exceedence of any of the following levels when measured at any dust sensitive place is an environmental nuisance for the purposes of condition B2-1.
- Dust deposition of 120 milligrams per square metre per day, when monitored in accordance with Australian Standard AS 3580.10 of 1991; OR
 - A concentration of particulate matter with an aerodynamic diameter of less than 10 micrometre (μm) (PM10) suspended in the atmosphere of 150 micrograms per cubic metre over a 24 hour averaging time, at a dust sensitive place downwind of the site, when monitored in accordance with:
 - Australian Standard AS 3580.9.6 'Ambient air – Particulate matter – Determination of suspended particulate PM10 high-volume sampler with size-selective inlet – Gravimetric method', or
 - 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.
- B2-3 When requested by the Administering Authority, dust and particulate monitoring must be undertaken to investigate any complaint of environmental nuisance caused by dust and/or particulate matter, and the results notified with 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:
- For a complaint alleging dust nuisance, dust deposition; and
 - 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 micrometre (μm) (PM10) suspended in the atmosphere over a 24hr averaging time.

The release of contaminants to the atmosphere

- B3-1 Contaminants must not be released to the atmosphere from a release point shown in Schedule B – Table 1 other than:
- a) In accordance with the criteria shown in Schedule B – Table 1; and
 - b) Directed vertically upwards, with no impedance.
- B3-2 Contaminants must be released to the atmosphere from a release point at a height and a flow rate not less than the corresponding height and velocity stated for that release point in Schedule B – Table 1.
- Contaminants must not be released to the atmosphere from a release point at a concentration, as measured at a monitoring point, in excess of that stated in Schedule B – Table 1 and must be monitored not less frequently than stated in Schedule B – Table 1.

Schedule B – Table 1 (Release of Contaminants)

Release point number	Minimum release height (metres)	Minimum velocity (m/sec)	Contaminant release	Maximum release limit	Sampling frequency
RP1 Rotary Kiln Exhaust	25	--	Particulates	100mg/Nm ³ dry 12% CO ₂	Annually

B3-4 When requested by the Administering Authority, contaminant monitoring and recording must be undertaken to investigate any complaint of air contamination, and the results notified within 14 days to the administering authority. If you can provide evidence through monitoring that the limits in Schedule B Table 1 are not being exceeded then you shall not be in break of condition B2-1 with regards to any release of the contaminants listed in Schedule B Table 1. When monitoring is requested the following must be complied with:

- Monitoring provisions for the release points listed in Schedule B – Table 1 must comply with the Australian Standard AS 4323.1 – 1995 ‘Stationary source emissions Method 1: Selection of sampling positions’.
- The following tests must be performed for each required determination specified in Schedule B – Table 1:
- Gas velocity and volume flow rate;
- Gas temperature
- Water vapour concentration (moisture content),
- Where practicable samples must be taken when emissions are expected to be at maximum rates.
- During the sampling period the following additional information must be gathered:
- Production rate at the time of sampling;
- Pressure drop across fabric filter dust collector;
- Raw materials used;
- Number of equipment and mixing vessels operating;
- Operating or mixing temperature;
- Product made; and
- Reference to the actual test methods and accuracies.

B3-5 If monitoring indicates exceedance of the relevant limits in Schedule B Table 1, then the environmental authority holder must:

- Address the complaint including the use of appropriate dispute resolution if required or;
- Immediately implement dust abatement measures so that emissions of dust from the activity do not result in further environmental nuisance.

Fabric Filter Dust Collector (FFDC)

- B4-1 All collected material removed from the FFDC must be handled or disposed of in a manner that minimises dust emissions.
- B4-2 All contaminant emissions from Release Point 1 in Schedule B Table 1 must be treated via the FFDC emission control system except during emergency shut-down.

Fuel Burning

- B5-1 The sulphur content of any fuel burned in industrial fuel burning equipment is not to exceed 3 percent by weight.
- B5-2 The fuels that may be burned in industrial fuel burning equipment are coal and fuel oil.
- B5-3 Reclaimed fuel oil must only be sourced from an oil recycler who is the holder of a current registration certificate for a development approval for that activity under the Environmental Protection Act 1994.

