Permit

Environmental Protection Act 1994

Environmental authority EPPR00443213

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

Environmental authority number: EPPR00443213

Environmental authority takes effect on the day the authority is issued.

The anniversary date of this environmental authority is **28 March** each year. Payment of the annual fee will be due each year on the anniversary day.

Environmental authority holder

Name	Registered address
Lemura Sand Company Pty Ltd as trustee for Lemura / Bugeja Discretionary Trust	Level 1, 15 Lake Street, CAIRNS QLD 4870

Environmentally relevant activity and location details

Environmentally relevant activities	Locations
ERA 60 – Waste disposal, 2 operating a facility for disposing of, in a year, the following quantity of waste mentioned in subsection (1)(b)— (e) more than 20,000t but not more than 50,000t	Barron River Sand Plant Site: Lot 1/SP173007 Lot 2/SP173007
ERA 62 – Resource recovery and transfer facility operation, 1 operating a facility for receiving and sorting, dismantling, baling or temporarily storing— (a) scrap metal, non-putrescible waste or green waste only ERA 54 – Mechanical waste reprocessing, 2 operating a facility for receiving and mechanically reprocessing, in a year, the following quantity of general waste— (c) more than 10,000t ERA 54 – Mechanical waste reprocessing, 3 operating a facility for receiving and mechanically reprocessing, in a year, the following quantity of category 2 regulated	Lot 1/SP173007 Lot 2/SP173007

ABN 46 640 294 485

Queensland Government

Environmentally relevant activities	Locations
waste — (b) more than 5,000t but not more than 10,000t	
ERA 16 - Extraction and Screening - 3(b) - Screening, in a year, the following quantity of material - more than 100,000t but not more than 1,000,000t ERA 16 - Extraction and Screening - 2(b) - Extracting, other than by dredging, in a year, the following quantity of material - more than 100,000t but not more than 1,000,000t	Lot 1/SP173007 Lot 2/SP173007 Lot 2/SP284222 Lot 4/SP284222
ERA 54 – Mechanical waste reprocessing, 2 operating a facility for receiving and mechanically reprocessing, in a year, the following quantity of general waste— (c) more than 10,000t	Mobile and temporary within the State of Queensland
ERA 57 Regulated waste transport 1: Transporting end-of-life tyres	

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.

The anniversary day of this environmental authority is the same day each year as the original take effect date unless you apply to change the anniversary day. The payment of the annual fee will be due each year on this day.

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.

	28 July 2022
Signature	Date

Scott Blanchard
Department of Environment and Science
Delegate of the administering authority
Environmental Protection Act 1994

Enquiries:
Waste Assessment
Department of Environment and Science
Phone: 1300 130 372
Email: palm@des.qld.gov.au

Privacy statement

Pursuant to section 540 of the EP Act, the Department is required to maintain a register of certain documents and information authorised under the EP Act. A copy of this document will be kept on the public register. The register is available for inspection by members of the public who are able take extracts, or copies of the documents from the register. Documents that are required to be kept on the register are published in their entirety, unless alteration is required by the EP Act. There is no general discretion allowing the Department to withhold documents or information required to be kept on the public register. For more information on the Department's public register, search 'public register' at www.qld.gov.au. For queries about privacy matters please email privacy@des.qld.gov.au or telephone 13 74 68.

Obligations under the *Environmental Protection Act 1994*

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

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

Other permits required

This permit only provides an approval under the *Environmental Protection Act 1994*. In order to lawfully operate you may also require permits / approvals from your local government authority, other business units within the department and other State Government agencies prior to commencing any activity at the site. For example, this may include permits / approvals with your local Council (for planning approval), the Department of Transport and Main Roads (to access state controlled roads), the Department of Resources (to clear vegetation), and the Department of Agriculture and Fisheries (to clear marine plants or to obtain a quarry material allocation).

Conditions of environmental authority

Part 1: Mobile and temporary within the State of Queensland

- ERA 57 Regulated waste transport 1: Transporting end-of-life tyres

Part 2: Barron River Sand Plant Site - Lot 1/SP173007 and Lot 2/SP173007

- ERA 60 – Waste disposal, 2 operating a facility for disposing of, in a year, the following quantity of waste mentioned in subsection (1)(b)— (e) more than 20,000t but not more than 50,000t
- ERA 62 – Resource recovery and transfer facility operation, 1 operating a facility for receiving and sorting, dismantling, baling or temporarily storing— (a) scrap metal, non-putrescible waste or green waste only

Part 3: Lot 1/SP173007and Lot 2/SP173007

- ERA 54 – Mechanical waste reprocessing, 2 operating a facility for receiving and mechanically reprocessing, in a year, the following quantity of general waste— (c) more than 10,000t
- ERA 54 – Mechanical waste reprocessing, 3 operating a facility for receiving and mechanically reprocessing, in a year, the following quantity of category 2 regulated waste — (b) more than 5,000t but not more than 10,000t

Part 4: – Mobile and temporary within the State of Queensland

- ERA 54 – Mechanical waste reprocessing, 2 operating a facility for receiving and mechanically reprocessing, in a year, the following quantity of general waste— (c) more than 10,000t

Part 5: Lot 1/SP173007

- ERA 16 - Extraction and Screening - 2(b) - Extracting, other than by dredging, in a year, the following quantity of material - more than 100,000t but not more than 1,000,000t
- ERA 16 - Extraction and Screening - 3(b) - Screening, in a year, the following quantity of material - more than 100,000t but not more than 1,000,000t

Part 6: Lot 2/SP173007

- ERA 16 - Extraction and Screening - 2(b) - Extracting, other than by dredging, in a year, the following quantity of material - more than 100,000t but not more than 1,000,000t
- ERA 16 - Extraction and Screening - 3(b) - Screening, in a year, the following quantity of material - more than 100,000t but not more than 1,000,000t

Part 7: Lot 2/SP284222 and Lot 4/SP284222

- ERA 16 - Extraction and Screening - 2(b) - Extracting, other than by dredging, in a year, the following quantity of material - more than 100,000t but not more than 1,000,000t
- ERA 16 - Extraction and Screening - 3(b) - Screening, in a year, the following quantity of material - more than 100,000t but not more than 1,000,000t

Part 8: Lot 2/SP284222 and Lot 4/SP284222

- ERA 16 - Extraction and Screening - 2(b) - Extracting, other than by dredging, in a year, the following quantity of material - more than 100,000t but not more than 1,000,000t
- ERA 16 - Extraction and Screening - 3(b) - Screening, in a year, the following quantity of material - more than 100,000t but not more than 1,000,000t

Part 1 Standard Conditions of environmental authority

Location: Mobile and temporary through the State of Queensland

Relevant activity:

ERA 57 Regulated waste transport 1: Transporting end-of-life tyres

Standard conditions

This environmental authority contains standard conditions. Standard conditions are identified by (S) after the condition number.

Eligibility criteria

Eligibility criteria
Regulated waste is transported by **vehicles**

Conditions of environmental authority

Condition number	Condition
Agency Interest: General	
G1 (S)	All reasonable steps must be taken to ensure the **activity** complies with the eligibility criteria.
G2 (S)	The **activity** must be undertaken by **vehicles** whose registration details must be provided to the administering authority before commencing the activity. The administering authority must be notified within 10 business days of any change to the **vehicle** registration details.
G3 (S)	The activity is undertaken by **vehicles** which are covered by a policy of insurance or other form of indemnity, for a sum that is not less than $100,000, in respect of: a) personal injury, death, property damage and other damage (except consequential economic loss) arising out of fire, explosion, leakage or spillage of dangerous goods in, on or from the **vehicle** or a container on the **vehicle**; and b) costs incurred by or on behalf of a Commonwealth, State or Territory government authority in a clean-up resulting from any event of the kind referred to in subparagraph a) of this condition.
G4 (S)	Any breach of a condition of this environmental authority must be reported to the **administering authority** as soon as practicable within 24 hours of becoming aware of the breach. **Records** must be kept including full details of the breach and any subsequent actions taken.

Condition number	Condition
G5 (S)	The **activity** must be undertaken in accordance with written procedures that: a) identify potential risks to the environment from the activity during routine operations and emergencies; and b) establish and maintain control **measures** that minimise the potential for environmental harm; and c) ensure plant , equipment and **measures** are maintained in a proper and effective condition; and d) ensure plant , equipment and **measures** are operated in a proper and effective manner; and e) ensure that staff are trained and aware of their obligations under the *Environmental Protection Act 1994* ; and f) ensure that reviews of environmental performance are undertaken and recorded at least annually.
G6 (S)	The activity must not cause **environmental nuisance** at a **sensitive place**.
G7 (S)	All **records** required by conditions of this authority must be kept for at least five years and provided to the **administering authority** within 10 business days upon its request.
G8 (S)	When required by the **administering authority**, monitoring must be undertaken in the manner prescribed by the **administering authority** to investigate a complaint of **environmental nuisance** arising from the **activity**. The monitoring results must be provided within 10 business days to the **administering authority** upon its request.
G9 (S)	All **vehicles**, including tanks, containers and secondary containers used to transport **regulated waste** must be: a) maintained at all times to prevent any spillage or leakage of regulated waste or other contaminants; and b) kept free of regulated waste residues at all times when not in use; and c) must be effectively cleaned.

Condition number	Condition
G10 (S)	At all times, a copy of: a) this environmental authority issued by the **administering authority** for **regulated waste** transport activities; and b) the appropriate emergency guides in relation to the waste transported must be carried in the cabin of each **vehicle** used to transport **regulated waste** and when requested, be presented to an authorised officer of the **administering authority** or relevant **regulatory agency** of the State or Territory in which the **vehicle** is travelling. *Note: Standards Australia publish numerous guides including HB 76-2004 Dangerous Goods – Initial emergency response guide, and emergency procedure guides (AS1678 Series) which are available from SAI Global Business Publishing. Further, when developing emergency guides in relation to PCB's, reference should be made to the United States Environmental Protection Agency 40CFP Part 761: Polychlorinated biphenyls: notification and manifesting for PCB waste activities: clause number 761.125*
G11 (S)	When transporting **regulated waste**: a) any **regulated waste** not contained within weatherproof packages must be covered during transport to contain the load and protect it from wind and rain; and b) all regulated waste containers must be mounted securely to the vehicle and contained within the tray of the vehicle.
G12 (S)	When transporting **packaged regulated waste**, the top of any container must not protrude above the sides or gates of the vehicle by more than 30% of the height of the container.
G13 (S)	**Road tank vehicles** must: a) be constructed to minimise instability and risk of rollover; and b) be provided with roll-over protection to protect all tanks, components and fittings on the upper and side surfaces of the tank in the event of the vehicle rolling over or becoming inverted; and c) be provided with an effective bumper and/or barrier system to protect the tank and fittings from rear impact.
Agency Interest: Waste	
W1 (S)	Waste transported under the **activity** must be contained within a suitably designed waste containment structure that is constructed, operated and maintained in accordance with accepted engineering standards currently appropriate for the purpose for which the structure is intended to be used.
W2 (S)	**Regulated waste** must not be removed or released from the **vehicle** other than: a) for the purpose of consolidating grease trap and/or other oily wastes; or b) at a facility that can lawfully accept the waste.

Condition number	Condition
W3 (S)	**Incompatible wastes** must not be placed in the same container or transported in such a way that mixing may occur.
W4 (S)	A record of all **regulated waste** (excluding trackable waste) must be kept detailing the following information for every load of waste transported: a) date of pickup of waste, including where loads are consolidated; b) description of waste; c) quantity of waste; d) origin of the waste; and e) destination of the waste. *Note: Additional waste tracking requirements apply to the transportation of trackable waste in accordance with the Environmental Protection Regulation 2019.*
W5 (S)	**Vehicles** and load compartments must be locked when unattended.

Part 1 Definitions

Key terms and/or phrases bolded 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.

Term	Definition
Activity	means the environmentally relevant activity to which this environmental authority relates. An activity may be undertaken on the whole or a part of a site.
ADG Code	means the *Australian code for the transport of dangerous goods by road and rail, 7th edition*, or more recent versions as they become available.
Administering authority	means the Department of Environment and Science or its successor.
Combination vehicle	means a road vehicle that includes one or more trailers.
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.
Contaminant(s)	as defined in Section 11 of the *Environmental Protection Act 1994.*
Environmental harm	as defined in Section 14 of the *Environmental Protection Act 1994.*
Environmental nuisance	as defined in Section 15 of the *Environmental Protection Act 1994.*
Incompatible waste	means waste that may chemically react when: a) placed in proximity to other wastes; and/or b) mixed with other wastes.
Land	means land excluding waters and the atmosphere.
Measures	has the broadest interpretation and includes plant, equipment, physical objects, monitoring, procedures, actions, directions and competencies.
Minimise	means minimise by taking all reasonable and practical measures to minimise the adverse effect having regard to the following matters: a) the nature of the harm or potential harm b) the sensitivity of the receiving environment c) the current state of technical knowledge for the activity d) the likelihood of successful application of different measures that might be taken to minimise the adverse effects e) the financial implications of the different measures as they would relate to the type of activity f) if the adverse effect is caused by the location of the activity being carried out, whether it is feasible to carry out the activity at another location.
Sealed	means fully contained within. Where polythene sheeting has been used, adhesive tape should be applied to the entire length of every overlap.

Term	Definition
Sensitive place	includes the following and includes a place within the curtilage of such a place reasonably used by persons at that place: 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) a kindergarten, school, university or other educational institution; or d) a medical centre or hospital; or e) a protected area under the *Nature Conservation Act 1992*, the *Marine Parks Act 2004* or a World Heritage Area; or f) a public park or garden; or g) for noise, a place defined as a sensitive receptor for the purposes of the Environmental Protection (Noise) Policy 2019.
Packaged regulated waste	means **regulated waste** in a container with: a) a capacity of not more than 450 litres; and b) a nett mass of not more than 400 kilograms.
Records	includes breach notifications, written procedures, analysis results, monitoring reports and monitoring programs required under a condition of this environmental authority.
Regulated waste	As defined in Section 42 of the *Environmental Protection Regulation 2019.*
Regulatory agency	means the agency of a State or Territory that has responsibility for regulating the transport of regulated wastes in that State or Territory.
Related waste	means waste that constitutes, or is contaminated with, chemicals, cytotoxic drugs, human body parts, pharmaceutical products or radioactive substances.
Risk phrase	means a phrase stated in the National Occupational Health and Safety Commission's document entitled *National Code of Practice for the Labelling of Workplace Substances [NOHSC:2012(1994)]*, or more recent versions, that gives information about the substance's hazards.
Road tank vehicle	means a truck, trailer or semi-trailer or unit in a road train, incorporating a tank, or having a tank or tanks mounted thereon, either permanently or temporarily (as defined in AS 2809.1–2008 — road tank vehicles for dangerous goods).
Safety phrase	means a phrase stated in National Occupational Health and Safety Commission's document entitled *National Code of Practice for the Labelling of Workplace Substances [NOHSC:2012(1994)]*, or more recent versions, that gives information about: a) the safe use of the substance; or b) the personal protective equipment for the substance.
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.

