

Permit¹

Environmental Protection Act 1994 Environmental Authority (Mining Activities)

Permit¹ Number: EPML00912113

This permit is issued pursuant to Section 211 of the Environmental Protection Act 1994 and replaces Permit Number MIN101484410.

Takes Effect From: 17-JAN-2014

Details

Permit Holder(s)	Name	Address
Principal Holder	The Austral Brick Company Pty Ltd	105 Gardner Road ROCHEDALE QLD 4123

Activity(s)	Location(s)
Mining activities – Section 586 of the Environmental Protection Act 1994.	ML1151 ML1152 ML1156 ML1165 ML4578 ML50115 ML50035 ML50165 ML50189

The anniversary date of the environmental authority is 18 JANUARY.

The environmental authority is subject to the attached conditions of approval.

Shari Murr
Delegate
Department of Environment and Heritage Protection
17-JAN-2013

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Enquiries:

Permit and Licence Management
Department of Environment and Heritage Protection
GPO Box 2454
Brisbane Queensland 4001
Phone: 1300 130 372
Fax: 07 3330 5875
E-mail: palm@ehp.qld.gov.au

¹ Permit includes licences, approvals, permits, authorisations, certificates, sanctions or equivalent/similar as required by legislation



This **Environmental Authority** incorporates the following schedules:

- Schedule A - General
- Schedule B - Air
- Schedule C - Water
- Schedule D - Noise
- Schedule E - Waste
- Schedule F - Land
- Schedule G - Community
- Schedule H - Definitions

Schedule A – General

Prevent and/or minimise the likelihood of environmental harm

- (A1-1) In carrying out the environmentally relevant activities; you must take all reasonable and practicable measures to prevent and/or minimise the likelihood of environmental harm being caused. Any environmentally relevant activity, that, if carried out incompetently, or negligently, may cause environmental harm, in a manner that could have been prevented, shall be carried out in a proper manner in accordance with the conditions of this authority¹.

Financial Assurance

- (A2-1) Provide a financial assurance² in the amount and form required by the administering authority prior to the commencement of activities proposed under this environmental authority.
- (A2-2) The financial assurance is to remain in force until the administering authority is satisfied that no claim on the assurance is likely³.

¹ NOTE: This approval authorises the environmentally relevant activity. It does not authorise environmental harm unless a condition contained within this approval explicitly authorises that harm. Where there is no condition or the approval is silent on a matter, the lack of a condition or silence shall not be construed as authorising harm.

² NOTE: The calculation of financial assurance for condition (A1-1) must be in accordance with Guideline 17 and may include a performance discount. The amount is defined as the maximum total rehabilitation cost for complete rehabilitation of all disturbed areas, which may vary on an annual basis due to progressive rehabilitation. The amount required for the financial assurance must be the highest Total Rehabilitation Cost calculated for any year of the Plan of Operations and calculated using the formula: (Financial Assurance = Highest Total Annual Rehabilitation Cost x Percentage Required).

³ NOTE: Where progressive rehabilitation is completed and acceptable to the administering authority, progressive reductions to the amount of financial assurance will be applicable where rehabilitation has been completed in accordance with the acceptance criteria defined within this environmental authority

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Maintenance of Measures, Plant and Equipment

(A3-1) The holder must:

- a) take all control measures and install plant and equipment necessary to ensure compliance with the conditions of this environmental authority; and
- b) maintain such control measures, plant and equipment in a proper condition; and
- c) operate such control measures, plant and equipment in a proper manner.

Records

(A4-1) Record, compile and keep all monitoring results required by this environmental authority and present this information to the administering authority when requested, in a specified format.

Storage and Handling of Flammable and Combustible Liquids

(A5-1) Storage of all flammable and combustible liquids must be within an on-site containment system and controlled in a manner that prevents environmental harm (other than trivial harm) and maintained in accordance with Section 5.9 of AS 1940 – Storage and Handling of Flammable and Combustible Liquids of 1993.

Definitions

(A6-1) Words and phrases used throughout this environmental authority are defined in Schedule H – Definitions. 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 in the Environmental Protection Act 1994, its Regulations and Environmental Protection Policies, as amended from time to time must be used.

Integrated Environmental Management System (IEMS)

(A7-1) Prior to the commencement of any environmentally relevant activity ("the activity") under this environmental authority, the holder of this environmental authority must:

- develop an Integrated Environmental Management System (IEMS) which provides for the effective management by the holder of the actual and potential environmental impacts resulting from the carrying out of the activities; and
- implement and maintain the IEMS from the commencement of carrying out the activities.

(A7-2) The IEMS must provide for at least the following functions:

- Training staff in the awareness of environmental issues related to carrying out the activities, which must include at least:
 - o The environmental policy of the holder, so that all persons that carry out the activities are aware of all the relevant commitments to environmental management; and
 - o Any relevant environmental objectives and targets, so that all staff are aware of the relevant performance objectives and can work towards these; and
 - o Control procedures to be implemented for routine operations for day to day activities to minimise likelihood of environmental harm, however occasioned or caused; and
 - o Contingency plans and emergency procedures to be implemented for non-routine situations to deal with foreseeable risks and hazards including corrective responses to prevent and mitigate environmental harm (including any necessary site rehabilitation) and;

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- Organisational structure and responsibility to ensure that roles, responsibilities and authorities are appropriately defined to manage environmental issues effectively; and
 - Effective communication to ensure two-way communication on environmental matters between operational staff and higher management; and
 - Their obligations in respect of monitoring, notification and record keeping obligations under the IEMS and relevant environmental authorities and/or development approvals; and
 - Monitoring of the release of contaminants into the environment including procedures, methods, record keeping and notification of results;
 - Conducting assessment of the environmental impact of any release of contaminants into the environment;
 - Periodic conduct of energy audits and review of environmental performance and procedures adopted, not less frequently than annually; and
 - Waste prevention, treatment and disposal; and
 - A program for continuous improvement.
- (A7-3) The holder of this environmental authority must not implement or amend an IEMS (including any environmental management plan) that contravenes any condition of this environmental authority or any development condition applicable to carrying out these activities.

