Permit

Environmental Protection Act 1994

Environmental authority EPPR00794313

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

Environmental authority number: EPPR00794313

Environmental authority takes effect on 19-03-2020

Environmental authority holder(s)

Name(s)	Registered address
Sand (QLD) Pty Ltd	1901 Gatton Esk Rd BUARABA QLD 4311 Australia

Environmentally relevant activity and location details

Environmentally relevant activity/activities	Location(s)
ERA 16 - Extraction and Screening 2: Extracting, other than by dredging, in a year, the following quantity of material (b) more than 100,000t but not more than 1,000,000t ERA 16 - Extraction and Screening 3: Screening, in a year, the following quantity of material (b) more than 100,000t but not more than 1,000,000t	1500 Gatton Esk Road, CHURCHABLE QLD 4311 LOT 17 on RP208539, LOT 9 on RP12468
ERA 16 - Extraction and Screening 2: Extracting, other than by dredging, in a year, the following quantity of material (b) more than 100,000t but not more than 1,000,000t ERA 16 - Extraction and Screening 3: Screening, in a year, the following quantity of material (c) more than 1,000,000t	1901 Gatton Esk Road, BUARABA QLD 4311 LOT 35 on RP207988
ERA 47 - Timber Milling and Woodchipping Milling, in a year, the following total quantity of timber (a) 5000t to 10,000t	1500 Gatton Esk Road, CHURCHABLE, QLD 4311 LOT 9 on RP12468
ERA 16 - Extraction and Screening 2: Extracting, other than by dredging, in a year, the following quantity of material (a) 5,000t to 100,000t	Lot 36 on CSH2318

Additional information for applicants

Environmentally relevant activities

The description of any environmentally relevant activity (ERA) for which an environmental authority (EA) is issued is a restatement of the ERA as defined by legislation at the time the EA is issued. Where there is any inconsistency between that description of an ERA and the conditions stated by an EA as to the scale, intensity or manner of carrying out an ERA, the conditions prevail to the extent of the inconsistency.

An EA authorises the carrying out of an ERA and does not authorise any environmental harm unless a condition stated by the EA specifically authorises environmental harm.

A person carrying out an ERA must also be a registered suitable operator under the *Environmental Protection Act 1994* (EP Act).

Contaminated land

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

- the happening of an event involving a hazardous contaminant on the contaminated land (notice must be given within 24 hours); or
- a change in the condition of the contaminated land (notice must be given within 24 hours); or
- a notifiable activity (as defined in Schedule 3) having been carried out, or is being carried out, on the contaminated land (notice must be given within 20 business days);

that is causing, or is reasonably likely to cause, serious or material environmental harm.

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

Take effect

Please note that, in accordance with section 200 of the EP Act, an EA has effect:

a) if the authority is for a prescribed ERA and it states that it takes effect on the day nominated by the holder of the authority in a written notice given to the administering authority-on the nominated day; or

b) if the authority states a day or an event for it to take effect-on the stated day or when the stated event happens; or

c) otherwise-on the day the authority is issued.

However, if the EA is authorising an activity that requires an additional authorisation (a relevant tenure for a resource activity, a development permit under the *Planning Act 2016* or an SDA Approval under the *State Development and Public Works Organisation Act 1971*), this EA will not take effect until the additional authorisation has taken effect.

If this EA takes effect when the additional authorisation takes effect, you must provide the administering authority written notice within 5 business days of receiving notification of the related additional authorisation taking effect.

If you have incorrectly claimed that an additional authorisation is not required, carrying out the ERA without the additional authorisation is not legal and could result in your prosecution for providing false or misleading information or operating without a valid environmental authority.

Clancy Mackaway
Department of Environment and Science
Delegate of the administering authority
Environmental Protection Act 1994

Date issued: 19 March 2020

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

Phone: 1300 130 372
Email: palm@des.qld.gov.au

Obligations under the *Environmental Protection Act 1994*

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

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

Conditions of environmental authority

Part 1 – Extraction and Screening – Lots 17 on RP208539 & 9 on RP12468 (Development Approval IPDE00284805A11)

Environmentally relevant activity/activities	Location(s)
ERA 16 (2) - Extracting, other than by dredging, in a year, the following quantity of material - (b) more than 100,000t but not more than 1,000,000t ERA 16 (3) - Screening, in a year, the following quantity of material - (b) more than 100,000t but not more than 1,000,000t	Lot 17 on RP208539, Lot 9 on RP12468 1500 Gatton Esk Road, CHURCHABLE QLD 4311

The environmentally relevant activity(ies) conducted at the locations described above for this part must be conducted in accordance with the following site specific conditions.

Agency interest: General	
Condition number	**Condition**
G1	In carrying out an ERA 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.
G2	From commencement of an ERA 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 ERAs 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.
G3	This approval only authorises the extraction of material from the areas defined in Site Plan 1015.006 in 'Response to Request For Further Information, Application For Development Approval, Environmentally Relevant Activities 19(c), 20(c) and 22(c), 1500 Gatton Esk Road

	Churchable' prepared by Groundwork EMS Pty Ltd for Beaumont Sand and Gravel Pty Ltd.
G4	A natural buffer zone of at least 20 metres must be maintained between the high bank of Yellow Gully and extraction areas.
G5	Record, compile and keep all monitoring results required by this approval and present this information to the administering authority when requested.
G6	All records required by this approval must be kept for 5 years.
Agency interest: Air	
Condition number	**Condition**
A1	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.
A2	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.
A3	The release of dust and/or particulate matter resulting from the ERA must not cause an environmental nuisance at any nuisance sensitive or a commercial place.
A4	Dust and particulate matter must not exceed the following levels when measured at any nuisance sensitive or commercial place: (a) Dust deposition of 120 milligrams per square metre per day, when monitored in accordance with Australian Standard AS 3580.10.1 of 2003 (or more recent editions); OR (b) A concentration of particulate matter with an aerodynamic diameter of less than 10 micrometre (µm) (PM10) suspended in the atmosphere of 150 micrograms per cubic metre over a 24 hour averaging time, at a nuisance sensitive or commercial place downwind of the site, when monitored in accordance with: - Australian Standard AS 3580.9.6 of 2003 (or more recent editions) 'Ambient air - Particulate matter - Determination of suspended particulate PM10 high-volume sampler with size-selective inlet -Gravimetric method'; or - any alternative method of monitoring PM10 which may be permitted by the 'Air Quality Sampling Manual' as published from time to time by the administering authority.
A5	Trafficable areas must be maintained using all reasonable and practicable measures necessary to minimise the release of wind-blown dust and traffic generated dust to the atmosphere.

	Reasonable and practicable measures may include but are not limited to: a) keeping surfaces clean; b) sealing with bitumen or other suitable material; c) using water sprays; d) adopting and adhering to speed limits; and e) using dust suppressants and wind breaks.
A6	The operator of the ERA must take all reasonable and practicable measures to prevent spillage and/or loss of particulate matter and windblown dust from trucks used for transporting aggregates from the site. Reasonable and practicable measures may include but are not limited to: (a) wetting down the load prior to transport; (b) having the entire load covered with a tarpaulin or similar material; and (c) clearing of spillage from side rails, tail gates and draw bars of trucks prior to departure from the site.
Agency interest: Land	
Condition number	**Condition**
L1	The site (including all disturbed areas such as slopes, borrow pits, stockpile and screening areas) must be rehabilitated in a manner such that: (a) suitable 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.
L2	Rehabilitation of disturbed areas must take place progressively as works are staged and new areas of extraction are commenced.
L3	The top layer and the sub layers of the soil profile must be removed, stockpiled separately, and retained for the purpose of rehabilitation of disturbed areas.
L4	At least three (3) months prior to ceasing carrying out any of the environmentally relevant activities at the site, a Site Rehabilitation and Decommissioning Report (SRDR) must be prepared and submitted which details practices and measures necessary to prevent or minimise

	environmental harm during and after the decommissioning of the environmentally relevant activity/ies whose operation is to be ceased.
L5	The Site Rehabilitation and Decommissioning Report (SRDR) must address the following matters: (i) a rehabilitation plan for the site taking into account the final use of the land and relevant environmental considerations including but not limited to: - the proposed shaping of the final landform after rehabilitation including an assessment of the stability of all works such as buffer distances and batter slopes; - proposed nature of materials utilised and techniques employed for any proposed backfilling of extracted areas such as filling, compacting, topsoiling, overburden return and any other soil amelioration leading to vegetation establishment; and - a program and timetable for all works proposed. (ii) prevention or treatment of the release of contaminated stormwater runoff from raw material stockpiles and disturbed areas to the bed or banks of any watercourse.
L6	Contaminants must not be released to land.
L7	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: Acoustic	
Condition number	**Condition**
N1	Noise from the ERA must not cause an environmental nuisance at any nuisance sensitive place or commercial place.

<table>
<tr><td>N2</td><td>All noise from activities must not exceed the levels specified in Table – Noise limits at any nuisance sensitive or commercial place.
Table – Noise Limits
<table>
<tr><th rowspan="2">Noise level dB(A) measures as</th><th colspan="3">Monday to Saturday</th></tr>
<tr><th>6am–6pm</th><th>6pm–10pm</th><th>10pm–6am</th></tr>
<tr><td></td><td colspan="3">Noise measured at a ‘nuisance sensitive place’</td></tr>
<tr><td>LA10, adj, 10 mins</td><td>Bkg + 5</td><td>Bkg + 0</td><td>Bkg + 0</td></tr>
<tr><td>LA1, adj, 10 mins</td><td>Bkg + 10</td><td>Bkg + 5</td><td>Bkg + 5</td></tr>
<tr><td></td><td colspan="3">Noise measured at the ‘Commercial place’</td></tr>
<tr><td>LA10, adj, 10 mins</td><td>Bkg + 10</td><td>Bkg + 5</td><td>Bkg + 5</td></tr>
<tr><td>LA1, adj, 10 mins</td><td>Bkg + 15</td><td>Bkg + 10</td><td>Bkg + 10</td></tr>
</table></td></tr>
<tr><td>N3</td><td>When requested by the administering authority, noise monitoring must be undertaken to investigate any complaint of noise nuisance, and the results notified within 14 days to the administering authority. Monitoring must include:
- LA10, adj, 10 mins
- LA1, adj, 10 mins
- the level and frequency of occurrence of impulsive or tonal noise;
- atmospheric conditions including wind speed and direction;
- effects due to extraneous factors such as traffic noise; and
- location, date and time of recording.</td></tr>
<tr><td>N4</td><td>The method of measurement and reporting of noise levels must comply with the latest edition of the Environmental Protection Agency's Noise Measurement Manual.</td></tr>
<tr><td>N5</td><td>Notwithstanding any other condition of this approval, the operation of any plant or heavy machinery on the site, including operation for maintenance or warm-up purposes, shall not be permitted:
- outside the hours of 6.00 am to 6.00 pm Mondays to Fridays inclusive;
- outside the hours of 6.00 am to 3.00 pm on Saturdays;
- on Sundays or public holidays.</td></tr>
<tr><td colspan="2">Agency interest: Social</td></tr>
<tr><td>Condition number</td><td>Condition</td></tr>
</table>

S1	The operator of the ERA must record the following details for all complaints received and provide this information to the administering authority on request: (a) time, date, name and contact details of the complainant; (b) reasons for the complaint; (c) any investigations undertaken; (d) conclusions formed; and (e) any actions taken.