Term	Definition
Vehicle	Means a road vehicle including an articulated or combination vehicle, and does not include a train, boat or aircraft.
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.

Part 2 Site Specific Conditions of environmental authority - Barron River Sand Plant Site

Location: Lot 1/SP173007

Lot 2/SP173007

Relevant activities:

ERA 60 – Waste disposal, 2 operating a facility for disposing of, in a year, the following quantity of waste mentioned in subsection (1)(b)— (e) more than 20,000t but not more than 50,000t

ERA 62 – Resource recovery and transfer facility operation, 1 operating a facility for receiving and sorting, dismantling, baling or temporarily storing— (a) scrap metal, non-putrescible waste or green waste only

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

Agency Interest:	
Condition Number	**Condition**
2 - G1	All reasonable and practicable **measures** must be taken to minimise the likelihood of environmental harm being caused.
2 - G2	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.
2 - G3	All information and **records** that are required by the conditions of this environmental authority must be kept for a minimum of five (5) years. Environmental monitoring results must be kept until surrender of this environmental authority. All information and records required by the conditions of this environmental authority must be provided to the **administering authority**, upon request.
2 - G4	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.
2 - G5	When required by the **administering authority**, monitoring must be undertaken in the manner prescribed by the **administering authority**, to investigate a complaint of **environmental nuisance** arising from the **activity**. The monitoring results must be provided within 10 business days to the **administering authority** upon its request.

2 - G6	The **activity** must be undertaken in accordance with written procedures that: a) identify potential risks to the environment from the **activity** during routine operations, closure and an emergency; b) establish and maintain control **measures** that minimise the potential for environmental harm; c) ensure plant, equipment and **measures** are maintained in a proper and effective condition; d) ensure plant, equipment and **measures** are operated in a proper and effective manner; e) ensure that staff are trained and aware of their obligations under the *Environmental Protection Act 1994;* and f) ensure that reviews of environmental performance are undertaken at least annually.
2 - G7	All reasonable and practicable **measures** must be taken to contain litter within the waste operations area, and retrieve litter released.
2 - G8	**Financial Assurance** The **activity** must not be carried out until **you** have given financial assurance to the **administering authority**.
2 - G9	If the **administering authority** increases the amount of financial assurance **you** must give the additional financial assurance to the **administering authority** within 28 days of receiving written notice of the increase.
2 - G10	The financial assurance security must be maintained until it is demonstrated that the above site has been rehabilitated to the satisfaction of the **administering authority** and that the **administering authority** is satisfied that no claim is likely to be made on the assurance and in excess of any claims made in respect of such financial assurance under the provisions of the *Environmental Protection Act 1994*.
2 - G11	Prior to the commencement of any waste disposal activities at the site bund walls must be constructed at the site in accordance with locations and sizes referred to in drawing “C05037-19-Dated 14-11-2007” or most recent amendment.
2 – G12	Chemicals and fuels in containers of greater than 15 litres must be stored within a **secondary containment system.**
2 – G13	All analyses required under this environmental authority must be carried out by a laboratory that has National Association of Testing Authorities (**NATA**) certification, or an equivalent certification, for such analyses.

Agency Interest: Land	
Condition Number	**Condition**
2 - L1	When the deposition of waste to the **landfill unit** ceases, a final capping system to the **landfill unit** must be designed by an **appropriately qualified person** and installed to minimise: a) infiltration of water into the **landfill unit** and water ponding on the surface; and b) the likelihood of any erosion occurring to either the final capping system or the landfilled materials. A final capping system is not required where the deposition of waste to a **landfill unit** ceases temporarily for the purpose of using an alternative working face.
2 - L2	**Land** that has been disturbed for activities conducted under this environmental authority must be rehabilitated in a manner such that: a) suitable species of vegetation for the location are established and sustained for earthen surfaces; b) potential for erosion is minimized; c) the quality of water, including seepage, released from the site does not cause environmental harm; d) potential for **environmental nuisance** caused by dust is minimized; e) the water quality of any residual water body does not have potential to cause environmental harm; f) the final landform is stable and protects public safety; and g) the contaminant concentrations within the final capping layer are appropriate for the final land use and in accordance with the 'National Environmental Protection (Assessment of Soil Contamination) Measure 1999.'
2 - L3	Following cessation of deposition of waste in the **landfill unit**, post-closure care of the landfill unit must be conducted for a period of 30 years or until the **administering authority** determines, on the basis of correct information, that the landfill unit and surrounding site are stable and that no release of waste materials, leachate, landfill gas or other contaminants that may cause environmental harm is likely.
2 - L4	The program of post-closure care implemented must be effective in preventing and/or minimising the likelihood of environmental harm being caused. The program must include **measures** to: a) maintain the structural integrity and effectiveness of the final capping system; b) maintain and operate the leachate collection system; and c) maintain the **groundwater monitoring system** and monitor quality of **groundwater** at a frequency sufficient to detect any release of contaminants to **groundwater**.
2 - L5	A site management plan pursuant to Chapter 7, Part 8, Division 5 of the *Environmental Protection Act 1994* must be developed and provided to the administering authority at

	least 12 months before the expected final receipt of waste in the **landfill unit**. The site management plan must include, but is not to be limited to, the future land use and actions intended to be taken for compliance with the closure and post-closure care requirements of this approval.
Agency Interest: Air	
Condition Number	**Condition**
2 - 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**.
2 – A2	Dust and particulate matter emissions must not exceed the following concentration at any **sensitive place** or **commercial place**: a) Dust deposition of 120 milligrams per square metre per day, averaged over 1 month, when monitored in accordance with the most recent version of Australian Standard AS/NZS3580.10.1:2016 : Methods for sampling and analysis of ambient air—Determination of particulate matter—Deposited matter – Gravimetric method (or more recent editions). b) A concentration of particulate matter with an aerodynamic diameter of less than 10 micrometres (PM_{10}) suspended in the atmosphere of 50 micrograms per cubic metre over a 24-hour averaging time, when monitored in accordance with the most recent version of either: (i) Australian Standard AS/NZS3580.9.6:2015 : Methods for sampling and analysis of ambient air—Determination of suspended particulate matter—PM_{10} high volume sampler with size-selective inlet – Gravimetric method; or (ii) Australian Standard AS 3580.9.8- 2008 : Methods for sampling and analysis of ambient air - Determination of suspended particulate matter - PM_{10} continuous direct mass method using a tapered element oscillating microbalance (TEOM) analyser.
2 – A3	Stockpiles must be maintained using all reasonable and practicable measures necessary to minimise the release of windblown dust and particulate matter to the atmosphere. Reasonable and practicable measures may include but are not limited to: a) use of waterspraying as required during winds likely to generate such releases; and b) use of dust-suppressant shielding.

Agency Interest: Noise	
Condition Number	**Condition**
2 - 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)	**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'					
$L_{A10, adj, 10 mins}$	B/g + 5	B/g + 3	B/g + 0	B/g + 5	B/g + 3	B/g + 0
$L_{A1, adj, 10 mins}$	B/g + 10	B/g + 8	B/g + 5	B/g + 10	B/g + 8	B/g + 5
$maxL_{pA, 1hr}$	--	--	47	--	--	47
	Noise measured at a 'Commercial place'					
$L_{A10, adj, 10 mins}$	B/g + 10	B/g + 10	B/g + 5	B/g + 10	B/g + 10	B/g + 5
$L_{A1, adj, 10 mins}$	B/g + 15	B/g + 15	B/g + 10	B/g + 15	B/g + 15	B/g + 10

Associated requirements:

1) All monitoring devices must be calibrated and maintained according to the manufacturer's instruction manual.
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.
4) Monitoring must include:
   i. $L_{Aeq, adj, T}$;
   ii. **Background** noise (Background) as $L_{A 90, adj, T}$;
   iii. $\mathbf{MaxL_{pA,T}}$;
   iv. the level and frequency of occurrence of any impulsive or tonal noise;
   v. atmospheric conditions including wind speed and direction;
   vi. effects due to extraneous factors such as traffic noise; and
   vii. location, date and time of recording.
5) All monitoring must be performed by an **appropriately qualified person(s).**

Agency Interest: Water	
Condition Number	**Condition**
2 - WT1	There must be no release of contaminants from the site to any surface waters, the bed or banks of any waters, roadside gutter or stormwater drain.

<table>
<tr><td>2 - WT2</td><td>In addition to 2-WT1, the release to waters must not:
a) have any other properties at a concentration that is capable of causing environmental harm; and
b) produce any slick or other visible evidence of oil or grease, nor contain visible floating oil, grease, scum, litter or other visually objectionable matter.</td></tr>
<tr><td>2 - WT3</td><td>The irrigation of surface waters collected at the green waste sorting and storage pads must be carried out in a manner such that:
a) Vegetation is not damaged;
b) Soil erosion and soil structure damage is avoided;
c) There is no surface ponding of effluent;
d) Percolation of effluent beyond the plant root zone is minimised;
e) The capacity of the land to assimilate nitrogen, phosphorus, salts, organic matter as measured by oxygen demand and water is not exceeded; and
f) The quality of ground water is not adversely affected.</td></tr>
<tr><td>2 - WT4</td><td>Waste disposal pond monitoring
Location – Waters held in the waste disposal pond must be monitored in at least two locations. One location shall be within five (5) metres of the tipping face and the other in a separate location no more than fifty (50) metres from the tipping face in the waste disposal pond. Monitoring at each location shall be done weekly at the ponds surface and monthly at one (1) metre vertical intervals down to the pit floor.</td></tr>
<tr><td>2 - WT5</td><td>You must monitor the parameters at the frequency specified, and comply with the limits defined in Table 2 – Surface Water at the locations specified in 2-WT4.
Table 2 – Surface Water (Waste disposal pond contaminant limits)
<table>
<tr><th>Parameter</th><th>Units</th><th>Limit</th><th>Limit Type</th><th>Frequency</th></tr>
<tr><td>pH</td><td>pH Units</td><td>5.5 – 8.0</td><td>Range</td><td rowspan="3">Weekly at surface, monthly for full depth profiles</td></tr>
<tr><td>Electrical Conductivity</td><td>µS/cm</td><td>No Limit</td><td></td></tr>
<tr><td>Dissolved Oxygen</td><td>mg/L</td><td>2 – 8 at the pond surface</td><td>Range</td></tr>
</table></td></tr>
<tr><td>2 - WT6</td><td>The release of contaminants to groundwater as a result of the activity must:
a) be monitored from the uppermost aquifer at locations hydraulically up-gradient and down-gradient of the landfilled waste; and
b) not cause environmental harm; or
c) not exceed the limits for the quality characteristics prescribed in Table 3 — Groundwater Quality Limits—Detection monitoring, at or beyond the edge of the groundwater attenuation zone.</td></tr>
</table>

Table 3 – Groundwater quality limits—Detection monitoring

Quality Characteristics	Limit	Limit Type
EC	1000µS/cm	Maximum
pH	4 – 9	Range
Ammonia	0.9mg/L	Maximum
Sulphate	1000mg/L	Maximum
Chloride	37mg/L	Maximum
Total N	5mg/L	Maximum
Total P	0.14mg/L	Maximum
Aluminum	0.055mg/L	Maximum
Copper	0.2 mg/L	Maximum
Iron	6.6mg/L	Maximum
Lead	0.1 mg/L	Maximum
Zinc	2mg/L	Maximum
Cadmium	0.005mg/L	Maximum

2 - WT7

Groundwater quality and levels must be monitored at the locations and frequencies defined in *Table 4: Groundwater monitoring locations and frequencies* for quality characteristics identified in *Table 3: Groundwater quality limits – detection monitoring.*

Table 4 : Groundwater monitoring locations and frequencies

Monitoring point	Aquifer type	Location (decimal degree, GDA94)		Monitoring frequency
		Latitude	Longitude	
GW1	Alluvium	-16.86942°	145.69057°	Quarterly
GW2	Alluvium	-16.87192°	145.69206°	Quarterly
GW3	Alluvium	-16.87203°	145.68691°	Quarterly
BH20A	Alluvium	-16.87135°	145.69512°	Quarterly
BH30A	Alluvium	-16.87174°	145.69319°	Quarterly

2 - WT8

Stormwater Management

Waste disposal pits including the waste inspection areas, waste storage areas and temporary storage areas must be bunded and the bund must be maintained at all times to provide flood immunity from a 1 in 50 year flood event.

2 - WT9

Location of bund walls must be in accordance with the submitted site plan of the **licensed place**.

2 - WT10

All batteries, liquid chemicals, fuels, and other liquid substances with potential to cause environmental harm must be stored within a **secondary containment system** that is

	impervious to the materials stored within it, and must be managed to prevent the release of contaminants to **waters** or **land**.
2 - WT11	**Stormwater Management for Green Waste Stockpile** A stormwater collection system must be installed and maintained to prevent the release of wastes or contaminants from the green waste stockpile area to any **waters** or stormwater drainage system.
2 - WT12	Soils or other materials used in the construction of the base of any green waste stockpile area and any associated above ground perimeter embankment surrounding the green waste stockpile must achieve a maximum in situ hydraulic conductivity of no greater than 1 X 10^{-8} metres per second so as to effectively prevent or minimise the release of **leachate** through the base and embankments.
2 - WT13	The captured stormwater runoff contained in the stormwater collection system must be pumped for reuse or disposal without delay after the collection system has been filled so that the capacity of the collection system is again made available in readiness for the next rainfall event.
2 - WT14	Contaminated stormwater generated on the **licensed place** and captured in the stormwater collection system must be disposed of: a) in a dedicated evaporation pond located on a capped areas of the licensed place; or b) by recirculation back into the areas of the licensed place where green waste stockpiling is taking place; or c) by irrigation in accordance with condition numbers (2-WT12) and (2-WT13) of this environmental authority; or' d) to sewer in accordance with Council's Trade Waste Policy.
2 - WT15	The release to land of **leachate** and contaminated stormwater from stormwater collection system must not be carried out within ten (10) metres of any watercourse.
2 - WT16	**Leachate** and contaminated stormwater from the stormwater collection system must not be irrigated on land if soil moisture conditions are such that surface runoff or ponding is likely to occur.
Agency Interest: Waste (ERA 60 Waste Disposal activity)	
Condition Number	**Condition**
2 - WS1	Only the following waste streams can be disposed of at the site: a) construction and demolition waste; b) solid inert waste – limited to; i. bricks, pavers, ceramics, ii. minor amounts of paper covered plasterboard commingled with other accepted wastes,

	iii. concrete (including embedded steel reinforcing rods), iv. clean earthen fill – only earthen fill that has trace elements and contaminant levels within the Interim Urban Ecological Investigation Levels (EILS) described in guideline B1, Table 5-A of the National Environmental Protection Measure, Assessment of Site Contamination will be acceptable as clean Earthen fill. c) Potential Acid Sulfate Soils (PASS) and Acid Sulfate Soil (ASS).
2 - WS2	In addition to condition 2-WS1 the following waste streams must not be permitted to be placed at the landfill facility at any time: a) liquid or semiliquid waste, other than: i. liquid or semi-liquid waste which has been produced in the carrying out of the activity; ii. liquid or semi-liquid waste that is incidental to, and commingled with, the permitted waste streams. b) hot ash; c) material that is smouldering or aflame; d) material containing a substance which is ignitable, corrosive, reactive or toxic material (other than materials containing a toxic substance from domestic premises) unless this material is to be deposited into a dedicated monocell with a written approval of the administering authority; e) all radioactive wastes, unless otherwise approved under the *Radiation Safety Act 1999* or approved contaminated soil; f) an explosive; g) ammunition, other than ammunition that no longer contains explosives, pyrotechnics or propellants apart from trace residues that are no longer capable of supporting combustion or an explosive reaction.
2 - WS3	Deposited waste must be covered as soon as practicable to limit stormwater infiltration, prevent exposure of waste and prevent issues arising from vectors and pest species.
2 - WS4	In times where a flood warning or cyclone warning has been issued for the area: All accepted waste must be immediately deposited in the waste disposal pit, compacted and covered with a layer of earthen material at least 0.5m thick. Cover material must consist of soils that have been assessed as having low erodibility and be able to withstand water velocities of up to 0.7m/s without any significant erosion. All prohibited wastes temporarily stored on site must be removed forthwith from the site to a facility licensed to accept such wastes.
2 - WS5	**Green Waste Disposal Criteria** **Green waste** must not be disposed of at the licensed place unless it forms part of a mixed load of material which cannot be segregated from the mixed load. **Green wastes** must not constitute greater than 5% of the volume of the incoming mixed load.