END OF CONDITIONS FOR SCHEDULE A

Schedule B – Air

Dust nuisance

- (B1-1) Subject to conditions (B1-1) and (B2-3) the release of dust or particulate matter or both resulting from the mining activity must not cause an environmental nuisance, at any sensitive or commercial place.
- (B1-2) When requested by the administering authority, dust and particulate monitoring must be undertaken to investigate complaint of environmental nuisance caused by dust and/or particulate matter, and the results must be 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:
- for a complaint alleging dust nuisance, dust deposition; and
 - for a complaint alleging adverse health effects caused by dust, the concentration per cubic meter of particulate matter with an aerodynamic diameter of less than 10 micrometers (μm) (PM_{10}) suspended in the atmosphere over a 24hr averaging time.
- (B1-3) If the environmental authority holder can provide evidence through monitoring that the following limits are not being exceeded then the holder is not in breach of (B1-1):
- a) Dust deposition of 120 milligrams per square metre per day, averaged over one month, when monitored in accordance with AS 3580.10.1 *Methods for sampling and analysis of ambient air – Determination of particulates – Deposited matter – Gravimetric method* of 1991; and

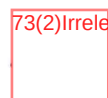
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- b) A concentration of particulate matter with an aerodynamic diameter of less than 10 micrometers (μm) (PM_{10}) suspended in the atmosphere of 150 micrograms per cubic metre over a 24 hour averaging time, at a sensitive place downwind of the operational land, when monitored in accordance with:
- Particulate matter – *Determination of suspended particulate PM10 high-volume sampler with size-selective inlet – Gravimetric method*, when monitored in accordance with AS 3580.9.6 Methods for sampling and analysis of ambient air – *Determination of suspended particulate matter – PM (sub) 10 high volume sampler with size-selective inlet – Gravimetric method* of 1990; or
 - Any alternative method of sampling PM_{10} , which may be permitted by the 'Air Quality Sampling Manual' as published from time to time by the administering authority⁴.

Dust Control

- (B2-1) Stockpiles must be maintained using all reasonable and practicable measures to minimise the release of windblown dust or particulate matter into the atmosphere. Reasonable and practicable measures may include but are not limited to anemometer switching systems which trigger operation of effective water spray systems during winds likely to generate such releases, use of dust suppressants, shielding and storage in bunkers.
- (B2-2) Trafficable areas must be maintained using all reasonable and practicable measures to minimise the release of windblown dust or traffic generated dust to the atmosphere. Reasonable and practicable measures may include but are not limited to sealing with bitumen or other suitable material, keeping surfaces clean, use of water sprays, adoption and adherence to speed limits, use of dust suppressants and wind breaks.
- (B2-3) Raw material preparation plants and external conveyors must be operated and maintained using all reasonable and practicable measures to minimise the release of windblown dust or particulate matter to the atmosphere. Reasonable and practicable measures may include but are not limited to transfer of materials in a moist state, enclosure of conveyors and buildings, use of water sprays at transfer points, shielding and wind breaks.

END OF CONDITIONS FOR SCHEDULE B



⁴ NOTE: You must propose which monitoring method is appropriate in accordance with condition (B1-3) (a) or (b) or both.

Schedule C – Water

Release to waters

(C1-1) Process water, storm water and/or receiving waters must be monitored at the locations and frequencies defined in Schedule C – Table 1 (at the locations depicted in Appendix 1 Figures 1, 2 and 3) and comply with the contaminant limits defined in Schedule C – Table 2.

Schedule C – Table 1: Water monitoring locations and frequency

*Monitoring point	Monitoring Type	Co-ordinates (AMG)		Frequency
		Easting	Northing	
Rochedale Leases (MLs 1156,1151,1165,50189 and 50165)				
R1	Background for point R3	511580	6951560	When point R3 is sampled
R3	Discharge	511040	6951970	"Event Release"
R4	Background for points R2 and R5	510500	6951200	When points R2 and/or R5 are sampled
R2	Discharge	510880	6951600	Each pump release
R5	Discharge	511470	6952600	"Event Release" and each pump release
Burbank Lease (ML 1552)				
B1	Discharge	513890	6949050	"Event Release"
Redland Bay Lease (ML50035)				
RB1	Discharge	526590	6943600	"Event Release"
RB2	Discharge	526350	6943600	"Event Release"
RB3	Discharge	526160	6943250	"Event Release"

*Refer to Appendix 1 Figure 1,2 and 3 for monitoring locations.