END OF CONDITIONS FOR SCHEDULE 3B

Schedule 3C – Water Management

Release to waters

- C1-1 Contaminants must not be released from the site to any waters or the bed and banks of any waters.

Erosion protection measures and sediment controls

- C2-1 All reasonable and practicable erosion protection measures and sediment control measures must be implemented and maintained to minimise erosion and the release of sediment.

Bunding

- C3-1 All petroleum storage tanks must be banded according to the Australian Standards for The Storage and Handling of Flammable and Combustible Liquids (Section 5.9 AS 1940).
- C3-2 Where it is impractical to completely roof a banded area the holder of this environmental authority must ensure that any stormwater captured within the bund is free from contaminants or wastes prior to any release.

END OF CONDITIONS FOR SCHEDULE 3C

Schedule 3D – Land Management

Rehabilitation landform criteria

- D1-1 All areas significantly disturbed by mining activities must be rehabilitated to a stable landform with a self-sustaining vegetation cover in accordance with final land use and landform design in Schedule D – Table 1.

Schedule D – Table 1 (Final Land Use and Rehabilitation Approval Schedule)

	DISTURBANCE TYPE					
	Product stockpiles	Residual voids	Infrastructure	Roads and tracks	Rejects & waste stockpiles	Topsoil stockpiles
Tenure ID	ML3614 ML5763 Lot 1 MPH3895	ML3614 ML5763 ML5764	ML3614 ML5763 Lot 1 MPH3895	ML3614 ML5763 ML5764 Lot 1 MPH3895	ML3614 ML5763 ML5764	ML5763
Projective surface area	0.5ha	8ha	3ha	0.7ha	2ha	0.05ha
Post mine land use	Low intensity grazing	Water storage	Low intensity grazing	Low intensity grazing	Low intensity grazing	Low intensity grazing
Post mine land description	Flat vegetated land	Open void	Flat revegetated land	Flat revegetated land	Slightly elevated with slopes <6:1	Flat revegetated land
Post mine land capability classification	VII	Class VIII	VII	VII	VII	VII
Projective cover range (%)	50%	N/A	50%	50%	50%	50%
Species Mix	Rhodes grass		Rhodes grass	Rhodes grass	Rhodes grass	Rhodes grass

D1-2 Progressive rehabilitation must commence when areas become available within the operational land.

Infrastructure

D2-1 All infrastructure, constructed by or for the environmental authority holder during the mining activities including water storage structures, must be removed from the site prior to mining lease surrender, except where agreed in writing by the post mining land owner/holder.

Note: this is not applicable where the landowner/holder is also the environmental authority holder.

END OF CONDITIONS FOR SCHEDULE 3D

Schedule 3E – Noise and Vibration

Noise nuisance

- E1-1 Subject to Conditions (E1-2) and (E1-3) noise from the mining activity must not cause an environmental nuisance, at any sensitive or commercial place.
- E1-2 When requested by the administering authority, noise monitoring must be undertaken within a reasonable and practicable timeframe nominated by the administering authority to investigate any complaint (which is neither frivolous nor vexatious nor based on mistaken belief in the opinion of the authorised officer) of environmental nuisance at any sensitive or commercial place, and the results must be notified within 14 days to the administering authority following completion of monitoring.
- E1-3 If the environmental authority holder can provide evidence through monitoring that the limits defined in Schedule E – Table 1 and 2 inclusive, are not being exceeded then the holder is not in breach of Condition (E1-1). Monitoring must include:
- LA, max adj, T; and
 - The level and frequency of occurrence or impulsive or tonal noise; and
 - Atmospheric conditions including wind speed and direction; and
 - Location, date and time of recording.
- E1-4 If monitoring indicates exceedance of the limits in Schedule E – Table 1 and 2, then the environmental authority holder must:
- Address the complaint including the use of appropriate dispute resolution if required; or
 - Immediately implement noise abatement measures so that emission of noise from the activity do not result in further environmental nuisance.
- E1-5 The method of measurement and reporting of noise levels must comply with the latest edition of the Environmental Protection Agency's Noise Measurement Manual.

