Permit

Environmental Protection Act 1994

Environmental authority EPPR00340913

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

Environmental authority number: EPPR00340913

Environmental authority takes effect on 16 May 2019

Environmental authority holder(s)

Name(s)	Registered address
WITHCOTT QUARRY PTY LTD	Unit 2 33 Sanders St UPPER MOUNT GRAVATT QLD 4122 Australia

Environmentally relevant activity and location details

Environmentally relevant activity/activities	Location(s)
Prescribed ERA, ERA 16 - Extraction and Screening, 2: Extracting, other than by dredging, in a year, the following quantity of material, (b) more than 100,000t but not more than 1,000,000t	Lot 4/RP186965
Prescribed ERA, ERA 16 - Extraction and Screening, 2: Extracting, other than by dredging, in a year, the following quantity of material, (b) more than 100,000t but not more than 1,000,000t	Lot 14/SP186714
Prescribed ERA, ERA 16 - Extraction and Screening, 3: Screening, in a year, the following quantity of material, (b) more than 100,000t but not more than 1,000,000t	Lot 4/RP186965
Prescribed ERA, ERA 16 - Extraction and Screening, 3: Screening, in a year, the following quantity of material, (b) more than 100,000t but not more than 1,000,000t	Lot 14/SP186714

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.

ABN 46 640 294 485

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: 16 May 2019

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

SCHEDULE A – GENERAL CONDITIONS	
Condition number	**Condition**
A1	The registered operator of this development approval 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; iii. and operate such plant and equipment in a proper and efficient manner.
A2	**Display of Development Approval** A copy of this development approval must be kept in a location readily accessible to personnel carrying out the activity.
A3	**Records** Any record or document required to be kept by a condition of this development approval must be kept at the approved 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.
A4	**Alterations** No change, replacement or operation of any plant or equipment is permitted if the change, replacement or operation of the plant or equipment increases, or is likely to substantially increase, the risk of environmental harm above that expressly provided by this development approval. An example of a substantial increase in the risk of environmental harm is-an increase of ten percent (10%) or more in the quantity of the contaminant to be released to the environment.
A5	**Calibration** All instruments and devices used for the measurement or monitoring of any parameter under any condition of this development approval must be calibrated, and appropriately operated and maintained.
A6	The registered operator of this development approval must rehabilitate the approved place in a manner such that: i. suitable native species of vegetation are planted and established; ii. potential for erosion of the site is minimised; iii. the quality of stormwater released from the site is such that releases of suspended solids, turbidity and total dissolved salts are not likely to cause environmental harm; iv. the likelihood of environmental nuisance being caused by release of dust is minimised; and v. the final landform is stable and not subject to slumping.
A7	Rehabilitation of disturbed areas must take place progressively as works are staged and new

	areas of extraction are commenced within the approved place.
A8	**Site Rehabilitation Program** For the purpose of demonstrating compliance with conditions A6 and A7, three (3) months prior to the cessation of the activities, the registered operator of this development approval must prepare and progressively implement a Site Rehabilitation Program addressing the following matters: i. the final land use of the site; ii. the proposed shaping of the final landform after rehabilitation including an assessment of the stability of all works such as batter slopes; iii. 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; iv. 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; v. protection of the final landform and newly established vegetation and seedlings from erosion susceptibility; vi. prevention or minimisation of windblown dust from any material stockpiles, remnant raw material stockpiles and rehabilitation earthworks; vii. prevention of the release of contaminated stormwater runoff from raw material stockpiles and disturbed areas to any stormwater drain, including any treatment of stormwater runoff required to achieve this objective; and viii. keeping of appropriate records of rehabilitation measures that have been implemented including taking of photographs demonstrative of rehabilitation achieved and the submission of a rehabilitation progress report to the administering authority upon request from the administering authority.
A9	**Rehabilitation - Fill Material** The registered operator of this development approval must not release, or permit the release of, any construction or demolition waste to any void or pond on the approved place.
A10	The only material to be used for the filling of voids and ponds must be clean rock, clay, gravel, sand or soil (excluding any contaminated rock, clay, gravel, sand or soil): i. obtained from the approved place; or ii. from another place.
A11	The operation of condition A10 does not authorise the carrying out of environmentally relevant activity (ERA) 75 - Waste disposal.
A12	**Integrated Environmental Management System (IEMS)** The registered operator of this development approval must not implement an Integrated Environmental Management System or amend the Integrated Environmental Management System where such implementation or amendment would result in a contravention of any condition of this development approval.
A13	A copy of the Integrated Environmental Management System must be kept at the approved place.