Schedule C – Table 2: Contaminant release limits

Monitoring point	Parameter	Minimum	Maximum
Rochedale Leases (MLs 1156, 1151, 1165, 50189 and 50165)			
R2 and R5	pH	6.5	9
	Total suspended solids (mg/L)	-	50mg/L or not more than 110% of the value at R4*
R3	pH	6.5	9
	Total suspended solids (mg/L)	-	50mg/L or not more than 110% of the value at R1*
Burbank Lease (ML 1552)			

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B1	pH	6.5	9
	Total suspended solids (mg/L)	-	50mg/L
Redland Bay Lease (ML 50035)			
RB1, RB2, RB3	pH	6.5	9
	Total suspended solids (mg/L)	-	50mg/L

*for the same monitoring event

END OF CONDITIONS FOR SCHEDULE C

Schedule D – Noise and Vibration

Noise Nuisance

- (D1-1) Noise from activities must not cause an environmental nuisance at any noise affected premises.
- (D1-2) All noise from activities must not exceed the levels specified in Schedule D – Table 2 at any noise affected premises.
- (D1-3) No mining activities may be undertaken outside of the hours for the sites listed in Schedule D – Table 1, unless the activities are solely for pollution control.

Schedule D – Table 1: Operating hours

Tenure(s) mining leases	Location	Hours
1151, 1156, 1165, 50165, 50189	Rochedale	Mon-Fri 6am-6pm; Sat 6am-5pm
1152	Burbank	Mon-Fri 7am-5pm
50035	Redland Bay	Mon-Fri 7am-6pm; Sat 7am-4pm
4578	Swanbank	Mon-Sat daylight hours
50115	New Chum	Mon-Sat daylight hours

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Schedule D – Table 2: Noise Limits

Noise level dB(A) measured as	Monday to Saturday	
	6am-7am	7am-6pm
	Noise measured at a Noise sensitive place	
L _{A10} , adj, 10 mins	b/g+3	b/g+5
L _{A1} , adj, 10 mins	b/g+5	b/g+10
	Noise measured at a Commercial place	
L _{A10} , adj, 10 mins	b/g+8	b/g+10
L _{A1} , adj, 10 mins	b/g+10	b/g+15

Noise monitoring

(D2-1) When requested by the administering authority, noise monitoring must be undertaken to investigate any complaint, which is neither frivolous nor vexatious nor based on mistaken belief in the opinion of the authorised officer, and the results must be notified within 14 days to the administering authority. The monitoring must include:

- L_{A1}, adj, 10 mins
- L_{A10}, 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.

(D2-2) The method of measurement and reporting of noise levels must comply with the latest edition of the administering authority's *Noise Measurement Manual*.

END OF CONDITIONS FOR SCHEDULE D

Schedule E – Waste

Waste handling

(E1-1) The holder of this environmental authority must not:

- burn waste at or on the licenced place; nor
- allow waste to burn or be burnt at or on the licenced place; nor
- remove waste from the licenced place and burn such waste elsewhere.

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Offsite movement

(E2-1) Where regulated waste is removed from the licenced place (other than by a release as permitted under another schedule of this environmental authority), the holder of this environmental authority must monitor and record the following⁵.

- 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.

Records

(E3-1) Records must be maintained for a period of five (5) years for all wastes mentioned in this schedule.

Notification of improper disposal of regulated waste

(E4-1) If the holder of this environmental authority becomes aware that a person has removed regulated waste from the licenced place and disposed of the regulated waste in a manner which is not authorised by this environmental authority or which is improper or unlawful, then the holder of this environmental authority as soon as practicable, notify the administering authority of all relevant facts, matters and circumstances known concerning the disposal.

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END OF CONDITIONS FOR SCHEDULE E

⁵ NOTE: Records of documents maintained in compliance with a waste tracking system established under the *Environmental Protection Act 1994* or any other law for regulated waste will be deemed to satisfy this condition.

Schedule F – Land

Rehabilitation landform criteria

(F1-1) All areas significantly disturbed by mining activities must be rehabilitated in accordance with Schedule F – Table 1.

Schedule F – Table 1: Final land use and rehabilitation outcomes

Tenure ID	Disturbance Type	Projective surface area (ha)	Rehabilitation outcomes
Rochedale Leases			
ML1151	Infrastructure (brick manufacturing and ancillary facilities)	22.5	Industrial
	Mine void	7.0	Industrial
	Sediment traps/water basins	0.2	Wetland Type 1
	Amenity banks/buffers	4.0	Native ecosystem
ML1156	Mine void	31.5	Industrial
	Sediment traps/water basins	2.0	Industrial or Wetland Type 1
	Amenity banks/buffers		Native ecosystem
ML1165	Mine void	5.0	Industrial
	Sediment traps/water basins	0.2	Wetland Type 2
	Amenity banks/buffers	0.8	Native ecosystem
ML50165	Mine void	3.7	Wetland Type 2
	Amenity banks/buffers	3.2	Native ecosystem
ML50189	Mine void	5.2	Wetland Type 2
	Amenity banks/buffers	1.6	Native ecosystem
Burbank Lease			
ML1152	Mine void	24	Native ecosystem
	Sediment traps/ water basins	0.6	Wetland Type 1
	Roads	1.0	No rehabilitation required