2 - WS6	**Green waste** must only be disposed of at an elevation of at least 2m above the highest seasonal groundwater table.
2 - WS7	Excepting combustion of landfill gas, waste must not be burnt.
2 - WS8	With the exception of mono loads verified as PASS – each load of waste received must be placed and visually inspected at the sorting area to remove recyclable material and to ensure compliance with the waste acceptance criteria, prior to deposition in the landfill.
2 - WS9	Exposed waste in the disposal pit must be limited to the working face and the area of exposure must be minimised to the greatest extent practicable.
2 – WS10	**Management of PASS** Treatment and management of acid sulfate soils must comply with the latest edition of the Queensland Acid Sulfate Soil Technical Manual, Department of Natural Resources and Mines.
Agency Interest: Waste (ERA 62 Resource Recovery and Transfer Facility Operation activity)	
Condition Number	**Condition**
2 – WS11	**Activities** under this environmental authority must be conducted in accordance with the following limitations: a) All sorting, consolidation and storage of wastes must be undertaken within the designated resource recovery and transfer facility operation area defined in *Appendix 2 – Part 2 & 3 - Site Plan*. b) The only wastes to be accepted at the site for resource recovery and transfer facility operation are the following: i. construction and demolition waste. ii. solid inert waste – limited to; - bricks, pavers, ceramics, - minor amounts of paper covered plasterboard commingled with other accepted wastes, - **solid concrete waste** (including embedded steel reinforcing rods). iii. clean earthen fill – only earthen fill that has trace elements and contaminant levels within the Interim Urban Ecological Investigation Levels (EILS) described in guideline B1, Table 5-A of the National Environmental Protection Measure, Assessment of Site Contamination will be acceptable as clean Earthen fill. iv. **Green waste** stored within Lot 1 on SP173007. v. Mattresses.

2 – WS12	No putrescible waste, organic waste (other than **green waste**) and **regulated waste** is to be accepted on site for resource recovery and transfer facility operation, other than **incidental amounts** comingled with the permitted waste streams prescribed in condition 2-WS11.
2 – WS13	All waste generated in carrying out the **activity** must be lawfully reused, recycled or removed to a facility that can lawfully accept the waste.
2 – WS14	**Incompatible wastes** must not be mixed in the same container or waste storage area.
2 – WS15	**Stockpile Management** The dimensions of any waste and material stockpiles (excluding **solid concrete waste**) must not exceed: a) 10 metres as the maximum width of the base for all stockpiles (excluding **solid concrete waste**); b) 30 metres as the maximum width of the base for **solid concrete waste** stockpiles; and c) 5 metres for the maximum height from the base for all stockpiles.
2 – WS16	**Measures** must be implemented and maintained to manage stockpile fire risk. These **measures** may include but not be limited to an effective fire break between stockpiles and effective minimum distance between stockpiles to prevent fire spreading and effective fire control systems.
2 – WS17	Stockpiling of waste and materials awaiting sorting, consolidation, reprocessing or removal to a facility that can lawfully accept the waste must not exceed twelve months.
2 – WS18	**Recovered regulated waste storage** **Regulated waste** recovered from waste loads at the site must be removed to a facility licensed to receive such wastes as soon as practicable. Temporary storage areas for **regulated waste** must be contained and bunded and; a) Bunding must be constructed of materials that provide an impervious barrier to the materials stored. b) Be roofed where practicable. c) Where it is impracticable to completely roof a bunded area, the operator must ensure that any stormwater captured within the bund is free from contaminants or waste prior to any release. A collection sump must be provided in the floor of the bunding to facilitate the removal of liquids and the bund floor must be graded so that the fall is towards the collection sump. All storage drums must be stored on a concrete hardstand area or similar impervious material with their closures in place.

2 – WS19	Notwithstanding the above, waste oil, fuel and chemicals may be temporarily stored in drums or other containers at the site, provided that the drums or containers are: a) Stored in a roofed area designated for this purpose; b) Bunded to contain spillages and leakages – bunding to comply with provisions of AS1940 – 2004, or more recent versions; and c) Securely sealed when full to prevent spillage if knocked over.
2 – WS20	Bunding of the regulated waste temporary storage areas must be to a height not less than a height equivalent to a one (1) in five (5) year average recurrence interval (ARI) flood level for the Barron River in the vicinity of the **licensed place**.
2 – WS21	All storage, treatment, sorting and reprocessing of wastes, including green waste, must only be carried out within the approved landfilling area and must be carried out in a way that does not cause or have the potential to cause environmental harm.

Part 3 Site Specific Conditions of environmental authority subject to approval of MCU 9681/2019

Location: Lot 1/SP173007

Lot 2/SP173007

Relevant activities:

ERA 54 – Mechanical waste reprocessing, 2 operating a facility for receiving and mechanically reprocessing, in a year, the following quantity of general waste— (c) more than 10,000t

ERA 54 – Mechanical waste reprocessing, 3 operating a facility for receiving and mechanically reprocessing, in a year, the following quantity of category 2 regulated waste — (b) more than 5,000t but not more than 10,000t

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

Agency Interest: Air	
Condition Number	**Condition**
3 - 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**.
3 – A2	Dust and particulate matter emissions must not exceed the following concentration at any **sensitive place** or **commercial place**: a) Dust deposition of 120 milligrams per square metre per day, averaged over 1 month, when monitored in accordance with the most recent version of Australian Standard AS/NZS3580.10.1:2016 : Methods for sampling and analysis of ambient air—Determination of particulate matter—Deposited matter – Gravimetric method (or more recent editions). b) A concentration of particulate matter with an aerodynamic diameter of less than 10 micrometres (PM_{10}) suspended in the atmosphere of 50 micrograms per cubic metre over a 24-hour averaging time, when monitored in accordance with the most recent version of either: (i) Australian Standard AS/NZS3580.9.6:2015 : Methods for sampling and analysis of ambient air—Determination of suspended particulate matter—PM_{10} high volume sampler with size-selective inlet – Gravimetric method; or (ii) Australian Standard AS 3580.9.8- 2008 : Methods for sampling and analysis of ambient air - Determination of suspended particulate matter - PM_{10} continuous direct mass method using a tapered element oscillating microbalance (TEOM) analyser. c) A concentration of particulate matter with an aerodynamic diameter of less than 2.5 micrometre ($PM_{2.5}$) suspended in the atmosphere of 25 micrograms per cubic metre over a 24 hour averaging time, when monitored in accordance with Australian Standard AS 3580.9.10 of 2017 (or more recent editions) or any other method approved by the **administering authority**.

	d) A concentration of respirable crystalline silica (as $PM_{2.5}$) of 3 micrograms per cubic metre annual average period, when monitored in accordance with Australian Standard AS 3580.9.10 (or more recent editions) or any other method approved by the **administering authority**. e) Any alternative methods of monitoring, which may be permitted by the 'Air Quality Sampling Manual' as published from time to time by the **administering authority**, are also acceptable.
3 – A3	Any measured exceedances of PM_{10}, $PM_{2.5}$, crystalline silica (as $PM_{2.5}$) or dust deposition as specified in condition 3-A2 must be investigated to determine the influence of emissions from the site on **sensitive place** or **commercial place**. A report by an **appropriately qualified person(s)** must be prepared and submitted to the **administering authority** every 12 months with an annual return and include: a) Review of monitoring locations; b) Frequency and cause of any exceedances of air quality objectives measured by the monitoring program; c) Dust complaints; d) Future progression of the activities; and e) Locations of sensitive receptors relative to the activities.
3 – A4	Stockpiles must be maintained using all reasonable and practicable **measures** necessary to minimise the release of windblown dust and particulate matter to the atmosphere. Reasonable and practicable **measures** may include but are not limited to: a) use of waterspraying as required during winds likely to generate such releases; and b) use of dust-suppressant shielding.

Agency Interest: Noise	
Condition Number	**Condition**
3 - 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)	**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'					
$L_{A10, adj, 10 mins}$	B/g + 5	B/g + 3	B/g + 0	B/g + 5	B/g + 3	B/g + 0
$L_{A1, adj, 10 mins}$	B/g + 10	B/g + 8	B/g + 5	B/g + 10	B/g + 8	B/g + 5
$maxL_{pA, 1hr}$	--	--	47	--	--	47
	Noise measured at a 'Commercial place'					
$L_{A10, adj, 10 mins}$	B/g + 10	B/g + 10	B/g + 5	B/g + 10	B/g + 10	B/g + 5
$L_{A1, adj, 10 mins}$	B/g + 15	B/g + 15	B/g + 10	B/g + 15	B/g + 15	B/g + 10

Associated requirements:

1. All monitoring devices must be calibrated and maintained according to the manufacturer's instruction manual.
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.
4. Monitoring must include:
   i. $L_{Aeq, adj, T}$;
   ii. **Background** noise (Background) as $L_{A 90, adj, T}$;
   iii. $MaxL_{pA,T}$;
   iv. the level and frequency of occurrence of any impulsive or tonal noise;
   v. atmospheric conditions including wind speed and direction;
   vi. effects due to extraneous factors such as traffic noise; and
   vii. location, date and time of recording.
5. All monitoring must be performed by an **appropriately qualified person(s).**

Agency Interest: Waste	
Condition Number	**Condition**
3 – WS1	**Activities** under this environmental authority must be conducted in accordance with the following limitations: a) All mechanical reprocessing of wastes must be undertaken within the designated mechanical waste reprocessing area defined in *Appendix 2 - Part 2 & 3 - Site Plan*. b) The only wastes to be accepted at the site for mechanical waste reprocessing are the following: i. construction and demolition waste; ii. inert **solid concrete waste**; iii. **Green waste**; iv. **End-of-life tyres**; and v. Mattresses.
3 – WS2	No putrescible waste, organic waste (other than **green waste**) and **regulated waste** (other than **end-of life tyres**) is to be accepted on site for mechanical waste reprocessing, other than **incidental amounts** comingled with the permitted waste streams prescribed in condition 3-WS1.
3 – WS3	All waste generated in carrying out the **activity** must be lawfully reused, recycled or removed to a facility that can lawfully accept the waste.
3 – WS4	**Incompatible wastes** must not be mixed in the same container or waste storage area.
3 – WS5	**Stockpile Management** The dimensions of any waste and material stockpiles (excluding **end-of-life tyres** and **solid concrete waste**) must not exceed: a) 10 metres as the maximum width of the base for all stockpiles (excluding **solid concrete waste**); b) 30 metres as the maximum width of the base for **solid concrete waste** stockpiles; and c) 5 metres for the maximum height from the base for all stockpiles.
3 – WS6	**Tyre storage** Notwithstanding condition 3-WS5, the storage of any end-of-life tyres must be stored in accordance with the following requirements: a) The dimensions of the **end-of-life tyre** stockpiles must not exceed: (i) 5 metres as the maximum width of the base; (ii) 45 metres for the maximum length of the base; and (iii) 3 metres for the maximum height from the base. b) The minimum separation distance between **end-of-life tyre** stockpiles and other waste and material stockpiles must be at least ten metres in any direction.

	c) The minimum distance between the **end-of-life tyre** stockpile and any flammable or combustible material, including grass or weeds, shall be at least 10 metres in any direction.
3 – WS7	**Measures** must be implemented and maintained to manage stockpile fire risk. These **measures** may include but not be limited to an effective fire break between stockpiles and effective minimum distance between stockpiles to prevent fire spreading and effective fire control systems.
3 – WS8	Stockpiling of waste and materials awaiting sorting, consolidation, reprocessing or removal to a facility that can lawfully accept the waste must not exceed twelve months.
3 – WS9	All storage, treatment, sorting and reprocessing of wastes, including green waste, must only be carried out within the approved landfilling area and must be carried out in a way that does not cause or have the potential to cause environmental harm.