A14	The registered operator of this development approval must submit details of any amendment to the Integrated Environmental Management System to the administering authority with the annual return which immediately follows the enactment of any such amendment.
A15	**Buffer Distance** A natural or revegetated buffer zone of at least 40 metres must be maintained between the extraction area and any residential area.
SCHEDULE B – AIR	
Condition number	**Condition**
B1	**Dust and Particulate Emissions** 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 approved place.
B2	**Dust Control - Stockpiles** 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: i. use of water spray as required during winds likely to generate such releases; ii. use of dust-suppressant shielding; and iii. storage in bunkers.
B3	**Crushing and Screening Equipment** Fine misting sprays, where practicable, shall be fitted and operated at each transfer point while crushing and screening is carried out as necessary to minimise the release of dust and wind Blown particulate matter to the atmosphere.
B4	Screens shall be fitted with dust covers on the top deck and dust seals between decks to prevent emissions of dust.
B5	**Conveyor Belts** The registered operator of this development approval must take all reasonable and practicable measures necessary to prevent and/or minimise the release of particulate matter and dust to the atmosphere from the material conveyor systems serving the crushing and screening plant. Reasonable and practicable measures may include but are not limited to: i. the installation of windshields or barriers to suppress dust emissions; and ii. keeping the material conveyed in a moist state.
B6	**Dust Control - Trafficable Areas**

	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: i. keeping surfaces clean; ii. sealing with bitumen or other suitable material; iii. using water sprays; iv. adopting and adhering to speed limits; and v. using dust suppressants and wind breaks.
B7	**Dust Control - Aggregate Transport Trucks** The registered operator of this development approval 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 approved place. Reasonable and practicable measures may include but are not limited to: i. wetting down the load prior to transport; ii. having the entire load covered with a tarpaulin or similar material for the duration of transport; and iii. clearing of spillage from side rails, tail gates and draw bars of trucks prior to departure from the approved place and prior to departure from the premises to which the load has been delivered.
B8	**Rock Drilling** Dust collectors shall be used as necessary to minimise the release of wind-blown dust to the atmosphere while rock drilling is carried out.
B9	**Sediment and Erosion Control** Worked areas must be stabilised by landscaping or revegetating as soon as practicable.
B10	Rehabilitation must be carried out in such a manner so as to minimise releases of wind-blown dust and the likelihood of erosion occurring.

SCHEDULE C - WATER	
Condition number	**Condition**
C1	**Release of Contaminants to Waters** Contaminants that may cause environmental harm must not be directly or indirectly released from the approved place to any waters or the bed and banks of any waters except: i. as permitted under the stormwater management schedule; or ii. to a sewer as permitted or otherwise agreed from time to time by the relevant Local Government.

SCHEDULE D – STORM WATER MANAGEMENT	
Condition number	**Condition**
D1	**Release of contaminated stormwater runoff** Except as otherwise provided by the conditions of the stormwater management schedule and the water schedule of this development approval, the environmentally relevant activities 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 approved 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.
D2	**Stormwater Management Plan** The registered operator of this development approval must implement an effective stormwater management plan which details how the registered operator of this development approval will manage the actual and potential impacts resulting from the contamination of stormwater at the approved place.
D3	The Stormwater Management Plan must address at least the following matters: i. prevention of stormwater and stormwater runoff from contacting contaminants and minimising runoff from the extraction area during overburden removal; ii. minimisation of the amount of soil disturbed by staging works; and iii. details of sediment control measures;
D4	A copy of the Stormwater Management Plan and any amendment of the Stormwater Management Plan must be kept at the approved place and be available for examination by an authorized person on request.
D5	The registered operator of this development approval must not implement the Stormwater Management Plan where such implementation or amendment would result in a contravention of any condition of this development approval.
D6	**Maintenance and Clean Up** 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.
D7	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.
D8	**Sediment and Erosion Control** Sediment control facilities must be installed before any construction takes place.