Agency interest: Water	
Condition number	**Condition**
WA1	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.
WA2	Erosion protection measures and sediment control measures must be implemented and maintained to minimise erosion and the release of sediment.
WA3	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.
WA4	Sediment collected in sediment settlement ponds and or silt traps must be removed as necessary to maintain proper and effective operation of the pond and silt traps.
WA5	The size of any sedimentation dam must be sufficient to contain the runoff expected from a 24 hour storm with an average recurrence interval of 1 in 5 years.

Definitions for Part 1

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

"administering authority" means the Environmental Protection Agency or its successor.

"annual return" means the return required by the annual notice (under section 316 of the *Environment Protection Act 1994*) for the section 73F registration certificate that applies to the development approval.

"approval" means 'notice of development application decision' or 'notice of concurrence agency response' under the *Integrated Planning Act 1997*.

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

"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.

"LA 10, 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.

"LA 1, 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.

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

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

"nuisance sensitive place" includes —

- a dwelling, residential allotment, mobile home or caravan park, residential marina or other residential premises; or
- a motel; hotel or hostel; or
- a kindergarten, school, university or other educational institution; or
- a medical centre or hospital; or
- a protected area under the Nature Conservation Act 1992, the Marine Parks Act 1992 or a World Heritage Area; or
- a public thoroughfare, park or gardens; or 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.

"quarry material" means material on State coastal land, other than a mineral within the meaning of any Act relating to mining. Material includes for example stone, gravel, sand, rock, clay, mud, silt and soil, unless it is removed from a culvert, stormwater drain or other drainage infrastructure as waste material.

"site" means the place to which this environmental authority relates or the premises to which this environmental authority relates.

"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.

Part 2 – Timber Milling – Lot 9 on RP12468 (Development Approval IPDE00698907)

Environmentally relevant activity/activities	Location(s)
ERA 47 Timber milling and woodchipping (a) milling, in a year, the following total quantity of timber - 5,000t to 10,000t	Lot 9 on RP12468 1500 Gatton Esk Road, CHURCHABLE QLD 4311

The environmentally relevant activity(ies) conducted at the locations described above for this part must be conducted in accordance with the following site specific conditions

Agency interest: General	
Condition number	**Condition**
G1	The holder of this environmental authority must: (i) install all plant and equipment necessary to ensure compliance with the conditions; and (ii) maintain such plant and equipment in a proper and efficient condition; and (iii) operate such plant and equipment in a proper and efficient manner. In this condition, "plant and equipment" includes: (i) plant and equipment used to prevent and/or minimise the likelihood of environmental harm being caused; (ii) devices and structures to contain foreseeable escapes of contaminants and waste; (iii) vehicles used to transport waste; (iv) devices and structures used to store, handle, treat and dispose of waste; (v) monitoring equipment and associated alarms; and backup systems that act in the event of failure of a primary system.
G2	A copy of this environmental authority must be kept in a location readily accessible to personnel carrying out the activity.
G3	Any record or document required to be kept by a condition of this environmental authority must be kept at the licensed place for a period of at least five (5) years and be available for examination by an authorised person. The record retention requirements of this condition will be satisfied if any daily and weekly records are kept for a period of at least three (3) years and these records are then kept in the form of annual summaries after that period.
G4	No change, replacement or operation of any plant or equipment is permitted if the change, replacement or operation of the plant or equipment increases, or is likely to substantially increase, the risk of environmental harm above that expressly provided. An example of a substantial increase in the risk of environmental harm is an increase of 10% or more in the quantity of the contaminant to be released into the environment.

G5	All instruments and devices used for the measurement or monitoring of any parameter under any condition of this environmental authority must be calibrated, and appropriately operated and maintained.
Agency interest: Air	
Condition number	**Condition**
A1	Dust or particulate matter that will have or is likely to have an adverse effect on people living in or using the surrounding area shall not be permitted to emanate beyond the boundaries of the licensed place.
A2	Saw dust collection systems, which transfer particulates to the screened area, must be fitted to all woodworking machinery and equipment that generate particulate emissions and designed, installed and maintained to effectively transfer particulates to the screened area. Woodworking machinery and equipment in this condition includes saws, planers and chippers.
A3	The saw dust collection system must operate at all times when the woodworking machinery and equipment stated in condition number A2 are operating.
A4	The tailgates of all trucks leaving the premises must be securely fixed prior to loading and immediately after unloading to prevent loss of materials.
A5	Trucks transporting material from the premises must be covered immediately after loading to prevent wind-blown releases and spillage. The covering must be maintained until immediately before unloading the trucks.
Agency interest: Water	
Condition number	**Condition**
WA1	Contaminants that will or may cause environmental harm must not be directly or indirectly released from the licensed place to any waters or the bed and banks of any waters except: (i) as permitted under this environmental authority; or (ii) to a sewer as permitted or otherwise agreed from time to time by the relevant Local Government.
WA2	Except as otherwise provided by the conditions of this environmental authority, the environmentally relevant activity must be carried out by such practicable means necessary to prevent and/or minimise the release or likelihood of release of contaminated runoff from the licensed place to any stormwater drain or waters or the bed or banks of any such waters. "Contaminated runoff' for the purposes of this condition means stormwater and/or stormwater runoff that contains contaminants that may cause environmental harm.

WA3	The maintenance and cleaning of vehicles and any other equipment or plant must be carried out in areas from where contaminants cannot be released into any waters, roadside gutter or stormwater drainage system.
WA4	Any spillage of wastes, contaminants or other materials must be cleaned up as quickly as practicable. Such spillages must not be cleaned up by hosing, sweeping or otherwise releasing such wastes, contaminants or material to any stormwater drainage system, roadside gutter or waters.
WA5	All fuel tank storages must be bunded so that the capacity of the bund is sufficient to contain at least 100% of the largest storage tank plus 10% of the second largest tank within the bund.
WA6	All oil drum storages must be bunded so that the capacity of the bund is sufficient to contain at least 25% of the maximum design storage volume within the bund.
WA7	All bunding must be constructed of materials which are impervious to the materials stored.
WA8	All bunding must be roofed where practicable.
WA9	A natural or grassed buffer zone of not less than 800 metres must be provided between the boundary of any development and a natural watercourse.
WA10	Waste oil from the vehicles must be used for lubricating equipment such as conveyors or disposed of at an approved or licensed waste disposal facility.
Agency interest: Land	
Condition number	**Condition**
L1	There must be no release nor likelihood of release of any contaminants to land.
Agency interest: Acoustic	
Condition number	**Condition**

<table>
<tr><td>N1</td><td>In the event of a complaint about noise that constitutes unreasonable or intrusive noise being made to the administering authority, that the administering authority considers is not frivolous or vexatious, then the emission of noise from the place to which this environmental authority relates must not result in levels greater than those specified in Table – Noise Limits.

Table – Noise Limits
<table><tr><th colspan="2">Noise Limits at a Noise Sensitive Place</th></tr><tr><td>Period</td><td>Noise Level at a Noise Sensitive Place Measured as the Adjusted Maximum Sound Pressure Level LAmax, adj, T</td></tr><tr><td>7am – 6pm</td><td>Background noise level plus 5 dB(A)</td></tr><tr><td>6pm – 10pm</td><td>Background noise level plus 5 dB(A)</td></tr><tr><td>10pm – 7am</td><td>Background noise level plus 3 dB(A)</td></tr><tr><th colspan="2">Noise Limits at a Noise Commercial Place</th></tr><tr><td>Period</td><td>Noise Level at a Noise Commercial Place Measured as the Adjusted Maximum Sound Pressure Level LAmax, adj, T</td></tr><tr><td>7am – 6pm</td><td>Background noise level plus 10 dB(A)</td></tr><tr><td>6pm – 10pm</td><td>Background noise level plus 10 dB(A)</td></tr><tr><td>10pm – 7am</td><td>Background noise level plus 8 dB(A)</td></tr></table></td></tr>
<tr><td colspan="2">Agency interest: Waste</td></tr>
<tr><td>Condition number</td><td>Condition</td></tr>
<tr><td>W1</td><td>Waste must not be released to the environment, stored, transferred or disposed of contrary to any condition of this environmental authority.</td></tr>
<tr><td>W2</td><td>Any treated materials, such as CCA treated sawdust or offcuts, must not be burnt or allowed to burn at the licensed place or removed and burnt elsewhere.</td></tr>
<tr><td>W3</td><td>Only wood waste can be burned, if and only if consideration is given to all other possibilities of recycling and disposing of wood waste. Some of these alternative methods of recycling and disposing include:
Chipping offcuts and selling or giving away the chips
Use offcuts for landscaping, mulch or composting
Using offcut to fuel boilers for the timber drying process
Disposal to landfill</td></tr>
</table>