Part 4 Site Specific Conditions of environmental authority

Location: Mobile and temporary within the State of Queensland

Relevant activities:

ERA 54 – Mechanical waste reprocessing, 2 operating a facility for receiving and mechanically reprocessing, in a year, the following quantity of general waste— (c) more than 10,000t

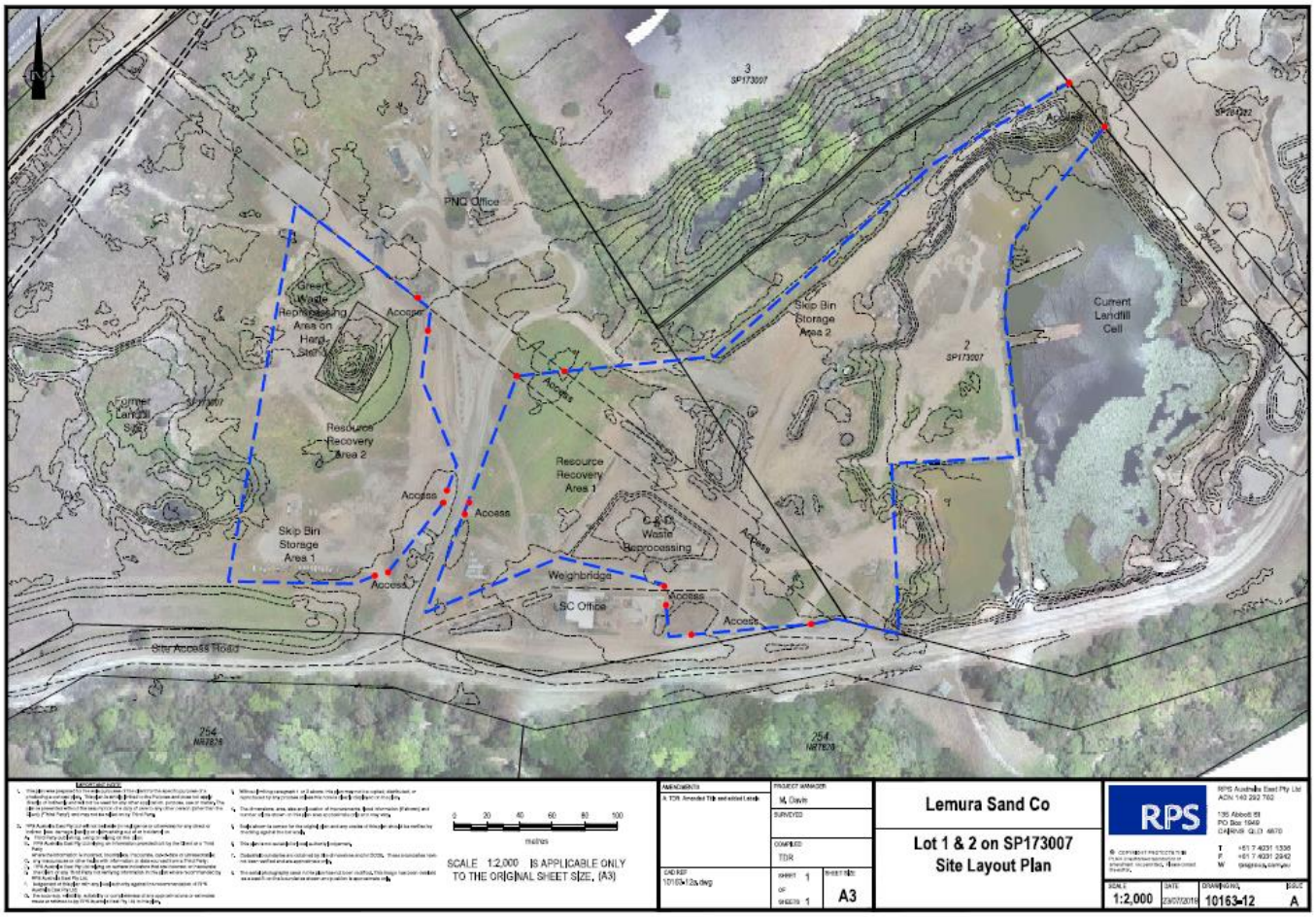
The environmentally relevant activities conducted at the locations as described above must be conducted in accordance with the following site specific conditions of approval.

Agency Interest: General	
Condition Number	**Condition**
4 - G1	Any breach of a condition of this environmental authority must be reported to the **administering authority** as soon as practicable within 24 hours of becoming aware of the breach. **Records** must be kept including full details of the breach and any subsequent actions taken.
4 - G2	**Activities** under this environmental authority must be conducted in accordance with the following limitations: a) The only materials which can be accepted for crushing/milling/grinding/screening are: (i) **Construction and demolition waste**; (ii) Skip bin wastes and mattresses; and (iii) **green waste**. b) **Regulated wastes** must not be accepted for crushing/milling/grinding/screening.
4 - G3	All reasonable and practicable **measures** must be taken to prevent or minimise environmental harm caused by the **activities**.
4 - G4	Written procedures must be developed for the activity that meet the following standards: a) Identify all potential risks to the environment from the activity, including when the activity is not in operation or in an emergency; b) Establish and maintain control **measures** that prevent and/or minimise the potential for environmental harm; c) Detail an inspection and maintenance program that ensure all plant and equipment are maintained in a proper and effective condition; d) Ensure plant and equipment are operated in a proper and effective manner; e) Detail how and when staff training is to be conducted (at least annually) to ensure awareness of obligations under the environmental authority and the *Environmental Protection Act 1994*; and f) Detail how reviews of environmental risks and environmental performance, including complaints, are undertaken at regular intervals (at least annually).
4 - G5	Procedures required by condition 4-G4 must be implemented so the activity is undertaken in accordance with these procedures.
4 - G6	Procedures required by condition 4-G4 must be reviewed at least annually.
4 - G7	All **records** must be kept for a period of at least five years and provided to the **administering authority** upon request.

4 - G8	Chemicals and fuels in containers of greater than 15 litres must be stored within a **secondary containment system.**
4 - G9	When required by the **administering authority**, monitoring must be undertaken in the manner prescribed by the **administering authority** to investigate a complaint of **environmental nuisance** arising from the **activity**. The monitoring results must be provided within 10 business days to the **administering authority** upon its request.
Agency Interest: Air	
Condition Number	**Condition**
4-A1	Odours or airborne contaminants must not cause **environmental nuisance** to any **sensitive place** or **commercial place**.
Agency Interest: Water	
Condition Number	**Condition**
4-WT1	Contaminants must not be released to any **waters** in a manner that causes or is likely to cause environmental harm.
Agency Interest: Noise	
Condition Number	**Condition**
4-N1	Noise generated by the **activity** must not cause **environmental nuisance** to any **sensitive place** or **commercial place.**
Agency Interest: Land	
Condition Number	**Condition**
4-L1	Contaminants must not be released to **land.**
Agency Interest: Waste	
Condition Number	**Condition**
4-W1	All waste generated in carrying out the **activity** must be lawfully reused, recycled or removed to a facility that can lawfully accept the waste.

APPENDICES
Appendix 1 – Site Plan – Barron River Sand Plant

Appendix 2 – Part 2 & 3 Site Plan



Part 2, 3, and 4 Definitions

Key terms and/or phrases used in this document are defined in this section and bolded throughout this document. Applicants should note that 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.

Words and phrases used throughout this permit' are defined below. Where a definition for a term used in this permit' is sought and the term is not defined within this permit' the definitions provided in the relevant legislation shall be used.

Activity means the environmentally relevant activities, whether resource activities or prescribed activities, to which the environmental authority relates.

Administering authority means the Department of Environment and Science or its successor.

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 $L_{A90,T}$ being the A-weighted sound pressure level exceeded for 90 per cent of the time period of not less than 15 minutes, using Fast response.

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.

Construction and demolition waste referred to in Part 4 is defined in the Waste Reduction and Recycling Regulation 2011.

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.

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 park or gardens; or
- a place used as an office or for business or commercial purposes.
- and includes the curtilage of any such place.

End-of-life tyres means a used tyre that is not attached to a vehicle.

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

Erosion prone area means an area declared to be an erosion prone area under section 70(1) of the *Coastal Protection and Management Act 1995*.

General waste means waste other than regulated waste.

Green waste means grass cuttings, trees, bushes, shrubs, loppings of trees, bushes or shrubs, or similar matter.

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

Groundwater monitoring system means a system of groundwater monitoring devices, such as monitoring bores, used to provide data in respect to the level and quality of groundwater in the uppermost aquifer where the location of the groundwater monitoring devices is such that comparisons of groundwater quality and groundwater level can be made between groundwater flowing from beneath the site (down-gradient flow) of the **activity** and groundwater flowing towards the site of the **activity** (up-gradient flow).

High water mark means the ordinary high water mark at spring tides.

Incidental amounts means no more than the following amounts of wastes occasionally found in defined waste loads:

- 6t or 6m^3 of **general waste**;
- 4t or 4m^3 of category 2 **regulated waste**; and
- 1t or 1m^3 of category 1 **regulated waste**.

Infectious waste means waste containing viable micro-organisms or their toxins which are known or suspected to cause disease in animals or humans.

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"$L_{A10,\ adj,\ 10\ mins}$" 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.

$\mathbf{L_{Aeq\ adj,T}}$ 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 land excluding waters and the atmosphere.

Landfill unit means a discrete area of land or an excavation that receives solid waste.

Leachate means a **liquid** that has passed through or emerged from, or is likely to have passed through or emerged from, a material stored, processed or disposed of at the site that contains soluble, suspended or miscible contaminants likely to have been derived from the said material.

Licensed place means the place authorised for the carrying out of the specified environmentally relevant activities.

Liquid means any substance that:

1. has an angle of repose of less than five degrees; or

2. becomes free flowing at or below 60 degrees Celsius or when it is transported; or

3. is not generally capable of being picked up by a spade or shovel.

$MaxL_{pA,T}$ 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 plant, equipment, physical objects, monitoring, procedures, actions, directions and competency.

mg/L means milligrams per litre.

Minor comingled amounts means <5% of comingled waste in a mixed load

Noxious means harmful or injurious to health or physical wellbeing.

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 2004* 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 2004*; or
- a World Heritage Area.

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

Regulated waste defined in the Environmental Protection Regulation 2019.

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 thoroughfare, park or gardens; or

7. for noise, a place defined as a sensitive receptor for the purposes of the Environmental Protection (Noise)

Policy 2019.

Site means land or tidal waters on or in which it is proposed to carry out the environmentally relevant activities under this environmental authority.

Solid concrete waste means inert waste that has not been processed through the a mechanical waste reprocessing plant.

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.

Toxic material means:

1. cytotoxic wastes;

2. drugs and poisons as cited in the Standards for Uniform Scheduling of Drugs and Poisons (Schedules 8 and 9 drugs as per the Poisons (Health and Drugs) Regulation 1996); and

3. any other material that:

    a. has contaminant concentrations in the waste exceeding the allowable levels in Table 5 – Maximum contaminant levels in soils; or

    b. has leaching contaminant levels in the waste when measured in accordance with toxicity characteristic leaching procedure (TCLP), exceeding the concentrations prescribed in Table 6 - Allowable leaching contaminant levels.

Waste operations area means the following areas:

1. waste receiving

2. sorting

3. treating

4. recycling

5. disposal

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 development approval.

You means the holder of this environmental authority.

Table 5 – Maximum contaminant levels in soils

Contaminant	Maximum contaminant level for **clay lined** landfills (mg/kg)	Maximum contaminant level for **double-lined** landfills (mg/kg)
Monocyclic aromatic hydrocarbons (MAH)		
Benzene	10	20
Ethyl Benzene	500	1,000
Toluene	300	600
Xylene	250	500
Total MAH	500	1,000
Polycyclic aromatic hydrocarbons (PAH)		
Total PAH	500	1,000
Phenolic contaminants - Non halogenated compounds		
Phenol	100	250
m-cresol	250	500
o-cresol	250	500
p-cresol	250	500
Total non-halogenated phenol	250	500
Phenolic contaminants - Halogenated phenol		
Chlorophenol	1	5
Pentachlorophenol	5	20
Trichlorophenol	5	20
Total halogenated phenol	5	20
Chlorinated Hydrocarbons - Chlorinated aliphatic compounds		
Carbon tetrachloride	5	10
1,2 Dichloroethane	10	20
1,1 Dichloroethene	1	1
Tetrachloroethene	10	20
Trichloroethene	25	25
Total chlorinated aliphatic compounds	50	50
Chlorinated Hydrocarbons - Chlorinated aromatic compounds		
Chlorobenzene	100	200
Hexachlorobenzene	1	1

Contaminant	Maximum contaminant level for **clay lined** landfills (mg/kg)	Maximum contaminant level for **double-lined** landfills (mg/kg)
Total chlorinated aromatic compounds	100	200
Non scheduled solid polychlorinated biphenyls (PCBs)	2	50
Pesticides (screening)		
Total organochlorine	5	50
Total herbicides	25	50
Total carbamates	25	50
Total organophosphorus	10	50
Petroleum hydrocarbons		
Total petroleum hydrocarbons (C_6-C_9)	500	1,000
Total petroleum hydrocarbons (C_{10}-C_{14})	5,000	10,000
Total petroleum hydrocarbons (C_{15}-C_{28})	10,000	50,000
Total petroleum hydrocarbons (C_{29}-C_{36})	10,000	50,000

Table 6 — Allowable leaching contaminant levels

Contaminant	Allowable leaching contaminant levels (**TCLP***) for **clay lined** landfills (mg/L)	Allowable leaching contaminant levels (**TCLP**) for **double-lined** landfills (mg/L)
Non-specific contaminants		
Biochemical oxygen demand	20,000	20,000
Total organic carbon	10,000	10,000
Petroleum hydrocarbons	25	50
Metals and metalloids		
Antimony	0.5	5
Arsenic	0.5	5
Barium	10	100
Cadmium	0.05	0.5
Chromium	0.5	5
Cobalt	0.5	5
Copper	10	100

Contaminant	Allowable leaching contaminant levels (**TCLP***) for **clay lined** landfills (mg/L)	Allowable leaching contaminant levels (**TCLP**) for **double-lined** landfills (mg/L)
Lead	0.5	5
Mercury	0.01	0.1
Molybdenum	0.1	5
Nickel	0.5	5
Selenium	0.1	1
Silver	0.5	5
Thallium	0.1	1
Tin	0.3	3
Vanadium	0.5	5
Zinc	50	500
Inorganic anions		
Bromide	5	50
Chloride	6,000	6,000
Cyanide (total)	1	5
Fluoride	15	150
Nitrate	100	1,000
Sulphate	2,500	4,000
Monocyclic aromatic hydrocarbons (MAH)		
Benzene	0.1	1
Ethyl benzene	5	50
Toluene	3	30
Xylene	2	20
Total MAH	5	50
Polycyclic aromatic hydrocarbons (PAH)		
Anthracene	0.07	0.7
Benz (a) anthracene	0.005	0.05
Benz (c) phenanthrene	0.005	0.05
Benzo (a) pyrene	0.002	0.02
Benzo (b) fluoranthene	0.005	0.05

Contaminant	Allowable leaching contaminant levels (**TCLP***) for **clay lined** landfills (mg/L)	Allowable leaching contaminant levels (**TCLP**) for **double-lined** landfills (mg/L)
Benzo (k) fluoranthene	0.005	0.05
Chrysene	0.01	0.1
Dibenz (a,h) anthracene	0.002	0.02
Dibenz (a,h) pyrene	0.01	0.1
Dimethylbenz (a) anthracene	0.005	0.05
Fluoranthene	0.02	0.2
Indeno (1,2,3-cd) pyrene	0.01	0.1
Naphthalene	0.07	0.7
Phenanthrene	0.01	0.1
Pyrene	0.07	0.7
Total PAH	0.1	1
Phenolic contaminants – Non-halogenated compounds		
Phenol	1	10
m-cresol	2	20
o-cresol	2	20
p-cresol	2	20
Phenolic contaminants - Halogenated phenols		
Chlorophenol	0.01	0.1
Pentachlorophenol	0.1	1
Trichlorophenol	0.1	1
Chlorinated hydrocarbons - *Chlorinated aliphatic compounds*		
Carbon tetrachloride	0.03	0.3
1,2 Dichloroethane	0.1	1
1,1 Dichloroethene	0.003	0.03
Tetrachloroethene	0.1	1
Trichloroethene	0.3	3
Chlorinated hydrocarbons - *Chlorinated aromatic compounds*		
Chlorobenzene (total)	1	10
Hexachlorobenzene	0.002	0.02

Contaminant	Allowable leaching contaminant levels (**TCLP***) for **clay lined** landfills (mg/L)	Allowable leaching contaminant levels (**TCLP**) for **double-lined** landfills (mg/L)
Pesticides - Organochlorine		
Aldrin	0.001	0.01
Chlordane	0.006	0.06
Chlorpyrifos	0.01	0.03
Dieldrin	0.001	0.01
DDT	0.003	0.03
Endrin	0.001	0.01
Heptachlor	0.003	0.03
Lindane	0.1	1
Methoxychlor	0.1	1
Toxaphene	0.005	0.05
Pesticides - Herbicides		
2,4-D	0.1	1
2,4-DB	0.2	2
2,4,5 -T	0.002	0.02
MCPA	0.2	2
Pesticides - Carbamates		
Carbaryl	0.06	0.6
Carbofuran	0.03	0.3
Pesticides - Organophosphorus		
Diazinon	0.01	0.1
Methyl Parathion	0.006	0.06
Parathion	0.03	0.3
Pesticides - Triazines		
Atrazine	0.01	0.03
Simazine	0.01	0.03
Fluorinated organic compounds		
Total fluorinated organic compounds (if leachate reused on or off-site)	0.0003	0.0003

Contaminant	Allowable leaching contaminant levels (**TCLP***) for **clay lined** landfills (mg/L)	Allowable leaching contaminant levels (**TCLP**) for **double-lined** landfills (mg/L)
Total fluorinated organic compounds (if leachate not reused on or off-site)	0.05	0.05
For any waste or soil contaminated by radioactive material, the gross alpha and gross beta activity concentration in the Toxicity Characteristic Leaching Procedure (**TCLP**) extracts from the material are no more than 100 times the concentrations for the screening of gross alpha and gross beta activity concentrations specified in the National Health and Medical Research Council (NHMRC) Australian Drinking Water Guidelines, 2011.		