D9	Temporary erosion and sediment controls must be provided during-the initial stages of site clearing and construction works. Such measures must include diversion drainage works, provision of a straw bale perimeter drain and temporary sediment traps in drainage channels. Design criteria for these works are contained in *Soil Erosion and Sediment Control - Engineering Guidelines for Queensland* by Qld Division of the institution of Engineers Australia and the Qld Branch of the Australian Institute of Agricultural Scientists or NSW Department of Conservation and Land Management publication *Urban Erosion and Sediment Control*, (1992 edition).
D10	Diversion drains, appropriate grades or equivalent must be installed to ensure surface waters from disturbed areas, including operational or trafficable areas, are diverted to the sediment control system.
D11	All runoff from the stockpile(s) and the areas utilised for the operation of the stockpile(s) must be directed to the sedimentation pond(s).
D12	Drainage through and from all trafficable areas and production activities must be designed to minimise surface flow velocities.
D13	Erosion control and sediment control structures must be maintained at all times during the period of construction and checked, repaired or replaced as required after each rain event.
D14	There must be no discharge from any sediment retention pond except in accordance with the requirements of the water schedule.
D15	The sediment retention pond must be maintained on the site throughout the construction phase and until all remaining disturbed areas are rehabilitated.
D16	There must be no disturbance to, filling or obstruction of any part of a watercourse channel.
D17	**Pond conditions** All ponds used for the storage or treatment of contaminants or wastes must be installed and maintained to prevent any discharge through the bed or banks of the pond from causing environmental harm or environmental nuisance in any waters (including groundwaters).
D18	All ponds used for the storage or treatment of contaminants or wastes must be lined with a natural clay liner.
D19	All ponds used for the storage or treatment of contaminants or wastes must be installed and maintained so that a freeboard of not less than 0.5 metre is maintained at all times.
D20	All ponds used for the storage or treatment of contaminants or wastes must be installed and maintained to ensure the stability of the ponds construction.
D21	Clean uncontaminated stormwater must not be allowed to enter the sedimentation pond(s).
D22	**Bunding**

	All above ground chemical and fuel tank storages must be bunded so that the capacity of the bund is sufficient to contain at least one hundred percent (100%) of the largest storage tank plus ten percent (10%) of the second largest tank within the bund.
D23	All chemical and fuel drum storages must be bunded so that the capacity of the bund is sufficient to contain at least twenty-five percent (25%) of the maximum design storage volume within the bund.
D24	All bunding must be constructed of materials which are impervious to the materials stored.
D25	All bunding must be roofed where practicable.
D26	Where it is impractical to completely roof a bunded area the registered operator of this development approval must ensure that any stormwater captured within the bund is free from contaminants or wastes prior to any release.
D27	All empty drums must be stored on a concrete hardstand area with their closures in place.
D28	**Oil and Grease Conditions** All spilled materials on roadways or in bunded areas on the site must be cleaned-up immediately. The first-flush collection system must not be used for product recovery.
SCHEDULE E ─ LAND APPLICATION	
Condition number	**Condition**
E1	**Release of Contaminants to Land** There must be no release nor likelihood of release of any contaminants to land that may cause environmental harm or contribute to contamination of such land.
SCHEDULE F - NOISE	
Condition number	**Condition**
F1	**Emission of Noise (Other than Blasting)** In the event of a complaint about noise that constitutes annoyance being made to the administering authority, that the administering authority considers is not frivolous or vexatious, except as provided for during blasting operations, then the emission of noise from the approved place must not result in levels greater than those specified in Table 1 of the noise schedule. **Schedule F ─ Table 1** **NOISE LIMITS AT A NOISE SENSITIVE PLACE**

	<table><tr><th>Period</th><th>Noise Level at a Noise Sensitive Place Measured as the Adjusted Maximum Sound Pressure Level $L_{Amax, adj,T}$</th></tr><tr><td>7am – 5pm Weekdays</td><td>Background Noise level plus 5 dB (A)</td></tr><tr><td>7am – 11am Saturdays</td><td>Background Noise level plus 5 dB (A)</td></tr><tr><th colspan="2">NOISE LIMITS AT A COMMERCIAL PLACE</th></tr><tr><th>Period</th><th>Noise Level at a Commercial Place measured as the Adjusted Maximum Sound Pressure Level $L_{Amax, adj, T}$</th></tr><tr><td>7am – 5pm Weekdays</td><td>Background Noise level plus 10 dB (A)</td></tr><tr><td>7am – 11am Saturdays</td><td>Background Noise level plus 10 dB (A)</td></tr></table>
F2	Notwithstanding any other condition of this development approval, no operation in association with the quarry involving the movement of equipment or loading of vehicles or movement of vehicles onto or off the approved place or the operation of crushing or screening equipment shall be carried out: i. outside the hours of 7.00 am to 5.00 pm Mondays to Fridays; ii. outside the hours of 7.00 am to 11.00 am Saturdays; iii. on Sundays; and iv. on Christmas Day, Good Friday or Anzac Day.
F3	**Blasting - general** All blasting must be limited to two (2) days per week and must not be conducted before 9.00 am.
F4	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 air blast overpressure and ground borne vibrations on sensitive premises and people living in or using the surrounding area.
F5	**Blasting - Noise** Noise from blasting operations must not exceed an air blast overpressure level of 115 dB (linear peak) for more than four (4) blasts out of any five (5) consecutive blasts when measured at any of the monitoring points specified in schedule H.
F6	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 onset time of not greater than 100 µsec as assessed in accordance with AS 1259 clauses 8.5 and 10.4.4.
F7	**Blasting - Ground-borne Vibration** Ground-borne vibration caused by blasting operations must not exceed a peak particle velocity of:

	i. twenty-five (25) millimetres per second for vibrations greater than 35 Hz; or ii. ten (10) millimetres per second for vibrations less than 35Hz; the above values must not be exceeded for more than four (4) blasts out of any five (5) consecutive blasts when measured at any of the monitoring points specified in schedule H.
F8	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.
F9	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.
SCHEDULE G – WASTE MANAGEMENT	
Condition number	**Condition**
G1	**General** Procedures must be implemented to ensure that wastes are minimised, recycled, stored, handled and transferred in a proper and efficient manner and that any disposal of waste (excepting any release of waste provided for by a condition of this development approval) is to a facility appropriate to accept such waste.
G2	The registered operator of this development approval must not: i. burn waste at or on the approved place; or ii. allow waste to burn or be burnt at or on the approved place; or iii. remove waste from the approved place and burn such waste elsewhere.
G3	**Waste Management Plan** The registered operator of this development approval must implement a Waste Management Plan.
G4	The Waste Management Plan must detail at least the following: i. the quantity and nature of each waste produced, and ii. proposed methods of pre-treatment or disposal, and iii. expected reduction in quantity of waste produced through waste minimisation and cleaner production.
G5	The registered operator of this development approval must not implement the Waste Management Plan where such implementation or amendment would result in a contravention of any condition of this development approval.
G6	**Off Site Movement of Regulated Waste**

	Where regulated waste is removed from the approved place (other than by a release as permitted under another schedule of this development approval), the registered operator of this development approval must monitor and record the following: i. the date, quantity and type of waste removed; and ii. name of the waste transporter and/or disposal operator that removed the waste; and iii. the intended treatment/disposal destination of the waste.
G7	Regulated waste must not be sent for disposal at any facility without the written approval of the person operating the facility.
G8	**On site waste disposal** Where waste is disposed of on the premises (other than as permitted by another schedule of this development approval), the registered operator of this development approval must monitor and record: i. the date, quantity and type of waste disposed; and ii. the location of disposal of the waste; and iii. the method of disposal of the waste.
G9	**Records** Records must be maintained for a period of three (3) years for all wastes mentioned in this schedule

SCHEDULE H – SELF MONITORING AND REPORTING

Condition number	Condition
H1	**Complaint Recording** All complaints received by the registered operator of this development approval relating to operations at the approved 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.
H2	The complaints record required by condition number H1 must be maintained for a period of not less than three (3) years.
H3	**Incident Recording** A record must be maintained of events including but not limited to:

	i. any fire at the approved place; ii. any release of leachate or stormwater runoff which has been in contact with any raw materials, wastes and contaminants used for, and/or resulting from, carrying out any activity on the approved place to the receiving waters; iii. detection by the environmental monitoring program of any release of contaminants not likely to be in accordance with the conditions of this development approval; and iv. incidents which have adverse public health consequences and/or cause nuisance including time, date, duration and nature of the incident.
H4	**Notification of Emergencies and Incidents** 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 development approval, the registered operator of this development approval must notify the administering authority of the release by telephone or facsimile.
H5	The notification of emergencies or incidents as required by condition number H4 must include but not be limited to the following: i. the registered operator of the development approval; ii. the location of the emergency or incident; iii. the number of the development approval; iv. the name and telephone number of the designated contact person; v. the time of the release; vi. the time the registered operator of the development approval became aware of the release; the suspected cause of the release; vii. the environmental harm and or environmental nuisance caused, threatened, or suspected to be caused by the release; and viii. actions taken to prevent further any release and mitigate any environmental harm and or environmental nuisance caused by the release.
H6	Not more than fourteen (14) days following the initial notification of an emergency or incident, the registered operator of the development approval must provide written advice of the information supplied in accordance with condition number H5 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.
H7	**Ambient Particulate Monitoring** Ambient particulate monitoring must be undertaken to investigate any complaint of dust nuisance upon receipt of a written request from the administering authority to carry out such monitoring or upon the receipt of a dust complaint by the registered operator of this development approval.
H8	In carrying out an investigation as a result of a complaint referred to in Condition Fl7, sampling must be undertaken at an appropriate location(s) at the boundary of the approved place and/or the caretaker's house as described in. Witcott Quarry Integrated Environmental Management