	• Pit burning • Selling or giving away offcuts for other purposes
W4	The alternatives to burning, outlined in the letter regarding licence conditions, from Mr Bradley Hodge of Lockyer Lumber, dated 8 May 1996, must be considered prior to the burning of any wood waste.
W5	Any burning of wood waste must be carried out in the best possible manner as listed below: • Producing less smoke, odour and particulate nuisance to local residents • Ensuring fire is confined to a small area and start and finish time of the burn is controlled • Minimising any possible risk of accidents
W6	Permits from authorities such as QId Fire Service, Health Department Local Authority, Department of Training and Industrial Relations re safety and any other applicable authority must be obtained as required for burning of wood waste.
W7	The holder of this environmental authority must have a fully trained person to be on the site to supervise all burning activities from beginning to end.
W8	The holder of this environmental authority must maintain a written record of the start and finish times of any burning activities.
W9	If there is any nuisance caused, immediate control measures must be taken to ensure that there are no further complaints.
W10	An area must be set aside for the segregation and storage of recyclable solid wastes.
W11	Regulated wastes must not be disposed of on site or released to lands or released to waters.
W12	All transport of regulated waste generated in carrying out the environmentally relevant activity must be transported by a proper and appropriate licensed waste transporter that can lawfully transport such waste.
W13	Records must be maintained for a period of at least five years for all wastes mentioned in this environmental authority.
W14	If the holder of this environmental authority becomes aware that a person has removed regulated waste from the licensed place and disposed of the regulated waste in a manner which is not authorised by this environmental authority or improper or unlawful, then the holder of this environmental authority must, as soon as practicable, notify the administering authority of all relevant facts, matters and circumstances known concerning the disposal.
Agency interest: Self-Monitoring and Reporting	
Condition number	**Condition**

M1	All complaints received by the holder of this environmental authority relating to operations at the licensed place must be recorded in a log book with the following details: (i) time and date of complaint; (ii) type of communication (telephone, letter, personal etc.); (iii) name, contact address and contact telephone number of complainant (Note: if the complainant does not wish to be identified then "Not identified" is to be recorded); (iv) response and investigation undertaken as a result of the complaint; (v) name of person responsible for investigating complaint; and (vi) action taken as a result of the complaint investigation and signature of responsible person.
M2	The complaints record required by condition number (M1) must be maintained for a period of not less than five years.
M3	A record must be maintained of events including but not limited to: (i) the time, date and duration of pollution control equipment where the failure of such equipment may result in environmental contamination; (ii) any shut-downs of the saw dust collection system; and (iii) the hours of operation of the plant.
M4	The record required by condition number M3 must be maintained for a period of not less than five (5) years.
M5	As soon as practicable after becoming aware of any emergency or incident which results in the release of contaminants not in accordance, or reasonably expected to be not in accordance with the conditions of this environmental authority, the holder of this environmental authority must notify the administering authority of the release by telephone or facsimile.
M6	The notification of emergencies or incidents as required by condition number M5 must include but not be limited to the following: (i) the holder of the environmental authority; (ii) the location of the emergency or incident; (iii) the number of the environmental authority; (iv) the name and telephone number of the designated contact person; (v) the time of the release; (vi) the time the holder of the environmental authority became aware of the release; (vii) the suspected cause of the release; and (viii) the environmental harm and or environmental nuisance caused, threatened, or suspected to be caused by the release; and (ix) actions taken to prevent further any release and mitigate any environmental harm and or environmental nuisance caused by the release.

M7	Not more than 14 days following the initial notification of an emergency or incident, the holder of the environmental authority must provide written advice of the information supplied in accordance with condition number M6 in addition to: (i) proposed actions to prevent a recurrence of the emergency or incident; (ii) outcomes of actions taken at the time to prevent or minimise environmental harm and or environmental nuisance; and (iii) the results of any environmental monitoring performed.
M8	Monitoring must be undertaken to investigate any complaint of dust nuisance or upon receipt of a written request from the administering authority to carry out such monitoring.
M9	The dust fallout monitoring program must be carried out at a sufficient number of monitoring points to enable compliance with condition M8. Monitoring sites must be selected having regard to: (i) locations of dust sources; (ii) locations of persons potentially affected by any release of dust from the environmental relevant activity; and (iii) prevailing wind conditions.
M10	The samples must be collected and analysed in accordance with the requirements of Australian Standard AS 3580.10.1-1991 for Ambient Air - Particulate Matter.
M11	The measurement and reporting of ambient particulate matter must be undertaken by a person or body possessing appropriate experience and qualifications to perform the ambient particulate monitoring.
M12	Records must be kept of the results of all monitoring of releases of contaminants to the atmosphere for a period of least five (5) years.
M13	In the event of a complaint made to the administering authority about noise that is intrusive, and that the administering authority considers is not frivolous or vexatious, the holder of this environmental authority must undertake monitoring to investigate any complaint of noise annoyance upon receipt of a written request from the administering authority to carry out such monitoring.
M14	For the purposes of checking compliance with condition N1, monitoring and recording of the noise levels from the activity must be undertaken for the following descriptors, characteristics and conditions: (i) LAmax, adj, T; (ii) LAbg, T (or LA90, T); (iii) LAN, T (where N equals statistical levels of 1, 10, 50, 90 and 99); (iv) Max LpA T; (v) LAeq, T; (vi) the level and frequency of occurrence of impulsive or tonal noise;

	(vii) atmospheric conditions including temperature, relative humidity and wind speed and direction; and (viii) effects due to extraneous factors such as traffic noise.
M15	In conjunction with noise measurement and recording, the following parameters and conditions must be recorded: . (i) location, date and time of recording.
M16	The method of measurement and reporting of noise levels must comply with the Department of Environment and Heritage Noise Measurement Manual, second edition, March 1995, or more recent editions or supplements to that document as become available.
M17	The holder of this environmental authority must ensure that the results of all monitoring performed in accordance with this environmental authority are submitted with the initial Annual Return. Each subsequent Annual Return must include details of the results of monitoring performed during the 12 months preceding that Annual Return.
M18	Records must be kept of the results of all monitoring of noise levels and other information required to be recorded in conjunction with such monitoring for a period of at least three (3) years.

Definitions for Part 2

"Act" means the *Environmental Protection Act 1994*.

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

“LAmax adj, T" means the average maximum A-weighted sound pressure level, adjusted for noise character and measured over a time period of not less than 15 minutes, using Fast response.

"background noise level" means either:

LA90, 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, or

LAbg, T being the arithmetic average of the minimum readings measured in the absence of the noise under investigation during a representative 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.

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

(a) a house, unit, motel, nursing home or other building or part of a building;

(b) a caravan, mobile home or other vehicle or structure on land; or

(c) a watercraft in a marina.

“Max LpA, T” means the maximum A-weighted sound pressure level measured over time period of not less than 15 minutes, using Fast response.

“noise sensitive place” means any of the following places:

(a) a dwelling;

(b) a library, childcare centre, kindergarten, school, college, university or other educational institution;

(c) a hospital, surgery or other medical institution;

(d) a protected area, or an area identified under a conservation plan as a critical habitat or an area of major interest, under the *Nature Conservation Act 1992*;

(e) a marine park under the *Marine Parks Act 1982*;

(f) a park or garden that is open to the public (whether or not on payment of money) for use other than for sport or organised entertainment.

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

(a) is clearly audible to, or can be felt by, an individual; and

(b) annoys the individual.

In determining whether a noise annoys an individual and is unreasonably intrusive, regard must be had to Australian Standard 1055.2 - 1989 Acoustics - Description and Measurement of Environmental Noise Part 2 - Application to Specific Situations.

“annoyance" In determining what constitutes "annoyance", regard must be had to Australian Standard 1055.2 - 1989 Acoustics - Description and Measurement of Environmental Noise Part 2 Application to specific situations. .

"land" means land excluding waters and the atmosphere.

“licensed" means the person operating the facility mentioned in that condition holds a relevant licence under the Act to carry out an environmentally relevant activity mentioned in that condition.

"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 runoff, and any underground water, or any part thereof.

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

(i) for an element - any chemical containing the element; and

(ii) anything that has contained a regulated waste.

Regulated waste includes, filter cake sludges and residue, lime sludges and treatment tank sludges and residues.

Part 3 – Extraction and Screening – Lot 35 on RP207988 (Development Approval IPDE01187608)

Environmentally relevant activity/activities	Location(s)
ERA 16 (2) - Extracting, other than by dredging, in a year, the following quantity of material - (b) more than 100,000t but not more than 1,000,000t ERA 16 (3) - Screening, in a year, the following quantity of material (c) more than 1,000,000t	Lot 35 on RP207988 1901 Gatton Esk Road, BUARABA QLD 4311

The environmentally relevant activity(ies) conducted at the locations described above for this part must be conducted in accordance with the following site specific conditions.

Agency interest: General	
Condition number	**Condition**
G1	In carrying out the activities to which this approval relates, all reasonable and practicable measures must be taken to prevent or to minimise the likelihood of environmental harm being caused.
G2	The operator of the activities 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.
G3	From commencement of the activities 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 the activities that ate 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 contamination releases; (h) conducting environmental impact assessments; (i) staff training;

	(j) record keeping; and (k) periodic review of environmental performance and continual improvement.
G4	The site based management plan must not be implemented or amended in a way that contravenes any condition of this approval.
G5	Compliance with conditions of this approval must be audited within 3 months of the issue of the environmental authority and completed no later than 6 months after the issue of the environmental authority.
G6	The audit detailed in condition G5 must be conducted by a suitably qualified third party auditor, nominated by the holder of this approval no later than 6 months after the issue of the environmental authority.
G7	In relation to the audit required by condition G5, the holder of this approval must submit a final version of the auditor's report to the administering authority within 28 days of completing the audit.
G8	A suitably qualified third party auditor must certify in writing that the site based management plan has been prepared: (a) by a suitably qualified person with at least 5 years experience in the relevant area; (b) in a manner that is consistent with the requirements of condition G3; and (c) by having regard to, and appropriately applying, the relevant guidelines (being those applicable on a national, state or a regional basis) which the third party auditor considers should be applied in undertaking the site based management plan including relevant Environment Australia, ANZECC and the administering authority's guidelines where published.
G9	The total cost of the audit will be the responsibility of the holder of this approval.
G10	Record, compile and keep all monitoring results required by this approval and present this information to the administering authority or an authorised person when requested.
G11	All records required by this approval must be kept for 5 years.
G12	The person undertaking the activity to which this approval relates must contact 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.
G13	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 G12: (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.
G14	The person undertaking the activity to which this approval relates 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.
G15	A suitably qualified person(s) must conduct any monitoring required by this approval.
G16	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.
G17	The person undertaking the activity to which this approval relates must notify the administering authority in writing of any monitoring result which indicates a breach of any environmental authority condition within twenty-eight (28) days of completion of analysis.
G18	The written notification required by condition G17 must include: (a) the full analysis results (where applicable); (b) details of investigation or corrective actions taken; and (c) any subsequent analysis.
G19	An appropriate spill kit, personal protective equipment, relevant operator instructions and emergency procedure guides for the management of wastes and chemicals associated with the ERA must be kept at the site.
G20	Anyone operating under this approval must be trained in the use of the spill kit.
G21	The extractive activity must not take place outside of the areas marked as A1 and A2 on the attached map: RARP 2008/008280 (Refer: Part 3 - Appendix 1: Map 1)
G22	The person undertaking the activity to which this approval relates must not extract more than 110,000t in any 12 month period.