	Buffer	8.8	– retain Native ecosystem
Redland Bay Lease			
ML50035	Mine void	17.2	To be determined
	Sediment traps/ water basins	1.0	Wetland Type 1
	Roads	0.8	No rehabilitation required – retain
	Buffer	4.0	Native ecosystem
New Chum Lease			
ML50115	Mine void	31.0	Industrial
	Spoil stockpiles	13	Industrial
	Roads	3.0	No rehabilitation required – retain
	Water storages	1.5	No rehabilitation required - retain
Swanbank Lease			
ML4578	Mine voids	17.2	Industrial
	Stockpile areas	3.3	Industrial
	Spoil stockpiles	10.0	Industrial
	Roads/power line easements	3.3	No rehabilitation required – retain
	Water storages	0.8	No rehabilitation required - retain

Rehabilitation Outcome – Industrial or Residential

- (F2-1) Subject to conditions F2-2, F2-3 and F2-4, disturbed land nominated for industrial or residential rehabilitation outcome will be considered rehabilitated when the land is stabilised and does not, or will not have potential to cause environmental harm to the environmental values.
- (F2-2) Disturbed land and/or mine voids remaining at the end of the mine life and nominated for the rehabilitation outcome of industrial, will only be considered suitable for surrender when an application (or applicable local government and environmental approvals (or lawful use) relevant at the time) has been approved for the proposed activities.
- (F2-3) In the event of an unsuccessful development application (or other requirement at the time) for proposed industrial activities, an application must be made by the holder of this environmental authority to nominate an alternative rehabilitation outcome.
- (F2-4) To remove any doubt, the nomination of the final land use of industrial or residential in Schedule F – Table 1, does not negate any local or state government planning or approval requirements for the development of that land.

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Rehabilitation outcome – Native Ecosystem

(F3-1) Areas that are to be rehabilitated to native ecosystem must comply with the following outcomes:

- a) achievement of self-sustaining native ecosystem with a species composition and distribution similar to the pre-mining species composition and distribution; and
- b) the landform must be suitable to support the ecosystem in F3-1 a), not impede fauna corridors and be stable and non-polluting.

(F3-2) Complete an investigation into rehabilitation of disturbed areas and submit a report to the administering authority proposing acceptance criteria to meet the outcomes in F3-1. A report on the investigation, which will propose acceptance criteria, must be submitted to the administering authority by June 2005.

Rehabilitation outcome – Wetland Type 1 (rehabilitated sediment dams)

(F4-1) Areas that are to be rehabilitated to wetland type 1 outcome will be considered rehabilitated when the dams are revegetated with species appropriate to filter contaminants from the water, and water discharges from the dams do not exceed the total suspended solids value of the inflow to the pond.

Rehabilitation outcome – Wetland Type 2 (water filled voids)

(F5-1) Complete an investigation into rehabilitation of disturbed areas to wetland type 2 outcome and submit a report to the administering authority proposing acceptance criteria. A report on the investigation and proposals for acceptance criteria must address:

- a) water quality to be achieved in the water filled void;
- b) water quality to be achieved for any discharges from the void; and
- c) revegetation standards to be met for the fringes of the void.

The report must be submitted to the administering authority by 30 June 2005.

Buffer zones

(F6-1) There must be no mining activities conducted in the buffer zones or wildlife corridor areas identified in Appendix 1, Figures 1, 2 and 3, other than for the construction or removal of amenity banks, environmental control works, and activities involved with access or provision of services to the lease areas.

Open area and Progressive Rehabilitation

(F7-1) The *open area* for the relevant mining lease must not exceed the area described in Schedule F – Table 2.

Schedule F – Table 2: Open area limits

Tenure	Location	Open area limit (ha)
ML1152	Ford Road, Burbank	4

(F7-2) Subject to condition F7-1, progressive rehabilitation must commence within three years of areas becoming available within the operational land.

Infrastructure

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- (F8-1) All infrastructure, constructed by or for the environmental authority holder during the mining activities including water storage structures, must be removed from the site prior to mining lease surrender, except where agreed in writing by the post mining land owner/holder⁶.

Rehabilitation Outcome – To be determined

- (F9-1) The final land use of mine voids for Redland Bay lease (ML50035) is to be determined by a Planning Use Study which is to be consistent with any Planning Scheme and any rehabilitation outcome.
- (F9-2) The Planning Use Study report must be submitted to the administering authority by 30 June 2005.

END OF CONDITIONS FOR SCHEDULE F

Schedule G – Community

Complaint response

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

END OF CONDITIONS FOR SCHEDULE G

Schedule H – Definitions

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

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

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

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

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“ambient (or total) noise” at a place, means the level of noise at the place from all sources (near and far), measured as the L_{eq} for an appropriate time interval.

“blasting” means the use of explosive materials to fracture –

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

“commercial place” means a place used as an office or for business or commercial purposes, other than a place within the boundaries of the operational land.

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

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

“environmental authority holder” means the holder of this environmental authority.

“event release” means when water is released and which must occur at least four times per year.

“flowable substance” means matter or mixture of materials which can be forced to or otherwise flow under any conditions possible in a situation. It includes water, other liquids or a mixture that includes water or any other liquid or suspended solids.

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

“IEMS/Project EMOS” document titled “Environmental Management Overview Strategy (consolidating mining project numbers PJ50036, 50134, 50128 and 50150) incorporating integrated Environmental Management System (mining, manufacturing and extractive industries). Prepared for The Austral Brick Company Pty Ltd. Prepared by Groundwork Environmental Management Services Pty Ltd. October 2002.”