Schedule E – Table 1 (Noise Limits)

Noise level dB(A) measured as	Monday to Saturday			Sundays and public holidays		
	7am-6pm	6pm-10pm	10pm-7am	9am-6pm	6pm-10pm	10pm-9am
	Noise measured at a 'Noise sensitive place'					
LA ₁₀ , adj, 10 mins	b/g+5	b/g+5	b/g+5	b/g+5	b/g+5	b/g+0
LA ₁ , adj, 10 mins	b/g+10	b/g+10	b/g+5	b/g+10	b/g+10	b/g+5
	Noise measured at a 'Commercial place'					
LA ₁₀ , adj, 10 mins	b/g+10	b/g+10	b/g+5	b/g+10	b/g+10	b/g+5
LA ₁ , adj, 10 mins	b/g+15	b/g+15	b/g+10	b/g+15	b/g+15	b/g+10

Vibration nuisance

- E2-1 Subject to Conditions (E2-2) and (E2-3) must not cause an environmental nuisance at any sensitive or commercial place.
- E2-2 When requested by the administering authority, vibration monitoring must be undertaken within a reasonable and practicable timeframe nominated by the administering authority to investigate any complaint (which is neither frivolous nor vexatious nor based on mistaken belief in the opinion of the authorised officer) of environmental nuisance at any sensitive or commercial place, and the results must be notified within 14 days to the administering authority following completion of monitoring.
- E2-3 If the environmental authority holder can provide evidence through monitoring that the limits defined in Schedule E – Table 3 are not being exceeded then the holder is not in breach of (E2-1). Monitoring must include:
- Location of the blast(s) within the mining area (including which bench level); and
 - Atmospheric conditions including temperature, relative humidity and wind speed and direction; and
 - Location, date and time of recording.
- E2-4 If monitoring indicates exceedance of the relevant limits in Schedule E – Table 3, then the environmental authority holder must:
- Address the complaint including the use of appropriate dispute resolution if required; or
 - Immediately implement vibration abatement measures so that vibration from the activity does not result in further environmental nuisance.

Schedule E – Table 3 (Vibration Limits)

Location	Vibration Measured	
	Monday to Friday 9am – 3pm	Saturday, Sundays and public holidays
Sensitive or commercial place	5mm/s peak particle velocity for nine (9) out of ten (10) consecutive blasts and not greater than 10mm/s peak particle velocity at any time	No blasting to occur

Note: The method of measurement and reporting of vibration levels must comply with the latest edition of the Department of Environment and Resource Management vibration and air blast overpressure monitoring guideline.

END OF CONDITIONS FOR SCHEDULE 3E

Schedule 3F – Waste Management

Waste Handling

- F1-1 All regulated waste removed from the site must be removed by a person who holds a current environmental authority to transport such as waste under the provisions of the *Environmental Protection Act 1994*.

END OF CONDITIONS FOR SCHEDULE 3F

Schedule 3G – Community

Complaint response

- G1-1 All complaints received must be recorded including details of complainant, reasons for the complaining, investigations undertaken, conclusions formed and actions taken. This information must be made available for inspection by the administering authority on request.

END OF CONDITIONS FOR SCHEDULE 3G

END OF PART 3

Definitions

"acceptance criteria" means the measures by which the actions implemented to rehabilitate the land are deemed to be complete. The acceptance criteria indicate the success of the rehabilitation outcome or remediation of areas which have been significantly disturbed by the mining activities. Acceptance criteria may include information regarding:

- vegetation establishment, survival and succession;
- vegetation productivity, sustained growth and structure development;
- fauna colonisation and habitat development;
- ecosystem processes such as soil development and nutrient cycling, and the recolonisation of specific fauna groups such as collembola, mites and termites which are involved in these processes;
- microbiological studies including recolonisation by mycorrhizal fungi, microbial biomass and respiration;
- effects of various establishment treatments such as deep ripping, topsoil handling, seeding and fertiliser application on vegetation growth and development;
- resilience of vegetation to disease, insect attack, drought and fire;
- vegetation water use and effects on ground water levels and catchment yields.

'airblast overpressure' means energy transmitted from the blast site within the atmosphere in the form of pressure waves. The maximum excess pressure in this wave, above ambient pressure is the peak airblast overpressure measured in decibels linear (dB).

'ambient (or total) noise' at a place, means the level of noise at the place from all sources (near and far), measured as the Leq for an appropriate time interval.