*Allowable leaching levels to be determined using the **TCLP** procedure mentioned in United States Environmental Protection Agency (USEPA), Washington DC (2008) "Test methods for evaluating solid waste, physical/chemical methods" Document number SW 846. 3rd Edition or more recent editions or supplement to that procedure as they become available.

Part 5 - Conditions of environmental authority

Location: Lot 1/SP173007

Relevant activities:

ERA 16 - Extraction and Screening - 2(b) - Extracting, other than by dredging, in a year, the following quantity of material - more than 100,000t but not more than 1,000,000t

ERA 16 - Extraction and Screening - 3(b) - Screening, in a year, the following quantity of material - more than 100,000t but not more than 1,000,000t

Agency interest: General	
Condition number	**Condition**
5-A1	Notwithstanding any other requirements of this document, all reasonable and practicable measures must be taken to prevent and / or to minimise the likelihood of environmental harm being caused when carrying out the environmentally relevant activities
5-A2	From commencement of the activity, implement the Site Based Management Plan (SBMP) that identifies the actual and potential release of ALL contaminants, their subsequent environmental impacts and all corrective and preventive measures that will be taken to prevent and / or minimise the likelihood of environmental harm. The SBMP must also provide for the review and continual improvement in the overall environmental performance of all Environmentally Relevant Activities that are carried out.
5-A3	The following items must be submitted with the annual return as part of the SBMP: a) a site development plan showing the succession of extraction activities (including location of active and inactive extraction pits, location of sand stockpiles, stormwater management on site, etc, and b) documentation of progressive rehabilitation of the pits for each one (1) year period until cessation of extraction activities.
Agency interest: Air	
Condition number	**Condition**
5-B1	Prevent the release of odour, dust and/or particulate matter, spray-drift, smoke, aerosols, or fumes which cause or are likely to cause a nuisance. Nuisance includes the release of contaminants that are likely to be offensive to a person or a nuisance in the opinion of an authorised person.
5-B2	Dust is not considered to be a nuisance under condition number 5-B1 if monitoring shows that dust and/or particulate matter does NOT exceed the following limits at the boundary of any affected dust sensitive place: a) dust deposition of 120 milligrams per square metre per day, when monitored in accordance with Australian Standard AS 3580.10 of 1991 ; and

	b) a concentration of particulate matter with an aerodynamic diameter of less than 10 micrometre (µm) (PM_{10}) suspended in the atmosphere of 150 micrograms per cubic metre over a 24 hour averaging time, at the boundary of any affected dust sensitive place downwind of the licensed place, when monitored in accordance with: i. Australian Standard AS 3580.9.6 Ambient air- Particulate matter Determination of suspended particulate PM_{10} high-volume sampler with size-selective inlet - Gravimetric method; or ii. any alternative method of monitoring PM_{10} which may be permitted by the Air Quality Sampling Manual as published from time to time by the administering authority.
Agency interest: Water	
Condition number	**Condition**
5-C1	Prevent erosion that may result in the release of sediment to waters.
5-C2	Prevent the release of stormwater run-off that has been in contact with any contaminants at the site to any waters.
5-C3	Spillage of all chemicals and fuels must be captured within an on-site containment system.
5-C4	Ensure that: a) All onsite drainage is constructed and maintained to ensure that runoff from disturbed areas, product stockpiles, and wastewater from screening and washing drains into an excavation pit; and b) Any excavation pit used as a sediment retention pond is maintained to have sufficient freeboard to ensure there is adequate storage in addition to groundwater to contain runoff from a one (1) in ten (10) year six (6) hour storm event; and c) Upstream stormwater runoff is diverted from exposed or disturbed areas.
Agency interest: Land	
Condition number	**Condition**
5-D1	All disturbed areas (e.g. borrow pits, stockpile and screening areas) must be progressively re-profiled and stabilised to ensure that at the cessation of activities, erosion is minimised.
5-D2	All disturbed areas (e.g. borrow pits, stockpile and screening areas) must be rehabilitated in accordance with the IEMS submitted to the administering authority with the application on 2 March 2001.

Agency interest: Noise	
Condition number	**Condition**
5-E1	Prevent the emission of noise, which causes or that is likely to cause a nuisance at any noise affected premises. Nuisance includes noise that is or is likely to be annoying, intrusive or offensive to a person or a nuisance in the opinion of an authorised person.
5-E2	Noise is NOT considered to be a nuisance under condition 5-E1 if monitoring shows that noise does NOT exceed the following levels in the time periods specified in Table 1 – Noise Limits. **Table 1 – Noise Limits**

Noise level dB(A) measured as	**Monday to Saturday**			**Sundays and public holidays**		
	7am – 6pm	**6pm – 10pm**	**10pm – 7am**	**7am – 6pm**	**6pm – 10pm**	**10pm – 7am**
	Noise measured at a 'Noise sensitive place'					
$L_{A10,adj,10mins}$	50* +5	45* +5	35* +0	50* +5	45* +5	35* +0
$L_{A1,adj,10mins}$	50* +10	45* +10	40* +5	50* +10	45* +10	40* +5

* Estimated average background A-weighted sound pressure level for areas with medium density transportation in accordance to AS 1055.2 - 1997.

5-E3	When requested by the administering authority noise monitoring must be undertaken to investigate any complaint of noise annoyance. Monitoring must include: a) $L_{A10,adj,10mins}$; b) $L_{A1,adj,10mins}$; c) the level and frequency of occurrence of impulsive or tonal noise; d) atmospheric conditions including wind speed and direction; e) effects due to extraneous factors such as traffic noise; f) location, date and time of recording; and g) the method of measurement and reporting of noise levels must comply with the administering authority's Noise Measurement Manual, Third Edition, 1 March 2000, or more recent editions or supplements to that document as they become available.
Agency interest: Self-Monitoring and Reporting	
Condition number	**Condition**
5-F1	Notify the administering authority as soon as practicable when the release of contaminants is not in accordance with the conditions of this document or any event where environmental harm may be threatened.
5-F2	Written advice of the following information must be provided within fourteen (14) days following any event as identified in condition number 5-F1. a) the location of the event;

	b) the time of the event; c) the time the holder of this document became aware of the event; d) the suspected cause of the event; e) a description of the resulting effects of the event; f) actions taken to mitigate any environmental harm and or environmental nuisance caused by the event; and g) proposed actions to prevent a recurrence of the event.
5-F3	Record, compile and keep all monitoring results required by this document and present this information to the administering authority when requested, in a specified format.
5-F4	All complaints received must be recorded including investigations undertaken, conclusions formed, and action taken. This information must be made available to the administering authority on request.

Part 6 - Conditions of environmental authority

Location: Lot 2/SP173007

Relevant activities:

ERA 16 - Extraction and Screening - 2(b) - Extracting, other than by dredging, in a year, the following quantity of material - more than 100,000t but not more than 1,000,000t

ERA 16 - Extraction and Screening - 3(b) - Screening, in a year, the following quantity of material - more than 100,000t but not more than 1,000,000t

Agency interest: General	
Condition number	**Condition**
6-A1	In carrying out an activity to which this approval relates, all reasonable and practicable measures must be taken to prevent and / or to minimise the likelihood of environmental harm being caused.
6-A2	The holder of this environmental authority must: a) install all measures, plant and equipment necessary to ensure compliance with the conditions of this approval, and b) maintain such measures, plant and equipment in a proper and efficient condition, and c) operate such measures, plant and equipment in a proper and efficient manner.
6-A3	From commencement of an activity to which this approval relates, 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 all 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 activities that are carried out. The SBMP must address the following matters: a) Environmental commitments - a commitment by senior management to achieve specified and relevant environmental goals, b) Identification of environmental issues and potential impacts. c) Control measures for routine operations to minimise likelihood of environmental harm. d) Contingency plans and emergency procedures for non-routine situations. e) Organisational structure and responsibility. f) Effective communication. g) Monitoring of contaminant releases. h) Conducting environmental impact assessments. i) Staff training. j) Record keeping. k) Periodic review of environmental performance and continual improvement.

6-A4	The site based management plan must not be implemented or amended in a way that contravenes any condition of this approval.
6-A5	Record, compile and keep all monitoring results required by this approval and present this information to the administering authority when requested.
6-A6	All records required by this approval must be kept for 5 years.
6-A7	A record of all waste (excluding trackable waste) must be kept detailing the following information: a) date of pickup of waste; b) description of waste; c) quantity of waste; d) origin of the waste; and e) destination of the waste. Note: Trackable wastes have similar recording requirements to this condition. Therefore, records of documents maintained in compliance with a waste tracking system established under the above Regulation or any other law for recording details for the transport of regulated waste satisfy this condition.
6-A8	The latest edition of the Queensland Government's INSTRUCTIONS FOR THE TREATMENT AND MANAGEMENT OF ACID SULFATE SOILS, 2001 , (the Instructions) must be complied with when treating and managing acid sulfate soils.
6-A9	Acid sulfate soils must be managed such that contaminants are not directly or indirectly released to any waters.
6-A10	Suitable banks and/or diversion drains must be installed and maintained to exclude stormwater runoff from entering any ponds or other structures used for the storage or treatment of contaminants including acid sulfate soils or wastes.
6-A11	Compliance with the conditions of this approval must be audited within 28 days of commencement of the activity.
6-A12	The audit detailed in condition 6-A11 must be conducted by a suitably qualified third party auditor, nominated by the approval holder and accepted by the administering authority
6-A13	In relation to the audit required by condition 6-A11, the auditor must submit a final version of the auditor's report to the administering authority within 28 days of completing the audit.
6-A14	The total financial cost of the audit(s) will be the responsibility of the holder of this approval.
6-A15	The holder of this environmental authority to which this approval relates must a) install all measures, plant and equipment necessary to ensure compliance with the conditions of this approval; and b) maintain such measures, plant and equipment in a proper and efficient condition; and c) operate such measures, plant and equipment in a proper and efficient manner.

6-A16	The site based management plan must not be implemented or amended in a way that contravenes any condition of this approval.
6-A17	Telephone the administering authority's Pollution Hotline or local office as soon as practicable after becoming aware of any release of contaminants not in accordance with the conditions of this approval.
6-A18	An appropriate spill kit, personal protective equipment and relevant operator instructions/emergency procedure guides for the management of wastes and chemicals associated with the activity must be kept at the site, and in each vehicle used if the activity is a mobile activity.
6-A19	Anyone operating under this approval must be trained in the use of the spill kit.
Agency interest: Air	
Condition number	**Condition**
6-B1	The release of dust and/or particulate matter resulting from the activity must not cause an environmental nuisance at any nuisance sensitive or commercial place.
6-B2	Dust is not considered to be a nuisance under condition number 6-B1 if monitoring shows that dust and/or particulate matter does NOT exceed the following limits at the boundary of any affected dust sensitive place: a) dust deposition of 120 milligrams per square metre per day, when monitored in accordance with Australian Standard AS 3580.10 of 1991 ; and b) a concentration of particulate matter with an aerodynamic diameter of less than 10 micrometre (µm) (PM_{10}) suspended in the atmosphere of 150 micrograms per cubic metre over a 24 hour averaging time, at the boundary of any affected dust sensitive place downwind of the licensed place, when monitored in accordance with: i. Australian Standard AS 3580.9.6 Ambient air- Particulate matter Determination of suspended particulate PM_{10} high-volume sampler with size-selective inlet - Gravimetric method; or ii. any alternative method of monitoring PM_{10} which may be permitted by the Air Quality Sampling Manual as published from time to time by the administering authority.
6-B3	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 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

	micrometre (µm) (PM_{10}) suspended in the atmosphere over a 24hr averaging time.
6-B4	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 nuisance sensitive or commercial place.
6-B5	When requested by the administering authority, monitoring must be undertaken to investigate any complaint of environmental nuisance caused by a release to the atmosphere from a release point at the site, and the results thereof notified to the administering authority within 14 days following completion of monitoring.
Agency interest: Water	
Condition number	**Condition**
6-C1	Contaminants must not be released from the site to any waters or the bed and banks of any waters.
6-C2	Erosion protection measures and sediment control measures must be implemented and maintained to minimise erosion and the release-of sediment. The size of any extraction lake must not exceed 2 hectares of open pit at any one time but be sufficient to contain the run-off expected from all disturbed areas and stockpiles during a 24 hour storm with an average recurrence interval of 1 in 5 years.
6-C3	There must be no release of stormwater runoff that has been in contact with any contaminants at the site to any waters, roadside gutter or stormwater drain.
6-C4	Water quality parameters for the extraction lake must not exceed the levels specified in Table 3 - Water Quality limits for Extractive Lake.

Table 3 -Water Quality limits for Extractive Lake

Monitoring Point	Quality Characteristic	Units		Monitoring Frequency
		Minimum	Maximum	
Extractive pond	pH	5	8	Weekly
Extractive pond	Hydrocarbons		Oils and petrochemicals should not be noticeable as a visible file on the water nor should they be detectable by odour[2]	Daily

[2] Value based on Recreational waters ANZECC (2000) Guidelines for Recreational Water Quality and Aesthetics

6-C5	Monitoring of water quality parameters for the extraction lake must be carried out at the frequency specified in Table 3 - Water Quality limits for Extractive Lake.
6-C6	Groundwater quality must be monitored at a frequency and for the parameters set out in Table 4 – Groundwater Quality Monitoring. Results are to be provided to the administering authority with each annual return.