“ $L_{A,10,adj,10\ mins}$ ” 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.

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

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

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

“land capacity” as defined in the DME 1995 Technical Guidelines for the Environmental Management of Exploration and Mining in Queensland.

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

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

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

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

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

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

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

- the mining activities do not or will not cause more than 10 ha of land to be significantly disturbed at any one time;
- the mining activities do not or will not cause more than 5 ha of land to be significantly disturbed at any one time;
 - o in a riverine area;
 - o because of mine workings;
- the mining activities are not or will not be carried out in, or within 2km of a category A *Environmentally Sensitive Area*;
- the mining activities are not or will not be carried out in, or within 1km of a category B *Environmentally Sensitive Area*;
- the mining activities do not include a level 1 environmentally relevant activity

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- no more than 20 persons are carrying out or will, at any one time, carry out the mining activities.

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

“open area” means, for the purposes of this environmental authority, areas that have been cleared in preparation for mining, are being mined and have not had any topsoil or seed spread on the re-profiled area to commence the rehabilitation process.

“peak particle velocity (ppv)” means a measure of ground vibration magnitude which is the maximum rate of change of ground displacement with time, usually measured in millimetres/second (mms^{-1}).

“protected area” means – a protected area under the Nature Conservation Act 1992; or

- a marine park under the Marine Parks Act 1992; or
- a World Heritage Area.

“progressive rehabilitation” means rehabilitation (defined below) undertaken progressively or a staged approach to rehabilitation as mining questions are ongoing.

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

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

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

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

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

“significant disturbance” – includes land

- a) if it is contaminated land; or
- b) it has been disturbed and human intervention is needed to rehabilitate it:
 - to a state required under the relevant environmental authority; or
 - if the environmental authority does not require the land to be rehabilitated to a particular state – to its state immediately before the disturbance.

Some examples of disturbed land include:

- areas where soil has been compacted, removed, covered, exposed or stockpiled;
- areas where vegetation has been removed or destroyed to an extent where the land has been made susceptible to erosion; (vegetation and topsoil);
- areas where land use suitability or capability has been diminished;
- areas within a watercourse, waterway, wetland or lake where mining activities occur;
- areas submerged by tailings or hazardous contaminant storage and dam walls in all cases;

73(2) Irrelevant

- areas under temporary infrastructure. Temporary infrastructure includes any infrastructure (roads, tracks, bridges, culverts, dams, bores, buildings, fixed machinery, hardstand areas, airstrips, helipads etc) which is to be removed after mining activities have ceased; or
- areas where land has been contaminated and a suitability statement has not been issued.

However, the following areas are not included:

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

“sensitive place” means;

- a dwelling, residential allotment, mobile home or caravan park, residential marina or other residential premises; or
- a motel, hotel or hostel; or
- an educational institution; or
- a medical centre or hospital; or
- a protected area under the Nature Conservation Act, the Marine Parks Act 1992 or a World Heritage Area; or
- a public park or gardens; or
- a place used as a workplace, an office or for business or commercial purposes which is not part of the mining activity and does not include employees accommodation or public roads.

“spillway” means passage or outlet from the dam through which surplus water flows.

“stable” means geotechnical stability of the rehabilitated landform where instability related to the excessive settlement and subsidence caused by consolidation/settlement of the wastes deposited, and sliding/slumping instability has ceased.

“trivial harm” means environmental harm which is not material or serious environmental harm and will not cause actual or potential loss or damage to property of an amount of, or amounts totalling more than \$5000.