G23	The maximum area disturbed by the extractive activity and not under active rehabilitation at any one time must not exceed three (3) hectares.

Agency interest: Air

Condition number	Condition
A1	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.
A2	The release of dust or particulate matter resulting from the activities must not cause an environmental nuisance at any nuisance sensitive or commercial place.
A3	Subject to condition A4, the dust deposition rate and concentration of PM_{10} and $PM_{2.5}$ must not exceed the limits specified in 'Table- Dust deposition rate and concentration of particulate matter limits' for the contaminant when measured from a nuisance sensitive or commercial place in accordance with the measurement method specified in 'Table - Dust deposition rate and concentration of particulate matter limits'.

Table - Dust deposition rate and concentration of particulate matter limits

Contaminant	Measure	Limit	Measurement Method
Dust	Deposition rate	120 mg/m^2/day	Australian Standard AS 3580.10.1 of 2003 (or more recent editions
PM_{10}	Concentration	50 µg/m^3 averaged over 24 hours	Either of the following— (a) AS 3580.9.6 of 2003 (or more recent editions); or (b) AS 3580.9.7 of 2009 (or more recent editions).
$PM_{2.5}$	Concentration	25 µg/m^3 averaged over 24 hours	Either of the following— (a) AS 3580.9.10 of 2006 (or more recent editions); or (b) AS 3580.9.7 of 2009 (or more recent editions).

Note:

- Australian Standard AS 3580.9.6 of 2003 (or more recent editions) 'Ambient air — Particulate matter — Determination of suspended particulate matter PM_{10} high volume sampler with size-selective inlet — Gravimetric method'.
- Australian Standard AS 3580.9.10 of 2006 (or more recent editions) 'Ambient air — Particulate matter — Determination of suspended particulate matter $PM_{2.5}$ low-volume sampler — Gravimetric method'.

	• Australian Standard AS 3580.9.7 of 2009 (or more recent editions) 'Ambient air — Particulate matter — Determination of suspended particulate matter — Dichotomous sampler (PM_{10} arid $PM2_{2.5}$) — Gravimetric method'.
A4	If the Air Quality Sampling Manual, published by the Queensland Government from time to time for the purpose of measuring or monitoring compliance with *the Environmental Protection Act 1994* specifies an alternative sampling protocol for dust and PM_{10} or $PM_{2.5}$ — the concentration of the contaminant for the purposes of compliance with condition A3 may be determined using that protocol.
A5	The person undertaking the activity to which this approval relates must undertake monitoring for dust deposition and particulate matter, and using the protocols, mentioned in condition A3 if directed, and subject to any specification of the direction, by the administering authority. Note: Any dust or particulate monitoring should also include an 'upwind' sample to determine the contribution of other dust and particulate sources in the area.
A6	The results of monitoring undertaken in accordance with a direction under condition A5 must be submitted to the administering authority within 14 days after the monitoring is completed.
A7	*1 - Stockpiles* Stockpiles must be maintained in such a manner as to prevent the release of wind blown dust and particulate matter to the atmosphere. Such measures may include but are not limited to: (a) use of waterspray as required during winds likely to generate such releases; (b) use of dust-suppressant shielding; and (c) storage in bunkers. *2 - Trafficable areas* Trafficable areas must be maintained in such a manner as to prevent the release of wind blown dust and traffic generated dust to the atmosphere. Such measures may include but are not limited to: (a) keeping surfaces clean; (b) using of water sprays; (c) adopting and adhering to speed limits; and (d) using dust suppressants and wind breaks. *3 - Transport trucks* Measures to prevent spillage and windblown dust from trucks used for transporting material from the approved place must be employed. Such measures may include but are not limited to: (a) wetting down the load prior to transport; (b) having the entire load covered with a tarpaulin or similar material prior to departure; and (c) clearing of spillage from side rails, tail gates and draw bars of trucks prior to departure.
Agency interest: Land	

Condition number	Condition
L1	Contaminants must not be released to land..
L2	Spillage of all chemicals and fuels must be contained within an on-site containment system and controlled in a manner that prevents environmental harm. All flammable and combustible material storage must be designed, constructed and maintained in accordance with AS 1940 - Storage and Handling of Flammable and Combustible Liquids.
L3	The total volume of all chemicals, including petroleum product, that may be stored on the site for any period greater than 24 hours is 510L.
L4	The maintenance and cleaning of vehicles and any other equipment or plant must be carried out in areas where contaminants are contained within an on-site containment system and controlled in a manner that prevents environmental harm.
L5	Any spillage of wastes, contaminants or other materials must be cleaned up as quickly as practicable. Such spillages must not be cleaned up in a way that releases such wastes, contaminants or materials to any stormwater drainage system, roadside gutter or waters.
L6	As soon as practicable, but no later than 6 months after completing the extraction activities, disturbed areas of the site must be rehabilitated. This includes rehabilitating all disturbed areas such as slopes, borrow pits, stockpile storage, and sedimentation basins in a manner such that: (a) all disturbed land is reshaped to a stable landform and is not subject to slumping; (b) the potential for erosion of the site is reduced; (c) the surface drainage lines are re-established; (d) topsoil is reinstated on areas where revegetation is possible; (e) suitable vegetation species and density of cover are established which is consistent with the site's proposed future land use; (f) the likelihood of environmental nuisance being caused by release of dust is minimised; (g) the quality of stormwater, water and seepage released from the site is such that releases of contaminants do not cause environmental harm; (h) the water quality of any residual water bodies meets criteria for subsequent uses and does not cause environmental harm; and (i) infrastructure is removed from the site.
L7	Rehabilitation of disturbed areas must take place progressively as works are staged and new areas of extraction are commenced.
L8	Maintenance of rehabilitated areas must take place to ensure: (a) erosion control measures remain effective; (b) plants show growth; (c) any weed infestations are removed and prevented from reoccurring;

	(d) plants that have not taken, died or have become diseased are removed and replaced as soon as practical; (e) significant plant losses are examined for possible causes; (f) the rehabilitated land should be capable of withstanding normal disturbances such as fire or flood; and (g) rehabilitated ecosystems must be sustainable in the long-term.
L9	Complete an investigation into rehabilitation of disturbed areas and submit a site rehabilitation plan at least two (2) years before the closure of the site and its activities for review and comment by the administering authority. The rehabilitation management plan must, at a minimum: (a) map existing areas of rehabilitation; (b) develop design objectives for rehabilitation of disturbed areas and post quarry land uses across the site; (c) specify soil characteristics, soil analysis, soil separation for use on rehabilitation; (d) detail rehabilitation methods applied to areas; (e) contain landform design criteria including end of quarry design; (f) detail how landform design will be consistent with the proposed future use; (g) identify success criteria for areas and itemise revegetation criteria; (h) explain planned native vegetation rehabilitation areas and corridors; (i) identify at least a minimum of one (1) reference and three (3) rehabilitation sites to be used to develop rehabilitation success criteria; (j) describe rehabilitation indicators and the monitoring program to be used; (k) develop a contingency plan for rehabilitation maintenance or redesign; and (l) describe end of quarry landform design plan and post quarry land uses across the site.

Agency interest: Acoustic

Condition number	Condition
N1	Any noise (including vibration) from the activities must not cause an environmental nuisance at any nuisance sensitive place or commercial place.
N2	All noise from activities, other than blasting, must not exceed the levels specified in 'Table - Noise limits', at any nuisance sensitive or commercial place.

<table>
<tr><td></td><td>

Table - Noise Limits

<table>
<tr><td rowspan="2">Noise Level dB (A) measures as</td><td colspan="3">Monday to Saturday</td><td colspan="3">Sundays and Public Holidays</td></tr>
<tr><td>7am – 6pm</td><td>6pm – 10pm</td><td>10pm – 7am</td><td>9am – 6pm</td><td>6pm – 10pm</td><td>10pm – 9am</td></tr>
<tr><td></td><td colspan="6">Noise measured at a ‘Noise Sensitive Place’</td></tr>
<tr><td>LA10, adj, 10 mins</td><td>Bkg + 5</td><td>Bkg + 5</td><td>Bkg + 0</td><td>Bkg + 5</td><td>Bkg + 5</td><td>Bkg + 0</td></tr>
<tr><td>LA1, adj, 10 mins</td><td>Bkg + 10</td><td>Bkg + 10</td><td>Bkg + 5</td><td>Bkg + 10</td><td>Bkg + 10</td><td>Bkg + 5</td></tr>
<tr><td></td><td colspan="6">Noise measured at a ‘Commercial Place’</td></tr>
<tr><td>LA10, adj, 10 mins</td><td>Bkg + 10</td><td>Bkg + 10</td><td>Bkg + 5</td><td>Bkg + 10</td><td>Bkg + 10</td><td>Bkg + 5</td></tr>
<tr><td>LA1, adj, 10 mins</td><td>Bkg + 15</td><td>Bkg + 15</td><td>Bkg + 10</td><td>Bkg + 15</td><td>Bkg + 15</td><td>Bkg + 10</td></tr>
</table>

Note – Bkg – Background noise level

</td></tr>
<tr><td>N3</td><td>When requested by the administering authority; noise monitoring must be undertaken to investigate any complaint of noise nuisance (excluding blasting), and the results notified within 14 days to the administering authority. Monitoring must include:
(a) background noise level;
(b) LA10, Adj, 10 mins;
(c) LA1, adj, 10 mins;
(d) LAmax, adj, T;
(e) the level and frequency of occurrence of impulsive or tonal noise;
(f) atmospheric conditions including wind speed and direction;
(g) effects due to extraneous factors such as traffic noise; and
(h) location, date and time of recording.</td></tr>
<tr><td>N4</td><td>The method of measurement and reporting of noise levels must comply with the latest edition of the Department of Environment and Resource Management's Noise Measurement Manual.</td></tr>
</table>

<table>
<tr><td>N5</td><td>Blasting must not be carried out other than during the times specified in 'Table - Vibration limits' at a nuisance sensitive place.