	System, prepared by Max Winders & Associates, dated February 1998. The selection of the monitoring point(s) will depend 'on the location of the complainant.
H9	Analysis of the obtained samples must be made for the following: i. total water insoluble dust in milligrams; and ii. dust fallout in milligrams/square metre/day.
H10	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.
H11	All measurement and reporting of particulates in ambient air must be performed by a person or body possessing appropriate experience and qualifications to perform the required measurements.
H12	Records must be kept of the results of all monitoring of particulates in ambient air for a period of at least three (3) years.
H13	**Noise and Ground Vibration Monitoring** For the purposes of investigating complaints of noise annoyance and for checking compliance with conditions F1, F5, and F7 of the noise schedule F, monitoring of the noise levels and ground vibration from the environmentally relevant activities must be undertaken for at least the following descriptors, characteristics and conditions: i. $L_{Amax.\ adj.\ T}$; ii. $L_{Abg,\ T}$ (or $L_{A90,\ T}$); iii. $L_{AN,\ T}$ (where N equals statistical levels of 1, 10, 50, 90 and 99); iv. Max L_{pAT}; v. $L_{Aeq,T}$ vi. the level and frequency of occurrence of impulsive or tonal noise; vii. atmospheric conditions including temperature, relative humidity and wind speed and direction; viii. effects due to extraneous. factors such as traffic noise; ix. overpressure level (dB linear peak.) (for blast monitoring only); x. peak particle velocity (for ground vibration monitoring only); and xi. location, date and time of recording.
H14	Noise monitoring must be undertaken to investigate any complaint of noise annoyance upon receipt of a complaint or upon a written request from the administering authority to carry out such monitoring.
H15	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.
H16	**Blasting - Noise Monitoring**

	For the purpose of checking compliance with condition F5 of the noise schedule F, at least one (1) position located closest to the noise sensitive place must be selected for the monitoring and recording of overpressure level (dB linear peak) from each blast. The monitoring positions shall be those described as rural properties near Jones Road and at Prince Henry Drive, documented in Withcott Quarry Integrated Environmental Management System, prepared by Max Winders & Associates, dated February 1998.
H17	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.
H18	The measurement and reporting of noise levels must be undertaken by a person or body possessing appropriate experience and qualifications to perform the required measurements.
H19	**Blasting - Ground Vibration** For the purpose of checking compliance with condition F7 of the noise schedule F, at least one (1) position located closest to the noise sensitive place must be selected for the monitoring and recording of peak particle velocity from each blast. The monitoring positions shall be those described as rural properties near Jones Road and at Prince Henry Drive, documented in *Withcott Quarry Integra*ted *Environmental Management System*, prepared by Max Winders & Associates, dated February 1998.
H20	The measurement and reporting of peak particle velocities must be undertaken by a person or body possessing appropriate experience and qualifications to perform the required measurements.
H21	**Environmental Impact Analysis Reporting** The registered operator of this environment authority must ensure the monitoring data gathered in accordance with this development approval is analysed and interpreted, by an expert in the field of each monitoring program, to assess the nature and extent of any environmental impact of the environmentally relevant activity. The data, analyses and assessments must be submitted to the administering authority with each annual return.
H22	**Exception Reporting** The registered operator of this development approval must notify the administering authority in writing of any monitoring result which indicates an exceedance of any development approval limit within twenty-eight (28) days of Completion of analysis.
H23	The written notification required by condition number H22 above must include: i. The full analysis results, and ii. Details of investigation or corrective actions taken, and iii. Any subsequent analysis.

Definitions

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

"Act' means the Environmental Protection Act 1994.
"administering authority" means the Department of Environment or its successor.
"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.
"Background noise level" means either: $L_{AgO,\ T}$ 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 readings measured in the absence of the noise under investigation during a representative time period of not less than 15 minutes, using Fast response.
"Max $L_{A\ T}$" means the maximum A-weighted sound pressure level measured over a time period of not less than 15 minutes, using Fast response.
"noise sensitive place" means - i. a dwelling, 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; or vi. a park or gardens.
"commercial place" means a place used as an office or for business or commercial purposes.
"annoyance". In determining what constitutes "annoyance", regard must be had to *Australian Standard 1055.2 -1997 Acoustics - Description and Measurement of Environmental Noise Part 2 Application to specific situations.*
"events" means uncontrolled or irregular release events.
"Regulated Waste" means non-domestic waste mentioned in Schedule 8 of the Environmental Protection (Interim) Regulation 1995 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.

END OF ENVIRONMENTAL AUTHORITY