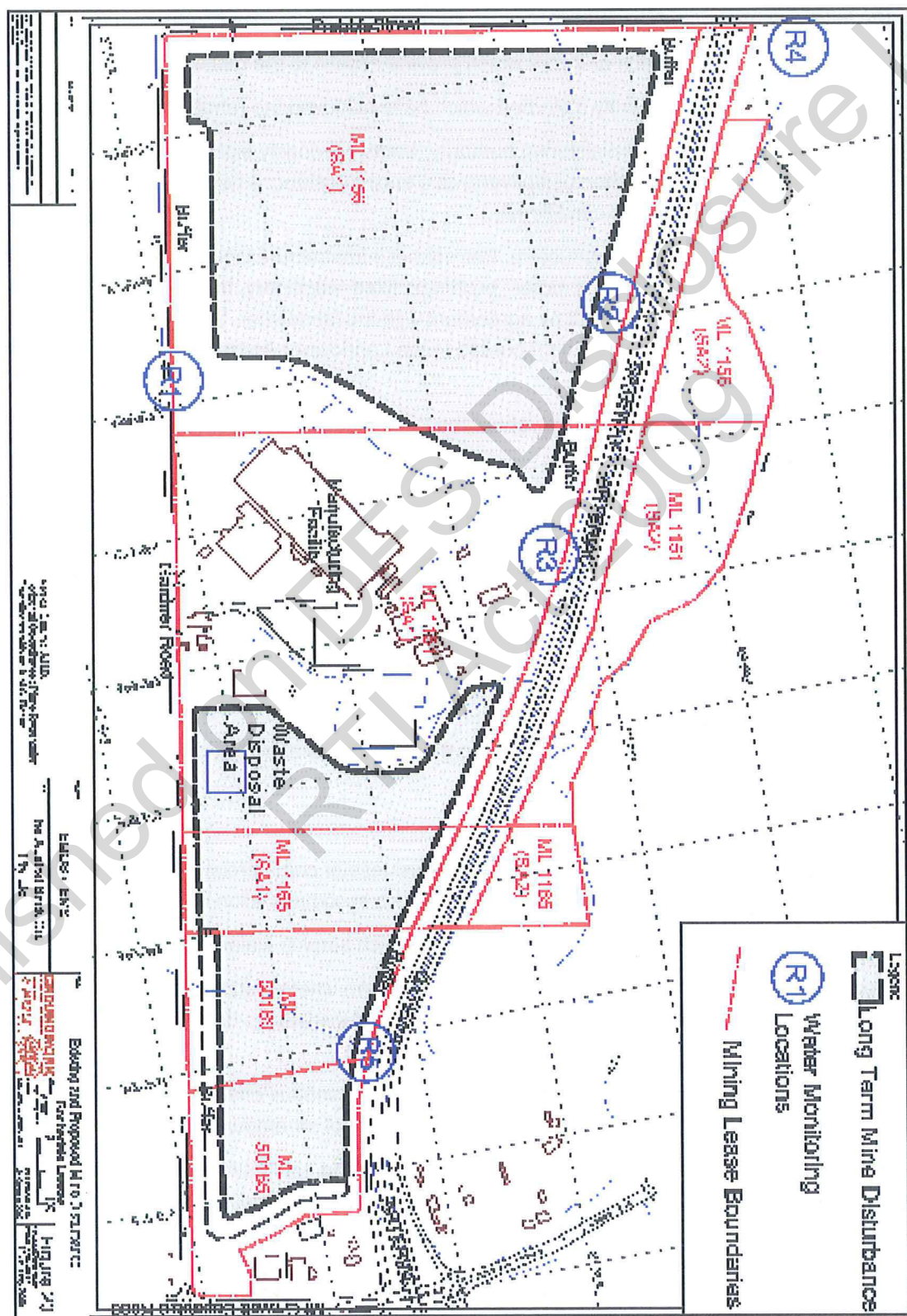
“waters” includes river, stream, lake, lagoon, pond, swamp, wetland, unconfined surface water, bed and bank of any waters, dams, non-tidal or tidal waters (including the sea), groundwater or any part thereof.

73(2) Irrelevant

END OF CONDITIONS FOR SCHEDULE H

APPENDIX 1 – FIGURE 1

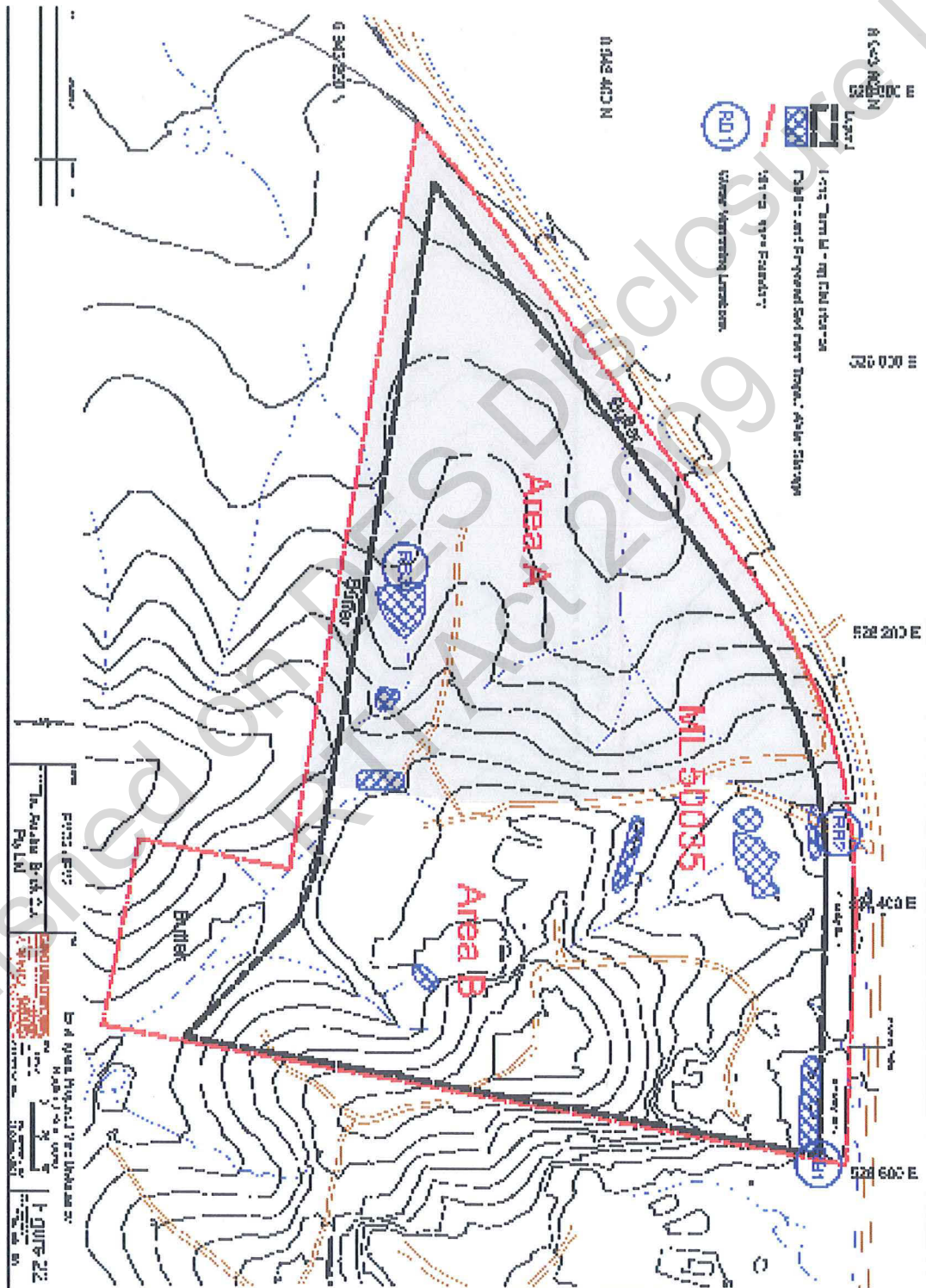
Rochedale Plant and Mining Leases – Waste Disposal Area, Water Monitoring Locations and Buffer Zones