Table - Vibration Limits
<table><tr><th>Monday to Friday 9am – 3pm
Saturday 9am – 1pm</th><th>Sundays and Public Holidays</th></tr><tr><td>(a) Ground-borne vibration must not exceed a peak particle velocity of 5mm per second for nine out of any ten consecutive blasts initiated, regardless of the interval between blasts; and
(b) Ground-borne vibration must not exceed a peak particle velocity of 10mm per second for any blast</td><td>No blasting to occur</td></tr></table></td></tr>
<tr><td>N6</td><td>Vibration emitted from activities must not exceed the levels specified in 'Table - Vibration limits' at a nuisance sensitive place.</td></tr>
<tr><td>N7</td><td>For vibration monitoring the ground-borne vibration transducer (or array) must be attached to a mass of at least thirty (30) kg to ensure good coupling with the ground where the blast site and the measurement site cannot be shown to be on the same underlying strata. The mass must be buried so that its uppermost surface is at the same level as the ground surface.</td></tr>
<tr><td>N8</td><td>The ground-borne vibration transducer (or array) must be placed at a distance of at least the longest dimension of the foundations of a noise-affected building or structure away from such building or structure and between that building or structure and the site of the blasting.</td></tr>
<tr><td>N9</td><td>The airblast overpressure must not exceed:
(a) 115dB(linear) peak for nine out of any 10 consecutive blasts initiated, regardless of the interval between blasts; and.
(b) 120dB(linear) peak for any blast.</td></tr>
<tr><td>N10</td><td>Measurement of airblast pressure must be taken at an appropriate location that is exposed to the direction of blasting and at least 4m from any noise-affected building or structure or within the boundary of a noise sensitive place, at a position between 1.2m and 1.5m above the ground. The method of measurement of the noise from blasting must be measured using noise measurement equipment with a lower limiting frequency of 2Hz (-3dB response point of the measurement system) and a detector onset time of not greater than 100 microseconds as assessed in accordance with the Australian Standard AS1259.1 clauses 8.5 and 10.4.</td></tr>
<tr><td>N11</td><td>When requested by the administering authority, airblast overpressure and ground vibration monitoring must be undertaken to investigate any complaint of vibration or nuisance noise associated with blasting, and the results notified within 14 days to the administering authority. Monitoring must include but not be limited to:
(a) maximum instantaneous charge (MIC) in kg;
(b) location of the blast within the site (including which bench level);
(c) airblast overpressure level, dB (linear) peak;
(d) peak particle velocity (mms-1)
(e) location, date and time of recording; .</td></tr>
</table>

	(f) the level and frequency of occurrence of impulsive or tonal noise; (g) meteorological conditions (including temperature, relative humidity, temperature gradient, cloud cover, wind speed and direction); (h) distance/s from the blast site to noise-affected building's, structure/s or the boundary of any noise-sensitive place; and (i) effects due to other extraneous factors.
Agency interest: Waste	
Condition number	**Condition**
W1	From commencement of an ERA to which this approval relates, a waste management program must be implemented. The Waste Management Plan must address at least the following matters: (a) the types and amounts of waste generated by the ERA; (b) how the waste will be dealt with, including a description of the types and amounts of waste that will be dealt with under each of the waste management practices mentioned in the waste management hierarchy (section 10 of the *Environmental Protection (Waste Management) Policy 2000*); (c) procedures for identifying and implementing opportunities to improve the waste management practices employed e.g. opportunities for beneficial reuse; (d) procedures for dealing with accidents, spills and other incidents that may impact on the waste management; (e) details of any accredited management system employed, or planned to be employed, to deal with the waste; (f) how often the performance of the waste management practices will be assessed; and (g) the indicators or other criteria on which the performance of the waste management practices will be assessed.
Agency interest: Water	
Condition number	**Condition**
WA1	Suitable banks or diversion drains must be installed and maintained so that all stormwater falling up gradient from the disturbed areas, including extraction and storage areas, is diverted away from entering any ponds or other structures used for the storage or treatment of contaminants or waste.
WA2	All waters flowing over disturbed areas including but not limited to the extraction area and stockpiling areas, must be diverted to an onsite sediment basin.
WA3	The person undertaking the activity to which this approval relates must develop and implement a Stormwater Management Plan (SMP). The SMP must include but not be limited to: (a) reuse, treatment and disposal of contaminated stormwater;

<table>
<tr><td></td><td>(b) prevention of incident stormwater and stormwater runoff from contacting wastes, contaminants or disturbed areas;
(c) diversion of upstream runoff away from areas containing wastes, contaminants or exposed or disturbed earthen surfaces;
(d) minimisation of the size of contaminated and exposed or disturbed earthen surfaces areas;
(e) installation of silt and rubbish traps, erosion protection measures, sedimentation basins and stormwater diversion drains; and
(f) ensuring final treatment ponds are of high enough quality to meet stormwater release limits.</td></tr>
<tr><td>WA4</td><td>Minimum design specifications for on site sediment control measures are as follows:
(a) the minimum size of any sediment basin must be sufficient to contain the contaminated runoff expected from a 24 hour storm with an average recurrence interval of 1 in 10 years;
(b) water retaining structures must be designed to prevent the influx of surface water from adjacent water courses from a 24 hour storm with an average recurrence interval of 1 in 10 years;
(c) drainage structures must be sufficient to convey the runoff from a 24 hour storm with an average recurrence interval of 1 in 10 years;
(d) in the event of site flooding, flow paths must be designed to minimise re-suspension of fines or slimes;
(e) any release point must be constructed in such a way as to prevent erosion and scouring of the area to which it discharges.</td></tr>
<tr><td>WA5</td><td>All sedimentation basins used for the storage or treatment of contaminants or wastes at or on the authorised place must be constructed, installed and maintained:
(a) so as to minimise the likelihood of any release of effluent through the bed or banks of the basin to any waters (including ground water);
(b) so that a freeboard of not less than 0.5 metres is maintained and recorded at all times, except in emergencies; and
(c) ensure the stability of the basins' construction.</td></tr>
<tr><td>WA6</td><td>Contaminants other than settled/treated stormwater runoff waters must not be released from the site to surface waters or the bed or banks of surface waters.</td></tr>
<tr><td>WA7</td><td>The person undertaking the activity to which this approval relates must undertake monitoring of the quality characteristics stated in 'Table — Water monitoring program' at the locations described.
Table – Water Monitoring Program
<table>
<tr><th>Monitoring Point</th><th>Quality Characteristic</th><th>Units</th><th>Frequency</th></tr>
<tr><td rowspan="3">MP1 — Gatton Gully at a location more than 50m of the most upstream point of the extraction area</td><td>pH</td><td>pH</td><td rowspan="3">One sample must be collected during each release, within the first 12 hours of the release commencing.</td></tr>
<tr><td>Dissolved oxygen</td><td>mg/L</td></tr>
<tr><td>Suspended solids</td><td>mg/L</td></tr>
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<table>
<tr><td></td><td>
<table>
<tr><td rowspan="2"></td><td>Turbidity</td><td>NTU</td><td rowspan="2">Then if the release continues, samples must be collected daily for a week, then weekly thereafter</td></tr>
<tr><td>Electrical Conductivity</td><td>µs/cm</td></tr>
<tr><td rowspan="5">MP2 — Gatton Gully at a location more than 50m of the most downstream point of the extraction area</td><td>pH</td><td>pH</td><td rowspan="5">One sample must be collected during each release, within the first 12 hours of the release commencing. Then if the release continues, samples must be collected daily for a week, then weekly thereafter</td></tr>
<tr><td>Dissolved oxygen</td><td>mg/L</td></tr>
<tr><td>Suspended solids</td><td>mg/L</td></tr>
<tr><td>Turbidity</td><td>NTU</td></tr>
<tr><td>Electrical Conductivity</td><td>µs/cm</td></tr>
</table>
Note: Refer Appendix: Map 2 – Location of Proposed Spillway
</td></tr>
<tr><td>WA8</td><td>Should the water monitoring described in 'Table — Water monitoring program' indicate that there is an increase of greater than 10% of the quality characteristics at the downstream monitoring point over the upstream sampling point, then the person undertaking the activity to which this approval relates must undertake a Water Contaminant Investigation Program (WCIP) within 14 days. The WCIP must incorporate but not be limited to the following:
(a) ensure all onsite stormwater diversion measures are intact;
(b) ensure the integrity of any onsite bunding;
(c) investigate possible points of discharge of stormwater from the extractive area;
(d) investigate the remaining capacity of sediment basin and determine if removal of sediment is necessary;
(e) determine the remaining freeboard of the sediment basin; and
(f) investigate stockpiles of material for release to stormwaters.</td></tr>
<tr><td>WA9</td><td>A report addressing the items identified in condition WA8 and the outcome and actions taken as a result of the WCIP must be supplied to the administering authority within 7 days of its completion.</td></tr>
<tr><td>WA10</td><td>The only material that is to be used for dust suppression within the site is settled/treated water from the sedimentation basin or any other onsite dam.</td></tr>
</table>

Definitions for Part 3

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.

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

"approval" means 'notice of development application decision' or 'notice of concurrence agency response' under the *Integrated Planning Act 1997.*

"background noise level" means either:

- LA90, 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, or
- LAbg, T being the arithmetic average of the minimum A-weighted sound pressure level readings measured in the absence of the noise under investigation during a representative time period of not less than 15 minutes, using Fast response.

"commercial place" means a place, other than a nuisance sensitive place, used as an. office or for business or commercial purposes.

"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.

"Department of Environment and Resource Management" means the department or agency (whatever called) administering the *Coastal Protection and Management Act 1995* or the *Environmental Protection Act 1994.*

"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.

“LA10, 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.

“LA1, 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.

“LAmax, adj, T” means the average maximum A-weighted sound pressure level, adjusted for noise character and measured over any 10 minute period, using Fast Response.

"land" means land excluding waters and the atmosphere.

"mg/L" means milligrams per litre.

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

"nuisance sensitive place" includes –

- a dwelling 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.

"PM_{10}" means particles in the air environment with an equivalent aerodynamic diameter of not more than 10 microns

"$PM_{2.5}$" means particles in the air environment with an equivalent aerodynamic diameter of not more than 2.5 microns

"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.

"quarry material" means material on State coastal land, other than a mineral within the meaning of any Act relating to mining. Material includes for example stone, gravel, sand, rock, clay, mud, silt and soil, unless it is removed from a culvert, stormwater drain or other drainage infrastructure as Waste material.