Table 4 — Groundwater Quality Monitoring

Monitoring Point	Quality Characteristics	Monitoring Frequency
Boreholes BH8, BH20, BH21 & BI-131	pH	Monthly
Boreholes BH8, BH20, BH21 & BH31	Conductivity	Monthly
Boreholes BH8, BH20, BH21 & BH31	Chloride	Quarterly
Boreholes BH8, BH20, BH21 & BH31	Groundwater level	Monthly

6-C7

Overflows from the extraction lake are only be released to waters when in compliance with the limits set out in Table 5 - Sediment and pH release limits to water during extractive take overflow.

Table 5 — Sediment and pH release limits to water during extractive take overflow

Monitoring Point	Monitoring Point	Parameter	Release limit	Monitoring Frequency
Discharge point at site boundary	Barron River	Turbidity	Less than 1 10% of Background[1]	Daily during any discharge off-site of waters from extractive pond
Discharge point at site boundary	Barron River	pH	No less than pH 5.5 or no greater than 8.0	Daily during any discharge off-site of waters from extractive pond
Discharge point at site boundary	Barron River	Dissolved oxygen	The lesser of background[1] or 2	Daily during any discharge off-site of waters from extractive pond

[1] Background values to be measured at a point at 500m upstream of any discharge point on an ebb tide, or 500m downstream on an incoming tide. Both samples must be carried out within 30mins of each other.

Agency interest: Land	
Condition number	**Condition**
6-D1	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 native species of vegetation are planted and established; 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 such as 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.
6-D2	Rehabilitation of disturbed areas must take place progressively as works are staged and new areas of extraction are commenced.
6-D3	Contaminants must not be released to land.
6-D4	Spillage of all chemicals and fuels must be contained within an on-site containment system and controlled in a manner that prevents environmental harm. *NOTE: All petroleum product storage's must be designed, constructed and maintained in accordance with AS 1940 - Storage and Handling of Flammable and Combustible Liquids.*
6-D5	A Financial Assurance must be provided to the administering authority in line with the following requirements: 1 The holder of the development - approval must provide and maintain a financial assurance security in the form of an irrevocable, unconditional and on demand bank guarantee in the favour of the administering authority in the amount of $198,460 before extraction can begin on the site; and 2. The financial assurance security must be maintained until the administering authority is satisfied that no claim is likely to be made on the assurance and in excess of any claims made in respect of such financial assurance under the provisions of section 308 of the *Environmental Protection Act 1994*.

Agency interest: Noise	
Condition number	**Condition**
6-E1	Noise from the activity must not cause an environmental nuisance at any nuisance sensitive place or commercial place.
6-E2	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

Noise level dB(A) measured as	**Monday to Saturday**			**Sundays and public holidays**		
	7am – 6pm	**6pm – 10pm**	**10pm – 7am**	**7am – 6pm**	**6pm – 10pm**	**10pm – 7am**
	Noise measured at a 'Noise sensitive place'					
$L_{A10,adj,10mins}$	50 +5	45 +5	35 +0	50 +5	45 +5	35 +0
$L_{A1,adj,10mins}$	55 +10	50 +10	40 +5	55 +10	50 +10	40 +5
	Noise measured at a 'Commercial Place'					
$L_{A10,adj,10mins}$	55 +10	50 +10	40 +5	55 +10	50 +10	40 +5
$L_{A1,adj,10mins}$	60 +15	55 +15	45 +10	60 +15	55 +15	45 +10

6-E3	When requested by the administering authority noise monitoring must be undertaken to investigate any complaint of noise annoyance. Monitoring must include: a) $L_{A10,adj,10mins}$; b) $L_{A1,adj,10mins}$; c) the level and frequency of occurrence of impulsive or tonal noise; d) atmospheric conditions including wind speed and direction; e) effects due to extraneous factors such as traffic noise; f) location, date and time of recording.
6-E4	The method of measurement and reporting of noise levels must comply with the latest edition of the administering authority's Noise Measurement Manual.
6-E5	Vibration emitted from the activity must not cause an environmental nuisance at any nuisance sensitive place or commercial place.
6-E6	Vibration emitted from activities must not exceed the levels specified in Table 2 - Vibration nuisance at a nuisance sensitive place.

Table 2 - Vibration nuisance at a nuisance sensitive place

Monitoring Point	**Monday to Saturday**	**Sundays and public holidays**
Houses and low rise residential buildings and commercial buildings not included below.	5mm/s	No blasting to occur

	Commercial and industrial buildings or structures of reinforced concrete or steel construction.	15mm/s	No blasting to occur
6-E7	When requested by the administering authority, vibration monitoring and recording must be undertaken to investigate any complaint of vibration nuisance, and the results notified within 14 days to the administering authority. Monitoring must Include: a) peak particle velocity (mm/s); b) location of the blast's within the site (including which bench level); c) atmospheric conditions including temperature, relative humidity and wind speed and direction; d) the level and frequency of occurrence of Impulsive or tonal noise; e) atmospheric conditions including wind speed and direction; f) effects due to extraneous factors; and g) location, date and time of recording.		
Agency interest: Self-Monitoring and Reporting			
Condition number	**Condition**		
6-F1	The holder of the environmental authority 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.		

Part 7 - Conditions of environmental authority

Location: Lot 2/SP284222
Lot 4/SP284222

Relevant activities:

ERA 16 - Extraction and Screening - 2(b) - Extracting, other than by dredging, in a year, the following quantity of material - more than 100,000t but not more than 1,000,000t

ERA 16 - Extraction and Screening - 3(b) - Screening, in a year, the following quantity of material - more than 100,000t but not more than 1,000,000t

Agency interest: General	
Condition number	**Condition**
7-A1	In carrying out an activity to which this approval relates, all reasonable and practicable measures must be taken to prevent and / or to minimise the likelihood of environmental harm being caused.
7-A2	The holder of this environmental authority must: a) install all measures, plant and equipment necessary to ensure compliance with the conditions of this approval, and b) maintain such measures, plant and equipment in a proper and efficient condition, and c) operate such measures, plant and equipment in a proper and efficient manner.
7-A3	From commencement of an activity to which this approval relates, 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 all 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 activities that are carried out. The SBMP must address the following matters: a) Environmental commitments - a commitment by senior management to achieve specified and relevant environmental goals, b) Identification of environmental issues and potential impacts. c) Control measures for routine operations to minimise likelihood of environmental harm. d) Contingency plans and emergency procedures for non-routine situations. e) Organisational structure and responsibility. f) Effective communication. g) Monitoring of contaminant releases. h) Conducting environmental impact assessments. i) Staff training. j) Record keeping. k) Periodic review of environmental performance and continual improvement.

7-A4	Compliance with the conditions of this approval and the SBMP must be audited within 60 days of the commencement of the activity.
7-A5	The audit detailed in Condition 7-A4 must be conducted by a suitably qualified third party auditor nominated by the approval holder and accepted by the administering authority.
7-A6	In relation to the audit required by Condition 7-A4, the auditor must submit a final version of the auditor's report to the administering authority within 28 days of completing the audit.
7-A7	Record, compile and keep all monitoring results required by this approval and present this information to the administering authority when requested.
7-A8	All records required by this approval must be kept for 5 years.
7-A9	A record of all waste including trackable wastes, must be kept detailing the following information: a) date of pickup of waste; b) description of waste; c) quantity of waste; d) origin of the waste; and e) destination of the waste.
7-A10	The latest edition of the Queensland Government's INSTRUCTIONS FOR THE TREATMENT AND MANAGEMENT OF ACID SULFATE SOILS, 2001 , (the Instructions) must be complied with when treating and managing acid sulfate soils.
7-A11	Acid sulfate soils must be managed such that contaminants are not directly or indirectly released to any waters. Any acid sulfate soils, or potential acid sulfate soils disturbed must be treated or submerged to reduce acid generating potential.
7-A12	Any temporary or permanent dewatering ponds or waterbodies used to contain or treat acid sulfate soils must not be constructed on a watercourse.
7-A13	All ponds used for the storage or treatment of acid sulfate soils or other contaminants must be constructed, installed and maintained: a) so as to prevent any release of contaminants through the bed or banks of the pond to any waters (including ground water); b) so that a freeboard of not less than 0.5 metres is maintained at all times" and c) so as to ensure the stability of the ponds' construction.
7-A14	Telephone the administering authority’s Pollution Hotline or local office as soon as practicable after becoming aware of any release of contaminants not in accordance with the conditions of this approval.
7-A15	A financial assurance must be provided to the administering authority in compliance with the following requirements: a) Before the commencement of the activity, the registered operator must provide and maintain a financial assurance security in the form of an irrevocable, unconditional and on demand bank guarantee in favour of the administering authority in the amount of at

	least $246,933.47. b) The initial bank guarantee must be incremented in accordance with the Consumer Price Index as determined by Australian Bureau of Statistics. c) The financial assurance must be maintained until the administering authority is satisfied that no claim is likely to be made on the assurance and in excess of any claims made in respect of such financial assurance under the provisions of Section 308 of the Act.
7-A16	The total financial cost of the audit will be the responsibility of the holder of this approval.
7-A17	A competent person(s) must conduct any monitoring required by this approval.
7-A18	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.
7-A19	Records of the source volumes and composition of all waste materials accepted at the facility, must be kept and maintained and reported, in a specified format, to the administering authority by 31 August each year.
7-A20	Only inert fill waste materials are permitted to be accepted as backfill to the extraction pits.

Agency interest: Air

Condition number	Condition
7-B1	The release of dust and/or particulate matter resulting from the activity must not cause an environmental nuisance at any nuisance sensitive or commercial place.
7-B2	Dust is not considered to be a nuisance under condition number 7-B1 if monitoring shows that dust and/or particulate matter does NOT exceed the following limits at the boundary of any affected dust sensitive place: a) dust deposition of 120 milligrams per square metre per day, when monitored in accordance with Australian Standard AS 3580.10 of 1991 ; and b) a concentration of particulate matter with an aerodynamic diameter of less than 10 micrometre (µm) (PM_{10}) suspended in the atmosphere of 150 micrograms per cubic metre over a 24 hour averaging time, at the boundary of any affected dust sensitive place downwind of the licensed place, when monitored in accordance with: i. Australian Standard AS 3580.9.6 Ambient air- Particulate matter Determination of suspended particulate PM_{10} high-volume sampler with size-selective inlet - Gravimetric method; or ii. any alternative method of monitoring PM_{10} which may be permitted by the Air Quality Sampling Manual as published from time to time by the administering authority.

7-B3	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 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 micrometre (µm) (PM_{10}) suspended in the atmosphere over a 24hr averaging time.
7-B4	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 nuisance sensitive or commercial place.
Agency interest: Water	
Condition number	**Condition**
7-C1	Erosion protection measures and sediment control measures must be implemented and maintained to minimise erosion and the release-of sediment.
7-C2	There must be no release of stormwater runoff that has been in contact with any contaminants at the site to any waters, roadside gutter or stormwater drain.
7-C3	Any waters contained within the extraction pit must not be released to any watercourse.
7-C4	Contaminants that may cause environmental harm must not be directly or indirectly released to groundwater at any location other than the pit waters.
7-C5	Erosion protection measures and sediment control measures must be implemented and maintained to minimise erosion and the release of sediment.
7-C6	An effective groundwater monitoring program must be developed and implemented for the site. The program must include the installation of a groundwater monitoring network which: a) is devised, installed and maintained by a person possessing appropriate qualifications and experience in the fields of hydrogeology and groundwater monitoring program design to be able to competently make recommendations about these matters. b) include a sufficient number of bore(s) of compliance' to detect any impact on groundwater as a consequence of the extraction and screening operations, constructed in accordance with the "Minimum Construction Requirements for Water Bores in Australia' (Agricultural and Resource Management Council of Australia and New Zealand 1997), and provides the following: i. background groundwater quality in hydraulically up-gradient or background bore(s) that have not been affected by any release of contaminants to groundwaters;

	ii. the quality of groundwater down gradient of any release of contaminants to groundwater including groundwater passing the relevant bore(s) of compliance; iii. will be maintained to allow ease of collection of groundwater samples; and iv. provides representative groundwater samples for the aquifers being sampled. c) Assessment of monitoring results to determine whether or not there has been any adverse change to the groundwater quality characteristics at locations hydraulically down gradient of the site.
7-C7	Groundwater quality must be monitored for the parameters and at the specified frequency in Table 1 - Groundwater monitoring program for the ground water bores installed as part of the network in Condition 7-C6. **Table 1 - Groundwater monitoring program** **Quality Characteristics** / **Monitoring Frequency** pH / Monthly Electrical Conductivity / Monthly Groundwater Level / Monthly Chloride / Quarterly Sulfate / Quarterly
7-C8	Notwithstanding the above conditions, should groundwater monitoring show a statistically significant adverse change of levels of contaminants over background values at locations hydraulically down gradient of the extraction pit then the administering authority must be notified within 14 days.
7-C9	Pit water quality must be monitored at the specified frequency for compliance with the limit set out in Table 2 – Pit water quality monitoring program. **Table 2 – Pit water quality monitoring program** **Monitoring Point** / **Quality Characteristics** / **Range** / **Monitoring Frequency** Pit waters / pH / 5.0 – 8.0 / Weekly

Agency interest: Land

Condition number	Condition
7-D1	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 pasture species of vegetation are planted and established; 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 such as 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.
7-D2	Rehabilitation of disturbed areas must take place progressively as works are staged and new areas of extraction are commenced.
7-D3	Contaminants must not be released to land.
7-D4	Spillage of all chemicals and fuels must be contained within an on-site containment system and controlled in a manner that prevents environmental harm. *NOTE: All petroleum product storage's must be designed, constructed and maintained in accordance with AS 1940 - Storage and Handling of Flammable and Combustible Liquids.*

Agency interest: Noise

Condition number	Condition
7-E1	Noise from the activity must not cause an environmental nuisance at any nuisance sensitive place or commercial place.
7-E2	All noise from activities must not exceed the levels specified in Table 1 - Noise limits at any nuisance sensitive or commercial place.