73(2)Irrelev

APPENDIX 1 – FIGURE 2

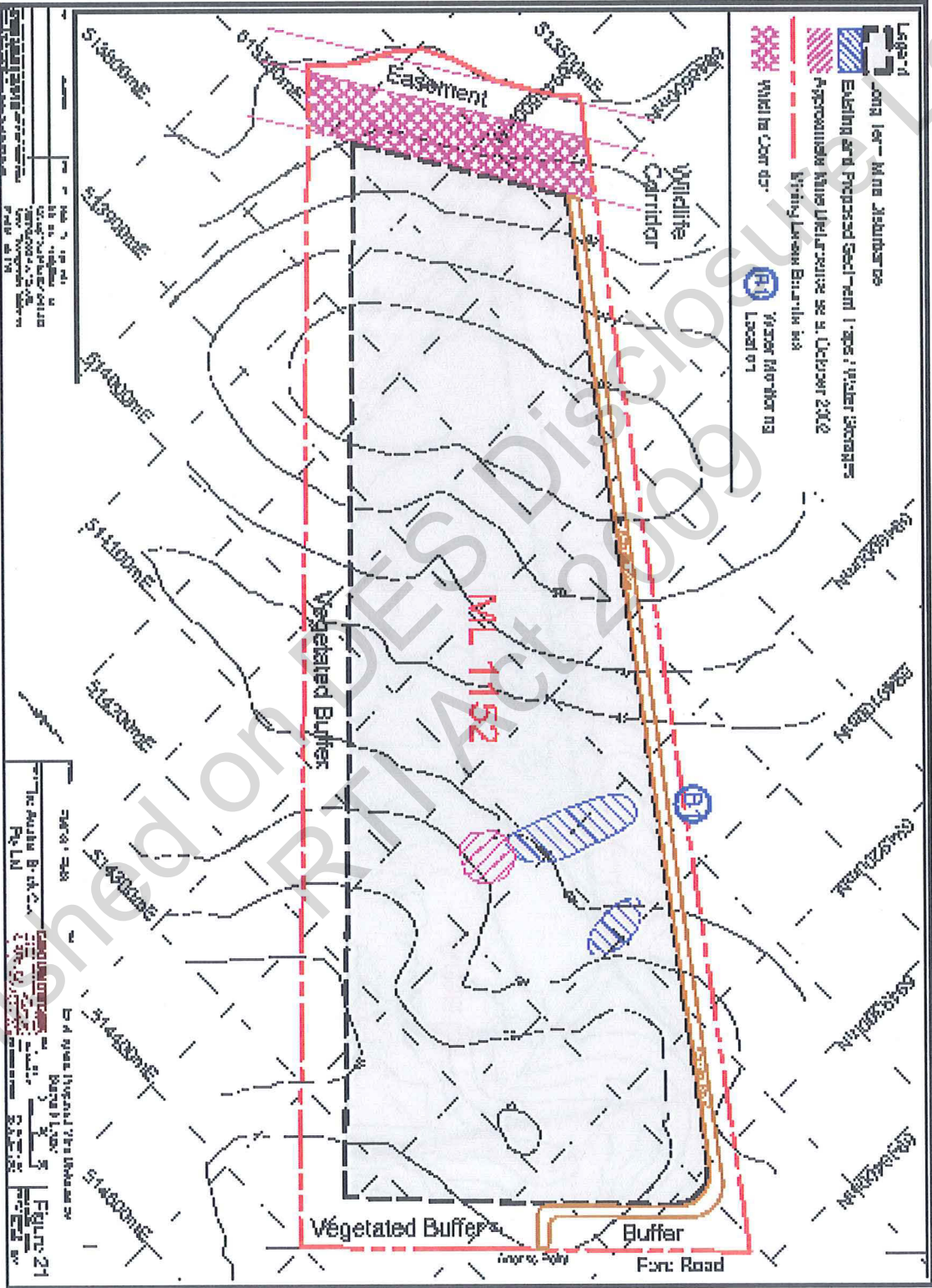
ML 50035 German Church Road Redland Bay – Monitoring Locations and Buffer Zones



73(2) Irrelevant

APPENDIX 1 – FIGURE 3

ML 1152 Ford Road Burbank – Monitoring Locations and Buffer Zones



73(2)Irreleva

Checklist

Environmental Protection Act 1994

Amendment application - assessment level decision and public notice

This checklist is to be used after receiving an environmental authority amendment application to decide whether the proposed amendment is a major or minor amendment (the assessment level decision) as required under section 228 of the Environmental Protection Act 1994 and if a major amendment, whether public notice is required under sections 230, 233 or 152 of that Act.