"regulated waste" means non-domestic waste mentioned in Schedule 7 of the *Environmental Protection Regulation 2008* (whether or not it has been treated or immobilised), and includes –

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

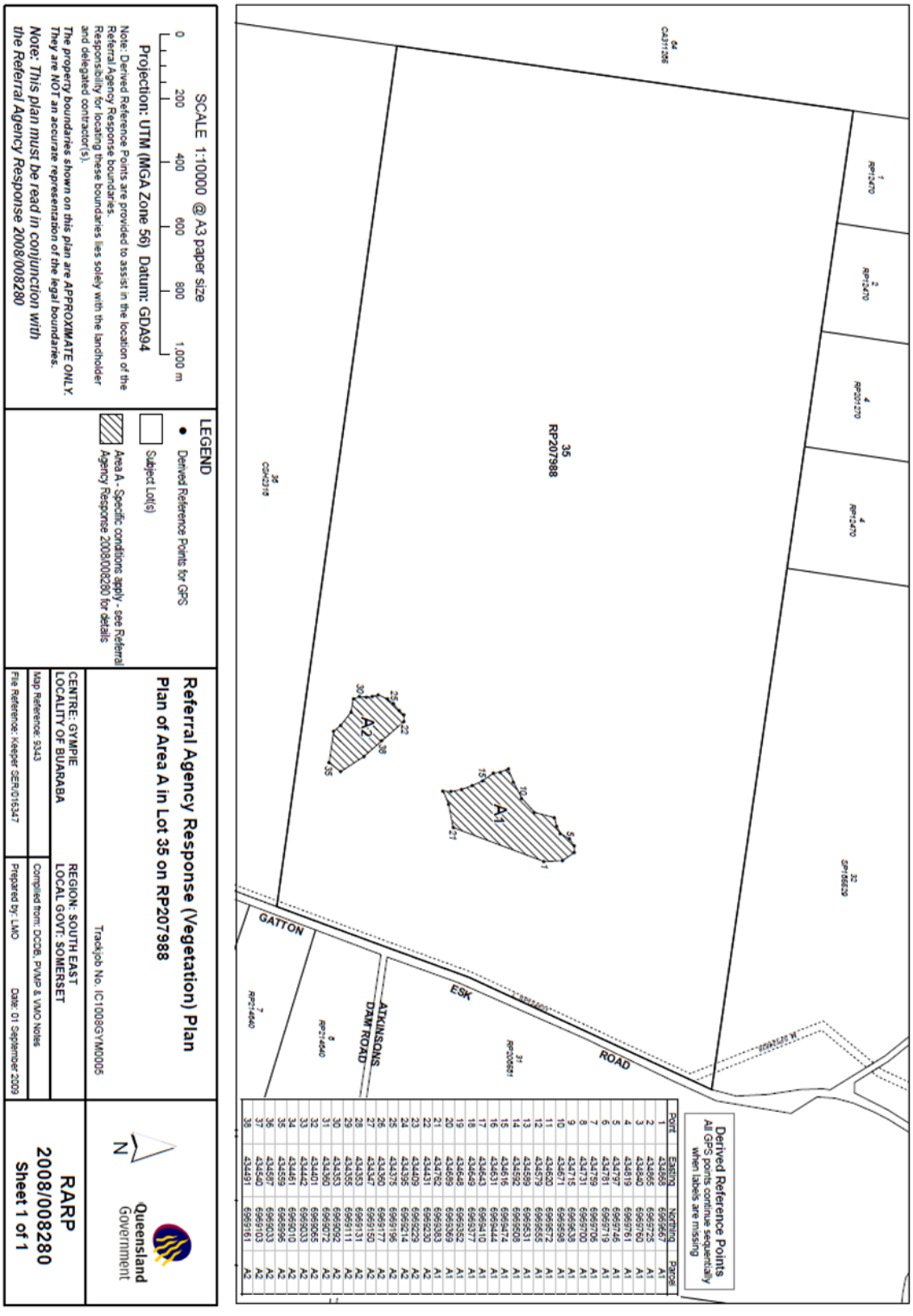
"site" means land or tidal waters on or in which it is proposed to carry out the development approved under this environmental authority.

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

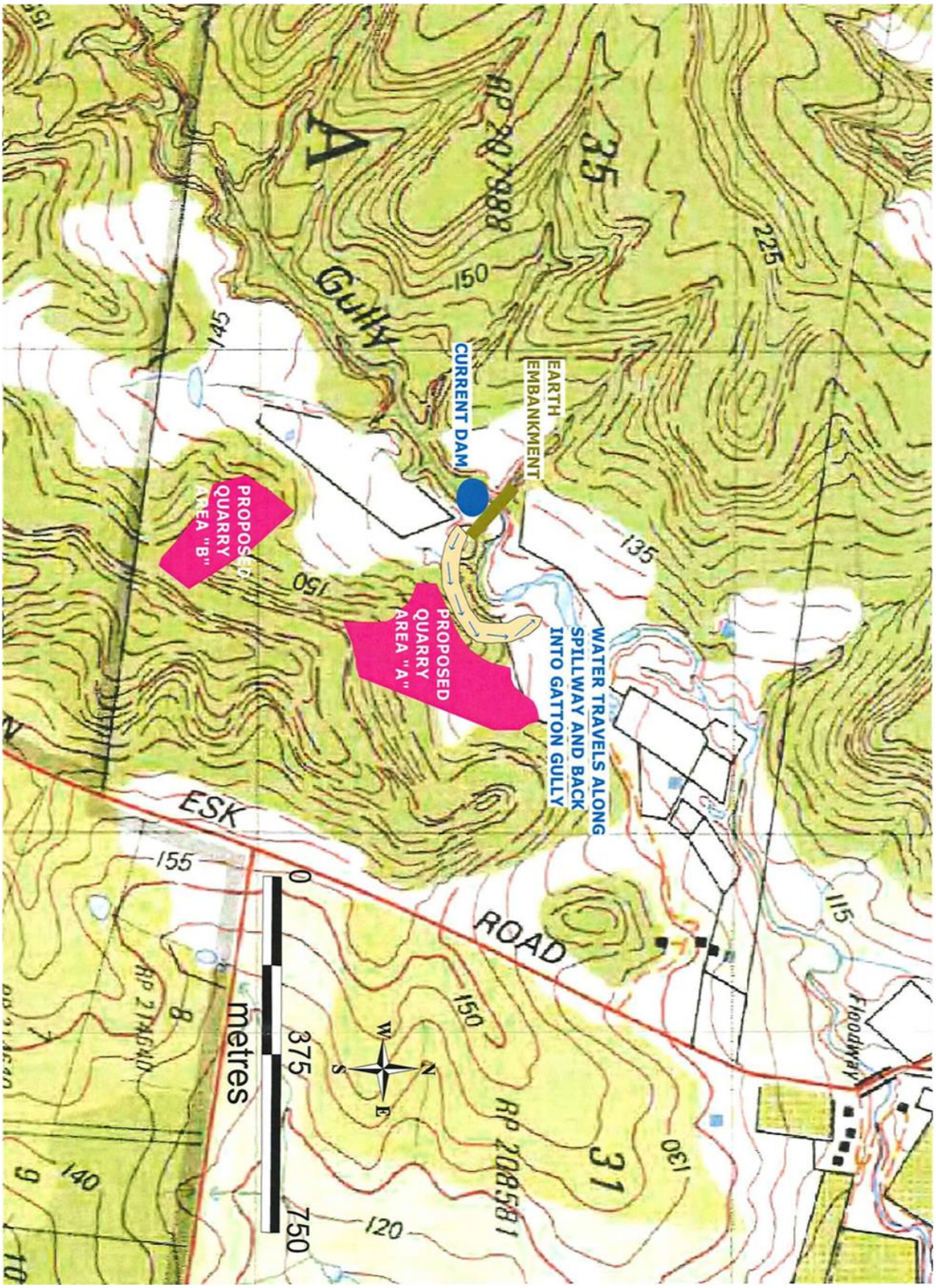
- in a natural channel; whether artificially improved or not; or
- in an artificial channel that has changed the course of the watercourse.

"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.

Part 3 - Appendix 1: Map 1



Part 3 - Appendix 2: Map 2 - Location of Proposed Spillway



Part 4 – Extraction and Screening – Lot 36 on CSH2318

Environmentally relevant activity/activities	Location(s)
ERA 16-2(a): Extracting, other than by dredging, in a year, the following quantity of material 5,000t to 100,000t	Lot 36 on CSH2318

The environmentally relevant activity(ies) conducted at the locations described above for this part must be conducted in accordance with the following site specific conditions.

Agency interest: General	
Condition number	**Condition**
G1	A copy of this environmental authority must be kept in a location readily accessible to the personnel that are carrying out those environmentally relevant activities.
G2	Any records or documents that are required to be kept by a condition of this environmental authority must be kept where practicable to do so at the premises to which this environmental authority relates for, except as otherwise provided, a period of at least five years and be available for examination by an authorised person. The record retention requirements of this condition will be satisfied if any daily and weekly records are kept for a period of at least three (3) years and these records are then kept in the form of annual summaries after that period.
G3	In carrying out an ERA to which this environmental authority relates, all reasonable and practicable measures must be taken to prevent and / or to minimise the likelihood of environmental harm being caused.
G4	The operator of an ERA to which this environmental authority relates must: a) install all measures, plant and equipment necessary to ensure compliance with the conditions of this environmental authority; 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. In this condition, "plant and equipment" includes: any plant and equipment used to prevent and/or minimise the likelihood of environmental harm being caused; any devices and structures to contain foreseeable escapes of contaminants and waste; any vehicles used to transport waste; any device or structure used to store, handle, treat or dispose of waste; any monitoring equipment and associated alarms; and any backup systems that act in the event of failure of a primary system.
G5	All petroleum product storage's must be designed, constructed and maintained in accordance with AS 1940 - Storage and Handling of Flammable and Combustible Liquids.
G6	From commencement of an ERA to which this environmental authority 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 ERA's 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.
G7	This condition applies to the site based management plan required by condition (G6). A suitably qualified third party auditor must certify in writing that the site base management plan has been prepared: a) by a suitably qualified person with at least 5 years' experience in the relevant area; b) in a manner that is consistent with the requirements of condition (G6); and c) by having regard to, and appropriately applying, the relevant guidelines (being those applicable on a national, state or a regional basis) which the third party auditor considers should be applied in undertaking the site based management plan including relevant Environment Australia, ANZECC and EPA guidelines where published.
G8	The site based management plan must not be implemented or amended in a way that contravenes any condition of this environmental authority.
G9	A record of all 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 as listed in Schedule 1 of the Environmental Protection (Waste Management) Regulation 2000 are not covered by this condition. Trackable wastes have similar recording requirements to this condition in accordance with a waste tracking system established under the above Regulation.
G10	All vehicles used to transport regulated waste must be registered with the administering authority.
G11	As soon as becoming aware of any emergency or incident which results in the release of contaminants not in accordance, or reasonably expected to be not in accordance with the conditions of this environmental authority, you must notify the administering authority of the release by electronic mail or facsimile.
G12	Not more than 14 days following the initial notification of an emergency or incident, written notice must be provided to the administering authority of any advice provided in accordance with condition (G11). The written notice must include at least the following information:

	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.
G13	An appropriate spill kit, personal protective equipment and relevant operator instructions/emergency procedure guides for the management of wastes and chemicals associated with the ERA must be kept at the site.
G14	Anyone operating under this environmental authority must be trained in the use of the spill kit.
G15	A competent person(s) must conduct any monitoring required by this environmental authority.
G16	All instruments, equipment and measuring devices used for measuring or monitoring in accordance with any condition of this environmental authority must be calibrated and appropriately operated and maintained.
G17	The registered operator of this environmental authority must notify the administering authority in writing of any monitoring result which indicates an exceedance of any environmental authority limit within twenty-eight (28) days of completion of analysis.
G18	The written notification required by condition (G17) above must include: a) the full analysis results; b) details of investigation or corrective actions taken; and c) any subsequent analysis.
Agency interest: Air	
Condition number	**Condition**
A1	The release of dust and/or particulate matter resulting from the ERA must not cause an environmental nuisance at any nuisance sensitive or commercial place.
A2	Dust and particulate matter must not exceed the following levels when measured at any nuisance sensitive or commercial place: a) Dust deposition of 120 milligrams per square metre per day, when monitored in accordance with Australian Standard AS 3580.10.1 of 2003 (or more recent editions); OR b) A concentration of particulate matter with an aerodynamic diameter of less than 10 micrometre (µm) (PM10) suspended in the atmosphere of 150 micrograms per cubic metre over a 24 hour averaging time, at a nuisance sensitive or commercial place downwind of the site, when monitored in accordance with: - Australian Standard AS 3580.9.6 of 2003 (or more recent editions) 'Ambient air - Particulate matter - Determination of suspended particulate PM10 high-volume sampler with size-selective inlet -Gravimetric method; and

	- Australian Standard AS3580.1.1 of 2007 (or more recent editions) 'Methods for sampling and analysis of Ambient air - Guide to siting air monitoring equipment'; or - Any alternative method of monitoring PM10 which may be permitted by the 'Air Quality Sampling Manual' as published from time to time by the administering authority.
A3	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) (PM10) suspended in the atmosphere over a 24hr averaging time.
A4	Stockpiles must be maintained using all reasonable and practicable measures necessary to minimise the release of wind blown dust and particulate matter to the atmosphere. Reasonable and practicable measures may include but are not limited to: a) use of waterspray as required during winds likely to generate such releases; b) use of dust-suppressant shielding; and c) storage in bunkers.
A5	Trafficable areas must be maintained using all reasonable and practicable measures necessary to minimise the release of wind blown dust and traffic generated dust to the atmosphere. Reasonable and practicable measures may include but are not limited to: a) keeping surfaces clean; b) using of water sprays; c) adopting and adhering to speed limits; and d) using dust suppressants and wind breaks.
A6	The registered operator of this environmental authority must take all reasonable and practicable measures necessary to prevent spillage and/or loss of particulate matter and windblown dust from trucks used for transporting aggregates from the authorised place. Reasonable and practicable measures may include but are not limited to: a) wetting down the load prior to transport; b) having the entire load covered with a tarpaulin or similar material prior to departure from the authorised place; and c) clearing of spillage from side rails, tail gates and draw bars of trucks prior to departure from the authorised place.
Agency interest: Land	
Condition number	**Condition**
L1	Contaminants must not be released to land.
L2	The registered operator of this environmental authority must rehabilitate the authorised place 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.
L3	Rehabilitation of disturbed areas must take place progressively as works are staged and new areas of extraction are commenced within the authorised place.
L4	For the purpose of demonstrating compliance with conditions L2 and L3, the registered operator of this environmental authority must prepare and progressively implement a Site Rehabilitation Program addressing the following matters: a) the final land use of the site in accordance with the local town plan; b) the proposed shaping of the final landform after rehabilitation including an assessment of the stability of all works such as buffer distances and batter slopes; c) proposed nature of materials utilised and techniques employed for any proposed backfilling of extracted areas such as filling, compaction, topsoiling, dewatering, overburden return and any other soil amelioration leading to vegetation establishment; d) rehabilitation measures such as irrigation, weed control, use of local native plant/seedling selections, site security and any other remedial works during the rehabilitation works; e) protection of the final landform and newly established vegetation and seedlings from erosion susceptibility; f) prevention or minimisation of windblown dust from any material stockpiles, remnant raw material stockpiles and rehabilitation earthworks; g) prevention of the release of contaminated stormwater runoff from raw material stockpiles and disturbed areas to any waters or land without proper treatment required to protect the environment; h) the progression rehabilitation of disturbed areas as works are staged and new areas of extraction are commenced; i) an implementation program and timetable for all works proposed; and j) keeping of appropriate records of rehabilitation measures implemented including taking of photographs demonstrative of rehabilitation achieved and the submission of an annual rehabilitation progress report to the administering authority with each annual return detailing the outcomes of the rehabilitation program in the preceding twelve (12) months.
L5	The registered operator of this environmental authority must not release, or permit the release of, any construction or demolition waste to any void or pond on the authorised place.
L6	The only material to be used for the filling of voids and ponds must be clean rock, clay, sand or soil (excluding any contaminated rock, clay, sand or soil).
Agency interest: Noise	
Condition number	**Condition**
N1	Noise from the ERA must not cause an environmental nuisance at any nuisance sensitive place or commercial place.

<table>
<tr><td>N2</td><td>When requested by the administering authority, noise monitoring must be undertaken to investigate any complaint of noise nuisance, and the results notified within 14 days to the administering authority. Monitoring must include:
a) airbiast overpressure (dB (Lin)Peak);
b) $L_{A\ 10,\ adj,\ 10\ mins}$
c) Background Noise level (Bkg)
d) the level and frequency of occurrence of impulsive or tonal noise ($L_{A1,\ adj,10\ mins}$)
e) atmospheric conditions including wind speed and direction;
f) effects due to extraneous factors such as traffic noise ($L_{A,\ max\ adj,\ T}$); and
g) location, date and time of recording.
Note: "$L_{A\ 10,\ adj,\ 10\ mins}$" 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.
"$L_{A\ 1,\ adj,\ 10\ mins}$" means the A-weighted sound pressure level, (adjusted for tonal character and impulsiveness of the sound) exceeded for 1% of any 10 minute measurement period, using Fast response.
"$L_{A,\ max\ adj;\ T}$" means the average maximum A-weighted sound pressure level, adjusted for noise character and measured over any 10 minute period, using Fast response.</td></tr>
<tr><td>N3</td><td>In the event of a complaint made to the administering authority about noise that is unreasonable and/or intrusive, and that the administering authority considers is not frivolous or vexatious, then the emission of noise from the approved place, except for blasting noise, must not result in levels greater than those specified in Table - Noise Limits.
Table - Noise Limits
<table>
<tr><th rowspan="2">Noise level dB(A) measured as</th><th colspan="3">Monday - Saturday</th><th colspan="3">Sundays and public holidays</th></tr>
<tr><th>7am-6pm</th><th>6pm-10pm</th><th>10pm-7am</th><th>9am-6pm</th><th>6pm-10pm</th><th>10pm-9am</th></tr>
<tr><td></td><td colspan="6">Noise measured at a ‘noise sensitive place’</td></tr>
<tr><td>$L_{A10,\ adj,\ 10\ mins}$</td><td>Bkg + 5</td><td>Bkg + 0</td><td>Bkg + 0</td><td>Bkg + 0</td><td>Bkg + 0</td><td>Bkg + 0</td></tr>
<tr><td>$L_{A1,\ adj,\ 10\ mins}$</td><td>Bkg + 10</td><td>Bkg + 5</td><td>Bkg + 5</td><td>Bkg + 0</td><td>Bkg + 0</td><td>Bkg + 0</td></tr>
<tr><td></td><td colspan="6">Noise measured at a ‘commercial place’</td></tr>
<tr><td>$L_{A10,\ adj,\ 10\ mins}$</td><td>Bkg + 10</td><td>Bkg + 5</td><td>Bkg + 5</td><td>Bkg + 0</td><td>Bkg + 0</td><td>Bkg + 0</td></tr>
<tr><td>$L_{A1,\ adj,\ 10\ mins}$</td><td>Bkg + 15</td><td>Bkg + 10</td><td>Bkg + 10</td><td>Bkg + 0</td><td>Bkg + 0</td><td>Bkg + 0</td></tr>
</table>
Where “Bkg" means background sound pressure level measured in accordance with the latest edition of the Administering Authority’s Noise Measurement Manual.
* Table – Noise Limits does not purport to set operating hours for the ERA.</td></tr>
<tr><td>N4</td><td>All blasting must be carried out in a proper manner by a competent person in accordance with best practice environmental management to minimise the likelihood of adverse effects being caused by the impact of airblast overpressure and ground borne vibrations on sensitive premises and people living in or using the surrounding area.</td></tr>
<tr><td>N5</td><td>Noise from blasting operations must not exceed an airblast overpressure level of 115 dB (linear peak) for more than four (4) blasts out of any five (5) consecutive blasts.</td></tr>
<tr><td>N6</td><td>Noise from blasting must be measured using noise measurement equipment with a lower limiting frequency of 2 Hz [-3 dB response point of the measurement system] and a detector</td></tr>
</table>