'competent person' means a person with the demonstrated skill and knowledge required to carry out the task to a standard necessary for the reliance upon collected data or protection of the environment.

'authority' means an environmental authority (mining activities) under the *Environmental Protection Act 1994*.

'blasting' means the use of explosive materials to fracture:

- a) rock, coal and other minerals for later recovery, or
- b) structural components or other items to facilitate removal from a site or for reuse.

'commercial place' means a work place used as an office or for business or commercial purposes, which is not part of the mining activity and does not include employees' accommodation or public roads.

'dam' means a containment or proposed containment whether permanent or temporary, which is designed to contain, divert or control flowable substances. However this does not include a fabricated or manufactured tank or container designed to a recognised standard.

'dust sensitive place' means-

- a dwelling, mobile home or caravan park, residential marina or other residential place;

- a motel, hotel or hostel;
- a kindergarten, school, university or other educational institution;
- a medical centre or hospital;
- a protected area;
- a public park or gardens;
- a place used as an office for business or commercial purposes and includes the curtilage of any such place.

‘environmental authority holder’ means the holder of this environmental authority.

‘hazardous waste’ means any substance, whether liquid, solid or gaseous, derived by or resulting from, the processing of minerals that tends to destroy life or impair or endanger health.

‘infrastructure’ means water storage dams, roads and tracks, buildings and other structures built for the purpose of the mining activities but does not include facilities required for the long term management of mining impacts or the impacts or the protection of potential resources. Such facilities include dams containing hazardous waste, waste rock dumps, voids, or ore stockpiles and building or other structures whose ownership can be transferred and which have a residual beneficial use for the next owner of the operational land or the background land owner.

“ L_{A10} , adj, 10 mins” 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.

“ L_{A1} , adj, 10 mins” 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 schedule’ of this document means land excluding waters and the atmosphere.

‘land capability’ as defined in the DME 1995 Technical Guidelines for the Environmental Management of Exploration and Mining in Queensland.

‘land suitability’ as defined in the DME 1995 Technical Guidelines for the Environmental Management of Exploration and Mining in Queensland.

‘land use’ term to describe the selected post mining use of the land, which is planned to occur after the cessation of mining operations.

‘mandatory reporting level’ means the volume below the spillway crest, equivalent to the lower of the AEP, 72 hour storm or the AEP wave allowance (AEP is the annual exceedance probability).

‘mineral’ means a substance which normally occurs naturally as a part of the earth’s crust or is dissolved or suspended in water within or upon the earth’s crust and includes a substance which may be extracted from such a substance, and includes-

- a) clay if mined for its ceramic properties, kaolin and bentonite;
- b) foundry sand;
- c) hydrocarbons and other substance or matter occurring in association with shale or coal and necessarily mined, extracted, produced or released by or in connection with mining for shale or coal or for the purpose of enhancing the safety or current or future mining operations for coal or the extraction or proxuction of mineral oil therefrom;
- d) limestone if mined for use for its chemical properties;
- e) marble;
- f) mineral oil or gas extracted or produced from shale or coal by in situ processes;
- g) peat;
- h) salt including brine;
- i) shale from which mineral oil may be extracted or produced;
- j) silica, including silica sand, if mined for use for its chemical properties;
- k) rock mined in rock or slab form for building or monumental purposes;
but does not include –
- l) living matter;
- m) petroleum within the meaning of the Petroleum Act 1923;
- n) soil, sand, gravel or rock (other than rock mined in block or slab form for building or monumental purposes) to be used or to be supplied for use as such, whether intact or in broken form;
- o) water.

‘noxious’ means harmful or injurious to health or physical well being, other than trivial harm.

‘non-standard’ means a mining operation that if in the opinion of the administering authority does not have a low risk of serious environmental harm and the activities can not comply with the criteria for standard mining activities prescribed in schedule 1A of the *Environmental Protection Regulation 1998*. The standard mining activity trigger criteria are as follows;

- the mining activities do not or will not cause more than 10ha of land to be significantly disturbed at any one time;
- the mining activities do not or will not cause more than 5ha of land to be significantly disturbed at any one time;

- a) in a riverine area;
- b) because of mine workings;
- the mining activities are not or will not be carried out in, or within 2km of a category A *Environmentally Sensitive Area*;
- the mining activities are not or will not be carried out in, or within 1km of a category B *Environmentally Sensitive Area*;
- the mining activities do not include a level 1 environmentally relevant activity
- no more than 20 persons are carrying out or will, at any one time, carry out the mining activities;

‘offensive’ means causing reasonable offence or displeasure; is disagreeable to the sense; disgusting, nauseous or repulsive, other than trivial harm.