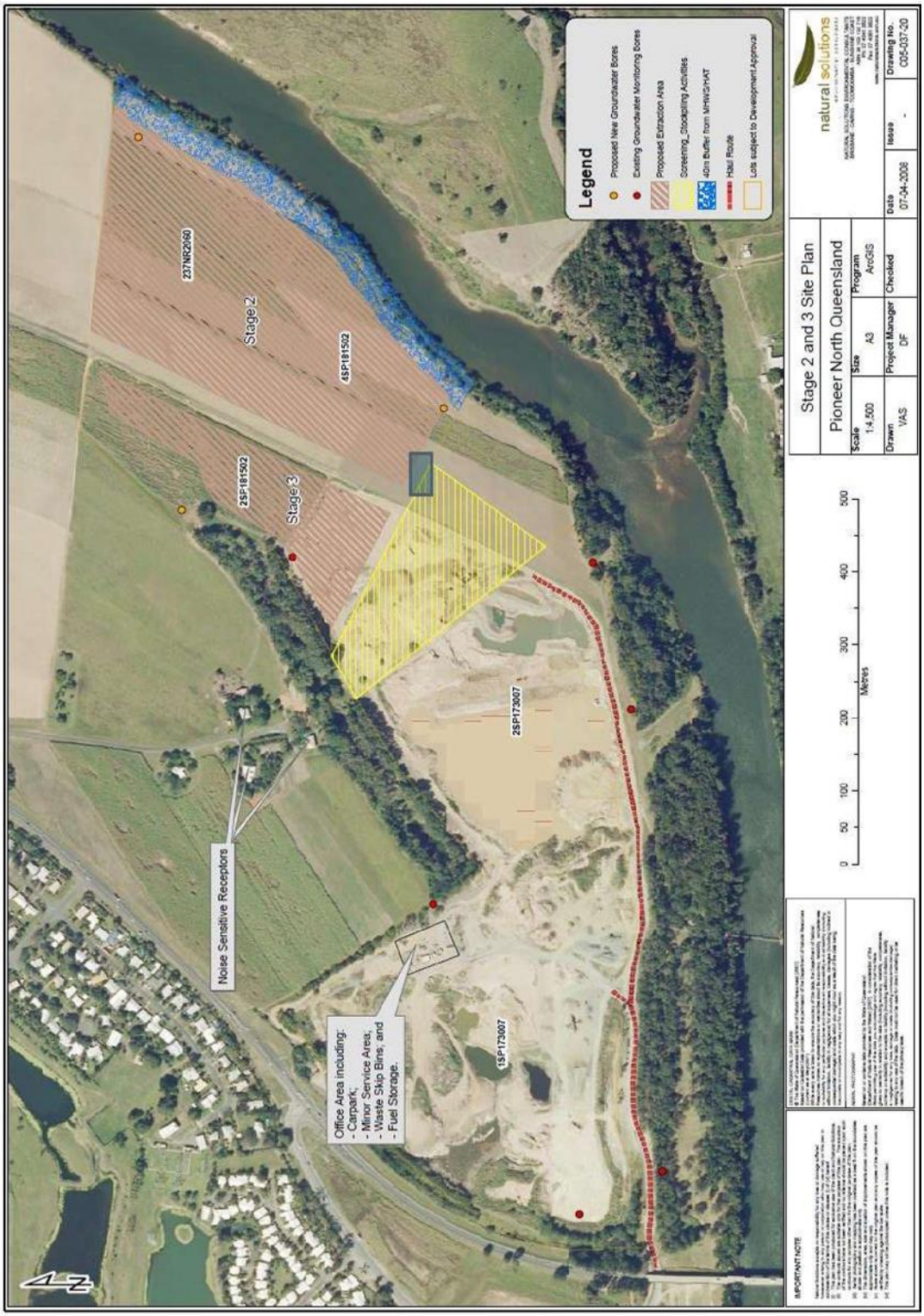
Table 1 – Noise Limits

Noise level dB(A) measured as	Monday to Saturday			Sundays and public holidays		
	7am – 6pm	6pm – 10pm	10pm – 7am	7am – 6pm	6pm – 10pm	10pm – 7am
	Noise measured at a 'Noise sensitive place'					
$L_{A10,adj,10mins}$	50	45	35	50	45	35
$L_{A1,adj,10mins}$	55	50	40	55	50	40
	Noise measured at a 'Commercial Place'					
$L_{A10,adj,10mins}$	55	50	40	55	50	40
$L_{A1,adj,10mins}$	60	55	45	60	55	45

7-E3	When requested by the administering authority noise monitoring must be undertaken to investigate any complaint of noise annoyance. Monitoring must include: a) $L_{A10,adj,10mins}$; b) $L_{A1,adj,10mins}$; c) the level and frequency of occurrence of impulsive or tonal noise; d) atmospheric conditions including wind speed and direction; e) effects due to extraneous factors such as traffic noise;

	f) location, date and time of recording.
7-E4	The method of measurement and reporting of noise levels must comply with the latest edition of the administering authority's Noise Measurement Manual.
7-E5	Vibration emitted from the activity must not cause an environmental nuisance at any nuisance sensitive place or commercial place.
7-E6	When requested by the administering authority, vibration monitoring and recording must be undertaken to investigate any complaint of vibration nuisance, and the results notified within 14 days to the administering authority. Monitoring must Include: a) peak particle velocity (mm/s); b) location of the blast's within the site (including which bench level); c) atmospheric conditions including temperature, relative humidity and wind speed and direction; d) the level and frequency of occurrence of Impulsive or tonal noise; e) atmospheric conditions including wind speed and direction; f) effects due to extraneous factors; and g) location, date and time of recording.
Agency interest: Self-Monitoring and Reporting	
Condition number	**Condition**
7-F1	The holder of the environmental authority 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.

Proposed Extraction Area for Stage 2 on Drawing Number C05-037-20



Part 8 - Conditions of environmental authority

Location: Lot 2/SP284222
Lot 4/SP284222

Relevant activities:

ERA 16 - Extraction and Screening - 2(b) - Extracting, other than by dredging, in a year, the following quantity of material - more than 100,000t but not more than 1,000,000t
ERA 16 - Extraction and Screening - 3(b) - Screening, in a year, the following quantity of material - more than 100,000t but not more than 1,000,000t

Agency interest: General	
Condition number	**Condition**
8-A1	In carrying out an activity to which this approval relates, all reasonable and practicable measures must be taken to prevent and / or to minimise the likelihood of environmental harm being caused.
8-A2	The holder of this environmental authority must: a) install all measures, plant and equipment necessary to ensure compliance with the conditions of this approval, and b) maintain such measures, plant and equipment in a proper and efficient condition, and c) operate such measures, plant and equipment in a proper and efficient manner.
8-A3	From commencement of an activity to which this approval relates, 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 all 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 activities that are carried out. The SBMP must address the following matters: a) Environmental commitments - a commitment by senior management to achieve specified and relevant environmental goals, b) Identification of environmental issues and potential impacts. c) Control measures for routine operations to minimise likelihood of environmental harm. d) Contingency plans and emergency procedures for non-routine situations. e) Organisational structure and responsibility. f) Effective communication. g) Monitoring of contaminant releases. h) Conducting environmental impact assessments. i) Staff training. j) Record keeping. k) Periodic review of environmental performance and continual improvement.

8-A4	The site based management plan must not be implemented or amended in a way that contravenes any condition of this approval.
8-A5	Compliance with the conditions of this approval must be audited within 60 days of the commencement of the activity.
8-A6	The audit detailed in Condition 8-A5 must be conducted by a suitably qualified third party auditor nominated by the approval holder and accepted by the administering authority.
8-A7	In relation to the audit required by condition 8-A5, the auditor must submit a final version of the auditor's report to the administering authority within 28 days of completing the audit.
8-A8	The total financial cost of the audit will be the responsibility of the holder of this approval.
8-A9	Record, compile and keep all monitoring results required by this approval and present this information to the administering authority when requested.
8-A10	All records required by this approval must be kept for 5 years.
8-A11	With the exception of dry surface soils, brown fine to medium sands, coarse brown white sands and fine gravels with a net acidity less than 0.1% derived from less than 3 meters below ground surface level and above the permanent groundwater table, all other materials with a net acidity of greater than or equal to 0.03% S are defined as acid sulphate soils and must be treated in accordance with section 8 of the Queensland Acid Sulfate Soil Technical Manual — Soil Management Guidelines
8-A12	Acid sulfate soils must be managed such that acid and metal contaminants are not directly or indirectly released from the site to any ground water or surface water.
8-A13	Each different type of sand product (i.e. 'fill sand', 'bedding sand' and 'concrete sand') derived from the site must be laboratory tested at a rate of at least 1 sample per month and the samples must be collected by a suitably qualified person and submitted for chromium suite analysis inclusive of acid base accounting.
8-A14	Sand with actionable levels of acid sulphate soils must be reprocessed or treated with agricultural lime in accordance with section 8 of the Queensland Acid Sulfate Soil Technical Manual — Soil Management Guidelines (latest version) the soil prior to being sold.
8-A15	Any ponds used for the submarine disposal of acid sulphate soil materials must be designed and maintained to facilitate long-term stable storage of the material. Storage considerations must include safe disposal depth, the integrity of pit walls and prevention of scour during flood events.
8-A16	All potential acid sulphate soil extracted, screened or otherwise disturbed must be consigned to submarine disposal by the end of the each working day. Materials must be deposited into deeper water locations that are at least 2 meters below the lowest recorded groundwater height recorded for this location.

<table>
<tr><td>8-A17</td><td>To minimise the likelihood of acid and dissolved metal contamination the site manager must
a) Return process waters back into the disposal pond in a manner that minimises further oxidation in the disposal pond.
b) Monitor discharges from the processing operations weekly and make necessary changes to the process to meet the weekly trigger values in the table below.
c) Ensure that any exceedance of a trigger value is accompanied with comments relating to what action was undertaken to resolve the non-conformance
<table>
<tr><th rowspan="2">Water Type</th><th colspan="2">Trigger Value</th></tr>
<tr><th>pH</th><th>Frequency</th></tr>
<tr><td>Water discharged from hydrocyclonic process</td><td>>5.2 and <8.5</td><td>Weekly</td></tr>
<tr><td>Any other process water</td><td>>5.2 and <8.5</td><td>Weekly</td></tr>
</table></td></tr>
<tr><td>8-A18</td><td>In the event of any exceedance of a trigger value for a period of four consecutive weeks, the offending process must be halted until the problem can be remedied and/or remediation is undertaken to ensure that the trigger values are met.</td></tr>
<tr><td>8-A19</td><td>An annual monitoring report must be prepared each year and presented to the administering authority along with the annual return. This report shall include but not be limited to:
a) a summary of the previous twelve (12) months monitoring results obtained under any monitoring programs required under this approval and, in graphical form showing relevant limits, a comparison of the previous twelve (12) months monitoring results to both this approvals limits and to relevant prior results;
b) an evaluation/explanation of the data from any monitoring programs;
c) an outline of actions taken or proposed to minimise the environmental risk from any deficiency identified by the monitoring or recording programs.</td></tr>
<tr><td>8-A20</td><td>A financial assurance must be provided to the administering authority in compliance with the following requirements:
a) Before the commencement of the activity, the registered operator must provide and maintain a financial assurance security in the form of an irrevocable, unconditional and on demand bank guarantee in favour of the administering authority in the amount of $402,695.76.
b) The initial bank guarantee must be incremented in accordance with the Consumer Price Index as determined by Australian Bureau of Statistics for a period of five years.
c) The financial assurance must be maintained until the administering authority is satisfied that no claim is likely to be made on the assurance and in excess of any claims made in respect of such financial assurance under the provisions of Section 308 of the Act.</td></tr>
<tr><td>8-A21</td><td>A financial assurance must be provided to the administering authority in compliance with the following requirements:
a) Before the commencement of the activity, the registered operator must provide and maintain a financial assurance security in the form of an irrevocable, unconditional and on demand bank guarantee in favour of the administering authority in the amount of $492,695.76.
b) The initial bank guarantee must be incremented in accordance with the Consumer Price Index as determined by Australian Bureau of Statistics for a period of five years.</td></tr>
</table>

	c) The financial assurance must be maintained until the administering authority is satisfied that no claim is likely to be made on the assurance and in excess of any claims made in respect of such financial assurance under the provisions of Section 308 of the Act.
8-A22	A competent person(s) must conduct any monitoring required by this approval.
8-A23	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.
8-A24	An appropriate spill kit, personal protective equipment, and relevant operator instructions/emergency procedure guides for the management of wastes and chemicals associated with the activity must be kept at the site, and in each vehicle used if the activity is a mobile activity.
8-A25	Anyone operating under this approval must be trained in the use of the spill kit.

Agency interest: Air

Condition number	Condition
8-B1	The release of dust and/or particulate matter resulting from the activity must not cause an environmental nuisance at any nuisance sensitive or commercial place.
8-B2	Establish and maintain a dust deposition network at the nearest site boundary of the closest dust sensitive place for a period of 12 months from the commencement of the proposed activity within each Lot. Assessment of dust deposition must be undertaken on at least a monthly basis.
8-B3	The results obtained from condition 8-B2 should be critically reviewed by a qualified professional and must be submitted to administering authority on a quarterly basis.
8-B4	Dust is not considered to be a nuisance under condition number 8-B1 if monitoring shows that dust and/or particulate matter does NOT exceed the following limits at the boundary of any affected dust sensitive place: c) dust deposition of 120 milligrams per square metre per day, when monitored in accordance with Australian Standard AS 3580.10 of 1991 ; and d) a concentration of particulate matter with an aerodynamic diameter of less than 10 micrometre (PM_{10}) suspended in the atmosphere of 150 micrograms per cubic metre over a 24 hour averaging time, at the boundary of any affected dust sensitive place downwind of the licensed place, when monitored in accordance with: i. Australian Standard AS 3580.9.6 Ambient air- Particulate matter Determination of suspended particulate PM_{10} high-volume sampler with size-selective inlet - Gravimetric method; or ii. any alternative method of monitoring PM_{10} which may be permitted by the Air Quality Sampling Manual as published from time to time by the administering

	authority.
8-B5	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 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 micrometre (PM_{10}) suspended in the atmosphere over a 24hr averaging time.
8-B6	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 nuisance sensitive or commercial place.

Agency interest: Water

Condition number	Condition
8-C1	Pit water quality must be monitored at the specified frequency for compliance with the limits set out in Table 1 — Pit water quality monitoring program.

Table 1 — Pit Water monitoring program

Monitoring Point	Quality Characteristics	Limits	Trigger Value[1]	Monitoring Frequency
Pit waters (active and inactive)	pH (field)	5-8.5	>5.2 and <8.5	Weekly
	Visual hydrocarbons	Visible	N/A	Weekly

[1] Trigger value is reached when the median[2] concentration of the quality characteristic of samples representative of pit waters falls outside of the pH range in Table 1.

[2] The Median must be calculated from no more than 5 consecutive samples.

If any of the trigger values for the parameters stated in Table 1 are exceeded the following must occur:

The administering authority must be notified within 14 days;

- An investigation must be completed in accordance with the 'Australian guidelines for water quality monitoring and reporting, 2000'[3] methodology, into the potential for environmental harm.
- A written report must be provided to the administering authority within three (3) months of the date of the original exceedance, outlining:
  - details of the investigation carried out; and

	○ actions taken to prevent environmental harm. [3] Australian and New Zealand Environment and Conservation Council (ANZECC), Agriculture and Resource Management Council of Australia and New Zealand (2000) 'Australian guidelines for water quality monitoring and reporting' (National Water Quality Management Strategy no. 7).
8-C2	The carrying out of the environmentally relevant activity must not cause any of the contaminant limits stated in Table 1 to be exceeded in any receiving waters.
8-C3	Contaminants must not be released from the site to any waters or the bed and banks of any waters.
8-C4	With the exception of sediment laden waters reporting to pond(s) as a result of a sediment and erosion control strategy, suitable banks and/or diversion drains must be installed and maintained to exclude stormwater runoff from entering any ponds or other structures used for the storage or treatment of contaminants or wastes.
8-C5	With the exception of sediment laden waters reporting to pond(s) as a result of a sediment and erosion control strategy, contaminants must not be released from the site to any groundwaters.
8-C6	An effective groundwater monitoring program must be developed and implemented for the site. The program must include the installation of a groundwater monitoring network which: a) is devised, installed and maintained by a person possessing appropriate qualifications and experience in the fields of hydrogeology and groundwater monitoring program design to be able to competently make recommendations about these matters. b) include a sufficient number of bore(s) of compliance' to detect any impact on groundwater as a consequence of the extraction and screening operations, constructed in accordance with the "Minimum Construction Requirements for Water Bores in Australia' (Agricultural and Resource Management Council of Australia and New Zealand 1997), and provides the following: i. background groundwater quality in hydraulically up-gradient or background bore(s) that have not been affected by any release of contaminants to groundwaters; ii. the quality of groundwater down gradient of any release of contaminants to groundwater including groundwater passing the relevant bore(s) of compliance; iii. will be maintained to allow ease of collection of groundwater samples; and iv. provides representative groundwater samples for the aquifers being sampled.
8-C7	Assessment of monitoring results must determine whether or not there has been any adverse change to the groundwater quality characteristics at locations hydraulically down gradient of the site.
8-C8	Groundwater monitoring bores must be representative of "background and potentially impacted" locations.
8-C9	Sampling of waters at each groundwater bore must be carried out on the same day.