<table>
<tr><td></td><td>onset time of not greater than 100 µsec as assessed in accordance with AS 1259 'Sound Level Meters ' clauses 8.5 and 10.4.4.</td></tr>
<tr><td>N7</td><td>Ground-borne vibration caused by blasting operations must not exceed a peak particle velocity as specified in Table - Vibration Limits at a Sensitive Place.
Table - Vibration Limits at a Sensitive Place
<table>
<tr><th>Location</th><th>Monday to Friday 9am-3pm; Saturday 9am-1pm</th><th>Sundays and public holidays</th></tr>
<tr><td>Houses and low rise residential buildings and commercial buildings not included below.</td><td>a) twenty-five (25) millimetres per second for vibrations greater than 35Hz; or
b) ten (10) millimetres per second for vibrations less than 35Hz;
c) the above values must not be exceeded for more than four (4) blasts out of any five (5) consecutive blasts.</td><td>No blasting to occur</td></tr>
<tr><td>Commercial and industrial buildings or structures of reinforced concrete or steel construction.</td><td>a) twenty-five (25) millimetres per second for vibrations greater than 35Hz; or
b) ten (10) millimetres per second for vibrations less than 35Hz;
c) the above values must not be exceeded for more than four (4) blasts out of any five (5) consecutive blasts.</td><td>No blasting to occur</td></tr>
</table></td></tr>
<tr><td>N8</td><td>The ground vibration transducer [or array] must be attached to a mass of at least 30 kg to ensure good coupling with the ground where the blast site and measurement site cannot be shown to be on the same underlying strata. The mass shall be buried so that its upper most surface is at the same level as the ground surface.</td></tr>
<tr><td>N9</td><td>The ground vibration transducer [or array] must be placed at least the greatest dimension of the foundations of the building or structure away from such building or structure between the building or structure and the site of the blasting.</td></tr>
<tr><td>N10</td><td>For the purposes of investigating complaint of noise nuisance and for checking compliance with conditions N5, N6, and N7, monitoring of the noise levels and ground-borne vibration from the environmentally relevant activities must be undertaken for at least the following descriptors, characteristics and conditions:
Blasting - Noise
a) airblast overpressure level (dB linear peak.) (for blast monitoring only);
b) atmospheric conditions including temperature, relative humidity, wind speed and direction; and
c) location, date and time of recording.

Ground-borne Vibration from Blasting
a) peak particle velocity (for ground-borne vibration monitoring only).</td></tr>
</table>

N11	Noise monitoring must be undertaken to investigate any complaint of noise and ground-borne vibration from the boundary of the complainants place or from the location nominated by the administering authority.
N12	Records must be kept of the results of all monitoring of noise levels (including blasting noise and ground vibration levels) and other information required to be recorded in conjunction with such monitoring for a period of at least three (3) years.
N13	The method of measurement and reporting of noise levels must comply with the Department of Environment and Heritage Noise Measurement Manual, second edition, March 1995, or more recent additions or supplements to that document as become available.
N14	The measurement and reporting of noise levels and peak particle velocities must be undertaken by a person or body possessing appropriate experience and qualifications to perform the required measurements.
Agency interest: Social	
Condition number	**Condition**
S1	The operator of the ERA must record the following details for all complaints received and provide this information to the administering authority on request: a) time, date, name and contact details of the complainant; b) reasons for the complaint; c) any investigations undertaken; d) conclusions formed; and e) any actions taken.
Agency interest: Water	
Condition number	**Condition**
WA1	There must be no release of contaminants to groundwater.
WA2	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.
WA3	Erosion protection and sediment control measures must be implemented and maintained to minimise erosion and release of sediment.
WA4	The size of any sedimentation dam must be sufficient to contain the run-off expected from a 24 hour storm with an average recurrence interval of 1 in 10 years.
WA5	Diversion drains and/or contour banks must be designed, installed and maintained to minimise the potential for stormwater runoff to enter areas disturbed by the ERA.
WA6	Prepare a Stormwater Management Plan to include: a) the location and design capacity of sediment dam(s) and description of the site drainage system; b) details of how the sediment dam(s) will be managed to prevent uncontrolled overflow of turbid water during storm events; and c) details of how the site will be managed to minimise erosion.

Agency interest: Waste	
Condition number	**Condition**
W1	All vehicles used to transport regulated waste must be registered with the administering authority.
Agency interest: Maps	
Condition number	**Condition**
M1	The following plans have been approved for this environmental authority: a) Part 4: Figure 1 - SPOT5 Imagery (Winter2006) Quarry Location on Site b) Part 4: Figure 2 - Site Layout

Definitions for Part 5

Key terms and/or phrases used in this document are defined in this section. Where a term is not defined, the definition in the *Environmental Protection Act 1994*, its regulations or environmental protection policies must be used. If a word remains undefined it has its ordinary meaning.

"Act" means the *Environmental Protection Act 1994*.

"administering authority" means the Department of Environment and Heritage Protection or its successor.

"annual return" means the return required by the annual notice (under section 316 of the Environment Protection Act 1994) for the section 73F registration certificate that applies to the environmental authority

"artificial watercourse" means an artificial channel, lake or other body of water. Artificial watercourse includes:

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

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

"background noise level" means either:

- $L_{A90, T}$ being the A-weighted sound pressure level exceeded for ninety percent (90%) of the time period of not less than 15 minutes measured in the absence of the noise under investigation, using Fast response, or
- $L_{Abg, T}$ being the arithmetic average of the minimum A-weighted sound pressure level readings measured in the absence of the noise under investigation during a representative 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.

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

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

"events" means uncontrolled or irregular release events.

"land" means land excluding waters and the atmosphere.

"$L_{Amax\ adj,\ T}$" means the average maximum A-weighted sound pressure level, adjusted for noise character and measured over a time period of not less than 15 minutes, using Fast response.

"noise sensitive place" means:

(i) a dwelling, residential allotment, mobile home or caravan park, residential marina or other residential premises; or

(ii) a motel, hotel or hostel; or

(iii) a kindergarten, school, university or other educational institution; or

(iv) a medical centre or hospital; or

(v) a protected area under the *Nature Conservation Act 1992*, the *Marine Parks Act 1992* or a World ' Heritage Area; or

(vi) a public thoroughfare, park or gardens; or

(vii) 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.

"protected area" means:

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

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

(i) for an element - any chemical compound containing the element; and

(ii) anything that has contained a regulated waste; and

(iii) regulated waste that has been treated or immobilised.

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

"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.

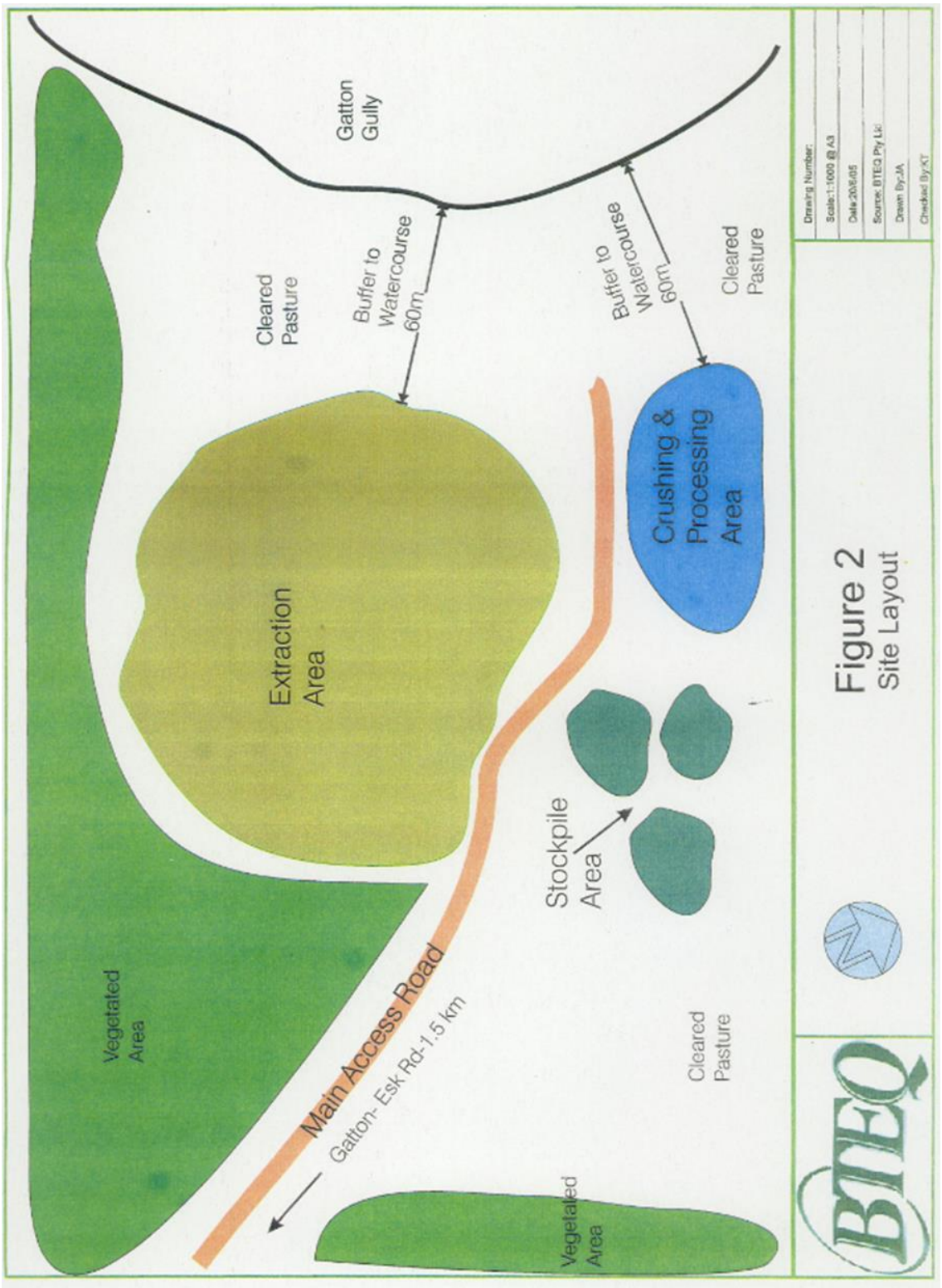
"works" or **"operation"** means the development approved under this environmental authority.

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

Part 4: Figure 1 - SPOT5 Imagery (Winter2006) Quarry Location on Site



Part 4: Figure 2 - Site Layout



END OF ENVIRONMENTAL AUITHORITY