‘peak particle velocity (ppv)’ means a measure of ground vibration magnitude which is the maximum rate of change of ground displacement with time, usually measured in millimetres/second (mms⁻¹).

‘protected area’ means – a protected area under the *Nature Conservation Act 1992*, or

- a) a marine park under the *Marine Parks Act 1992*, or
- b) a World Heritage Area.

‘progressive rehabilitation’ means rehabilitation (defined below) undertaken progressively or a staged approach to rehabilitation as mining activities are ongoing.

‘reference site’ (or analogue site) may reflect the original location adjacent area or another area where rehabilitation success has been completed for a similar biodiversity. Details of the reference site may be as photographs, computer generated images and vegetation models etc.

‘rehabilitation’ the process of reshaping and revegetating land to restore it to a stable landform and in accordance with the acceptance criteria set out in this environmental authority and, where relevant, includes remediation of contaminated land.

‘representative’ means a sample set which covers the variance in monitoring or other data either due to natural changes or operational phases of the mining activities.

‘residual void’ means an open pit resulting from the removal of ore and/or waste rock which will remain following the cessation of all mining activities and completion of rehabilitation processes.

‘self sustaining’ means an area of land which has been rehabilitated and has maintained the required acceptance criteria without human intervention for a period nominated by the administering authority.

‘sensitive place’ means:

- a) a dwelling, residential allotment, mobile home or caravan park, residential marina or other residential premises, or
- b) a motel, hotel or hostel, or
- c) an educational institution, or
- d) a medical centre or hospital, or
- e) a protected area under the *Nature Conservation Act 1992*, the *Marine Parks Act 1992* or a World Heritage Area, or
- f) a public park or gardens.

‘significant disturbance’ – includes land

- a) if it is contaminated land; or
- b) it has been disturbed and human intervention is needed to rehabilitate it
 - i. to a state required under the relevant environmental authority; or

if the environmental authority holder does not require the land to be rehabilitated to a particular state – to its state immediately before the disturbance.

Some examples of disturbed land include:

- areas where soil has been compacted, removed, covered, exposed or stockpiled;
- areas where revegetation has been removed or destroyed to an extent where the land has been made susceptible to erosion; (vegetation & topsoil)
- areas where the land use suitability or capability has been diminished;
- areas within a watercourse, waterway, wetland or lake where mining activities occur;
- areas submerged by tailings or hazardous contaminant storage and dam walls in all cases;
- areas under temporary infrastructure. Temporary infrastructure includes any infrastructure (roads, tracks, bridges, culverts, dams, bores, buildings, fixed machinery, hardstand areas, airstrips, helipads etc) which is to be removed after mining activities have ceased; or
- areas where land has been contaminated and a suitability statement has not been issued.

However the following areas are not included:

- areas off lease (e.g. roads or tracks which provide access to the mining lease);
- areas previously significantly disturbed which have achieved the rehabilitation outcomes;

- by agreement with the EPA, areas previously significantly disturbed which have not achieved the rehabilitation objective(s) due to circumstances beyond the control of the mine operator (such as climatic conditions);
- areas under permanent infrastructure. Permanent infrastructure includes any infrastructure (roads, tracks, bridges, culverts, dams, bores, buildings, fixed machinery, hardstand areas, airstrips, helipads etc) which is to be left with agreement with the landowner. The agreement to leave permanent infrastructure must be recorded in the Landowner Agreement and lodged with the EPA.
- Disturbances that pre-existed the grant of tenure unless those areas are disturbed during the term of tenure.

'waters' includes a river, stream, lake, lagoon, pond, swamp, wetland, unconfined surface water, bed and bank of any waters, dams, non-tidal or tidal waters (including the sea) and any part thereof.

END OF DEFINITIONS

END OF ENVIRONMENTAL AUTHORITY