8-C10	All monitoring wells must be maintained in an operative condition and be reasonably accessible at all times to any authorised person.
8-C11	Each groundwater monitoring bore must be fitted with a locked cap at all times other than at the time of sampling.
8-C12	Groundwater quality must be monitored for the parameters and at the specified frequency in 'Table 2 — Groundwater monitoring program' at the ground water bores installed as part of the network in Condition 8-C8. **Table 2 Groundwater monitoring program**

Monitoring point	Quality Characteristics	Limit	Trigger value	Frequency
Groundwater bores	pH (field)	5 - 8.5	>5.2 and <8.5	Monthly
	Electrical conductivity (field)	N/A	N/A	Monthly
	Groundwater Level (AHD)	N/A	N/A	Monthly
	Chloride (lab)	N/A	Chloride: Sulphate ration <4	Quarterly
	Sulphate (lab)			
	Iron (mg/L)	6.64	1.34	Quarterly
	Aluminium (mg/L)	0.2	0.0424	Quarterly
	Copper (mg/L)	0.02	0.006	Quarterly
	Zinc (mg/L)	0.03	0.0248	Quarterly
	Arsenic (mg/L)	0.01	0.003	Quarterly

8-C13	The results of monitoring in condition number 8-C12 must be submitted to the administering authority with each annual return
8-C14	The carrying out of the environmentally relevant activity must not cause any of the contaminant limits stated in Table 2 to be exceeded at any monitoring point.
8-C15	In the event that three (3) consecutive exceedances of the trigger limits in Table 2 are recorded then the following must occur: • The administering authority must be notified within 14 days; • An investigation must be completed in accordance with the Australian and New Zealand Environment and Conservation Council, Agriculture and Resource Management Council of Australian and New Zealand (2000), 'Australian guidelines for water quality monitoring

	and reporting' (National Water Quality Management Strategy No. 7).
	• A written report must be provided to the administering authority within three (3) months of the date of the last (i.e. third) exceedance, outlining:
	  ○ Details of the investigation carried out; and
	  ○ Actions taken to prevent environmental harm.

8-C16	From the cessation of extraction within each pit: a) The pH, Electrical conductivity must be monitored at a minimum of three locations within the pit quarterly for a period of five years. b) Ground water quality monitoring must also be carried out for the parameters given in Table 2 in the ground water bores around the extraction area on a biannual basis for five years.
Agency interest: Land	
Condition number	**Condition**
8-D1	The extent of disturbed area(s) must not exceed more than 2.5 ha at any one time with the exception of voids intended to remain open.
8-D2	With the exception of void waters, the total area of unrehabilitated land as a result of the carrying out of the environmentally relevant activity must not exceed 2.5 hectares.
8-D3	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 pasture species of vegetation are planted and established; 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 such as 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.
8-D4	Rehabilitation of disturbed areas must take place progressively as works are staged and new areas of extraction are commenced.
8-D5	Contaminants must not be released to land.
8-D6	Spillage of all chemicals and fuels must be contained within an on-site containment system and controlled in a manner that prevents environmental harm.

	NOTE: All petroleum product storage's must be designed, constructed and maintained in accordance with AS 1940 - Storage and Handling of Flammable and Combustible Liquids.
8-D7	A buffer distance of at least 25m must be maintained between extraction area and the following Matters of State Environmental Significance (MSES). • Regulated vegetation (Cat R – GBR riverine) • Regulated vegetation (Essential habitat) • Regulated vegetation (Cat B - Endangered or of concern) • Wildlife habitat (endangered or vulnerable) • Protected Area (Kamerunga Environmental Reserve)
8-D8	No extraction or screening or stockpiling activities are authorised to take place within the buffer areas required by condition 8-D7.
8-D9	The edge of all buffer areas must be identified in such a way as to be clearly identifiable to all employees undertaking the approved activity.

Agency interest: Noise

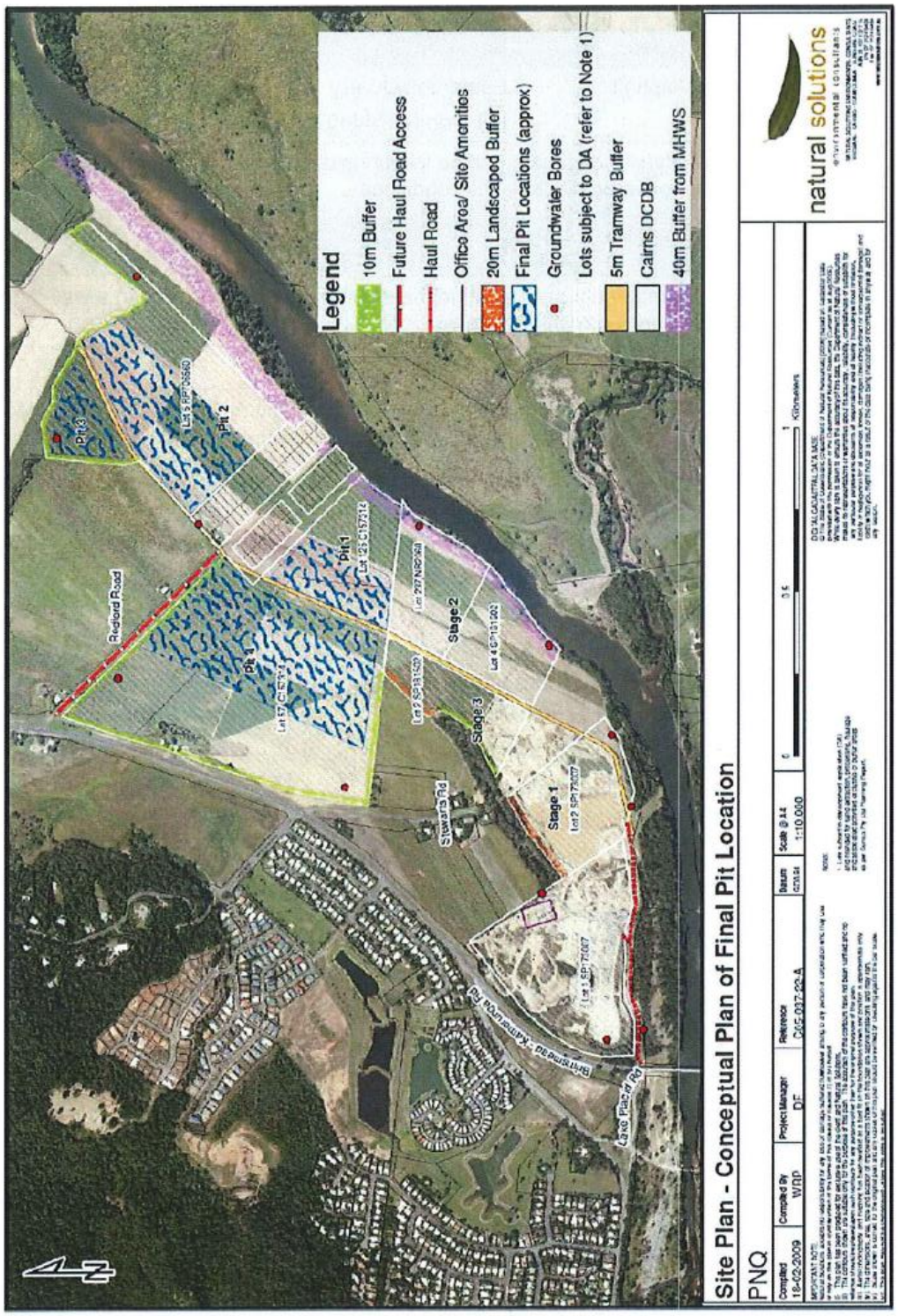
Condition number	Condition
8-E1	Noise from the activity must not cause an environmental nuisance at any nuisance sensitive place or commercial place.
8-E2	All noise from activities must not exceed the levels specified in Table 1 – (Noise limits). Noise measured at a 'noise sensitive place'. **Table 1 – Noise Limits** **Noise level dB(A) measured as** / **Monday to Saturday** / **7am – 6pm** / **6pm – 10pm** $L_{A, adj, T}$ / Background +5 dB(A) / Background +3 dB(A) $L_{A 1, adj, 15 mins}$ / Background +10 dB(A) / Background +5 dB(A) Where 'T' is 15 minutes and "Background" means background sound pressure level measured in accordance with the latest edition of the administering authority's Noise Measurement Manual.
8-E3	When requested by the administering authority, noise monitoring must be undertaken to investigate any complaint of noise nuisance and the method of measurement and reporting of noise levels must comply with the Australian Standard AS 1055.1, ASI 055.2 and ASI 055.3 and the administering authority's Noise Measurement Manual, Third edition, 1 March 2000, or more recent editions or supplements to that document as become available and the results notified within 14 days to the administering authority.

<table>
<tr><td>8-E4</td><td>The operation of the equipment specified in Tables 2, 3 and 4 must not be carried out within the minimum buffer distances stated in Tables 2, 3 and 4 for noise sensitive receptors identified in Figure 1.

Table 2 - Minimum Noise Buffer Distances for Noise sensitive receptors S2, S6 and S7 identified in Figure 1
<table>
<tr><th>Excavator on Surface (m)</th><th>Excavator in Pit (m)</th><th>Haul Truck (m)</th><th>Screening plant (m</th></tr>
<tr><td>210</td><td>100</td><td>80</td><td>450</td></tr>
</table>
Table 3 - Minimum Noise Buffer Distances for Noise sensitive receptors S3 identified in Figure 1
<table>
<tr><th>Excavator on Surface (m)</th><th>Excavator in Pit (m)</th><th>Haul Truck (m)</th><th>Screening plant (m</th></tr>
<tr><td>210</td><td>100</td><td>80</td><td>450</td></tr>
</table>
Table 4 - Minimum Noise Buffer Distances for Noise sensitive receptors S4, S8, S9 and SIO identified in Figure 1
<table>
<tr><th>Excavator on Surface (m)</th><th>Excavator in Pit (m)</th><th>Haul Truck (m)</th><th>Screening plant (m</th></tr>
<tr><td>60</td><td>40</td><td>40</td><td>220</td></tr>
</table></td></tr>
<tr><td>8-E5</td><td>Extraction activities are not permitted within the exclusion zone specified under condition 8-E4 unless the holder of the development permit demonstrates to the satisfaction of the administering authority through noise monitoring that the noise limits in Table Table 1 are not exceeded at the noise sensitive receptors.</td></tr>
<tr><td>8-E6</td><td>Reversing alarms for mobile equipment are to have their acoustic range limited to the immediate danger area.</td></tr>
<tr><td>8-E7</td><td>Vibration emitted from the activity must not cause an environmental nuisance at any nuisance sensitive place or commercial place.</td></tr>
<tr><td>8-E8</td><td>When requested by the administering authority, vibration monitoring and recording must be undertaken to investigate any complaint of vibration nuisance, and the results notified within 14 days to the administering authority. Monitoring must Include:
a) peak particle velocity (mm/s);
b) location of the blast's within the site (including which bench level);
c) atmospheric conditions including temperature, relative humidity and wind speed and direction;
d) the level and frequency of occurrence of Impulsive or tonal noise;
e) atmospheric conditions including wind speed and direction;
f) effects due to extraneous factors; and
g) location, date and time of recording.</td></tr>
</table>

Agency interest: Self-Monitoring and Reporting	
Condition number	**Condition**
8-F1	Telephone the administering authority's Pollution Hotline or local office as soon as practicable after becoming aware of any release of contaminants not in accordance with the conditions of this approval.
8-F2	The holder of the environmental authority 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.
8-F3	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 8-F1: 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.

Figure 1 - Noise Sensitive Receptors S1 to S10



Parts 5, 6, 7 and 8 Definitions

Key terms and/or phrases used in this document are defined in this section. Applicants should note that 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.

"activity" means the environmentally relevant activities, whether resource activities or prescribed activities, to which the environmental authority relates.

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

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

"**background noise level**" means $L_{A90,T}$ being the A-weighted sound pressure level exceeded for 90 percent of the time period of not less than (15) minutes using Fast response.

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

"**disturbed areas**" includes areas:

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

"**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 park or gardens; or
- a place used as an office or for business or commercial purposes and includes the curtilage of any such place.

"**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 watercraft 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.

Note: 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.

"**land"** means land excluding waters and the atmosphere.

"**licensed place**" means the place to which this document relates, as the case may be.

"mg/L" means milligrams per litre.

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

"**Noise affected premises**" means a "noise sensitive place" or a "commercial place"

"**Noise sensitive place**" means

- a dwelling, 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; or
- park or gardens

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

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

"**NTU**" means 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 2004* 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 2004*; or
- a World Heritage Area.

"**regulated waste**" means non-domestic waste mentioned in Schedule 9 of the *Environmental Protection Regulation 2019* (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.

"**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.

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

"statistically significant" means when the difference between groups of data is sufficient for a statistical test to reject the null hypothesis. For example, a requirement for a statistical test is that you have a minimum of two hypotheses, the null hypothesis and one or more alternative hypotheses. If you have data from two groups of bores (say A = background values and B = values at locations hydraulically down gradient of the landfill unit), and you wish to test whether A is different from B, the null hypothesis would be that A and B are from the same population (no significant difference). After performing the statistical test, you will either accept or reject the null hypothesis.

"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.

"**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.

"**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.

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

"$L_{A10, adj, 10 mins}$" 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.

"$L_{Amax, adj, T}$" means the average maximum A-weighted sound pressure level, adjusted for noise character, and measured over a time period of no less than fifteen(15) minutes, using Fast response.

"$L_{Aeq, adj, T}$" means the A-weighted sound pressure level, within the meaning given by AS1055.1, for a 15 minute time interval.

"$L_{A1, adj, 15 mins}$" means the A-weighted sound pressure level, (adjusted for tonal character and impulsiveness of the sound) exceeded for 1% of any 15 minute measurement period, using Fast response.

END OF ENVIRONMENTAL AUTHORITY