1. APPLICATION DETAILS

EA NO:	EPPR00411413 and EPML00912113	Project No:	241391
Applicant:	Austral Brick Company Pty Ltd	File No:	SOR116137
Tenure:	Lot1 RP854704 / ML50035	Received Date:	10-DEC-13
Project Name:	Amendment of EAs	Checklist Due:	6-JAN-2014
Amendment Application Description:	<p>Groundwork Plus acting on behalf of Austral Brick Co Pty Ltd has proposed a following changes to conditions of the Environmental Authority EPPR00411413:</p> <ul style="list-style-type: none"> - replacing the exsisting noise limits table prescribed in condition D1-2 with a new one that includes noise criteria for a 'Noise Sensitive Place' and a 'Commercial Place'; - replacing the existing final land use and rehabilitation outcome schedule prescribed in condition 3:F1-1 with a new one including slightly different rehabilitation outcomes, to align the outcomes with the rehabilitation outcomes specified in the Mining Lease EPML00912113; - replacing the rehabilitation outcome known as 'Wetland Type 2' description prescribed in condition 3:F5-1 with 'Wetland Type 1', in order to align this rehabilitation outcome with the Mining Lease; - removing condition 3:F7-1 and 3:F7-2 that specify the open area and progressive rehabilitation requirements. <p>Additionally, they requested an amendment of the following clerical errors occuring in a Mining Lease (resource/mining activity EA) EPML00912113:</p> <ul style="list-style-type: none"> - correcting condition numbering; - correcting the property description (Lot and Plan); - inserting Appendix 1 Figures which were left out following recently completed amendment of the Mining Lease; - correcting Noise Limit Table included in condition D1-2. <p>The amendments proposed to the Mining Lease EPML00912113 are clerical or administrative errors, which do not constitute the part of the subject amendment application.</p>		

Amendment applications – assessment level decision and public notice

2. ASSESSMENT CONSIDERATIONS

An assessment level decision must be made within 10 business days from receipt of the amendment application (section 228). This decision determines whether the proposed amendment is low risk and involves straightforward changes to the environmental authority (EA) or whether the activities proposed are likely to lead to a significant increase in the scale, intensity, level of environmental harm or impact.

Consideration In considering the amendment application is the administering authority satisfied that the amendment application:	Yes / No	Justification (if required)
(a) is not a change to a condition identified in the EA as a standard condition?	Yes	The changes are proposed to the conditions included in the EAs, which are not standard conditions.
(b) does not significantly increase the level of environmental harm caused by the relevant activity?	Yes	No additional environmental values are to be impacted as a result of the change, and no increase or change in the emissions or releases generated by the activity is anticipated, therefore the amendment will not significantly increase the level of potential environmental harm.
(c) does not change any rehabilitation objectives stated in the EA in a way likely to result in significantly different impacts on environmental values than the impacts previously permitted under the EA?	Yes	No increased areas of disturbance are proposed to occur as a result of the amendment.
(d) does not significantly increase the scale or intensity of the relevant activity?	Yes	No increase in the scale or intensity of the activity is to take place as a result of the amendment.
(e) does not relate to a new relevant resource tenure for the authority that is (i) a new mining lease? or (ii) a new petroleum lease? or (iii) a new geothermal lease under the Geothermal Energy Act? or (iv) a new GHG injection and storage lease under the GHG storage Act?	Yes	The mining lease and resource tenure are an existing ones.
(f) involves an addition to the surface area for the relevant activity of no more than 10% of the existing area?	Yes	No increased areas of disturbance are proposed to occur as a result of the amendment.
(g) for an environmental authority for a petroleum activity, involves (i) constructing a new pipeline—the new pipeline does not exceed 150km? or (ii) extending an existing pipeline—the	Yes	N/A

Amendment applications – assessment level decision and public notice

extension does not exceed 10% of the existing length of the pipeline?		
(h) relates to a new relevant resource tenure for the authority that is an exploration permit or GHG permit—and the amendment application under section 224 seeks an amended environmental authority that is subject to the standard conditions for the relevant activity or authority, to the extent it relates to the permit?	Yes	N/A

Recommendation – major or minor amendment

After completing the list above, mark which of the following applies:

- (a) If all the 'Yes' boxes are marked, the application is a minor amendment
- Send ALD Notice to applicant in accordance with s229 within 10 business days
 - Proceed to decide whether to grant or refuse the application
- MINOR** ☒
- (b) If any of the 'No' boxes are marked, the application is a major amendment with issues likely to lead to a significant increase in the scale, intensity, level of environmental harm or impact.
- MAJOR** ☐
- Proceed to the public notification consideration (Section 3)

3. PUBLIC NOTIFICATION CONSIDERATION – MAJOR AMENDMENTS

There are a number of different public notification processes that apply for a major amendment under the *Environmental Protection Act 1994*. Mark the relevant box and complete the relevant section:

- i) Public notice of a major amendment for a resources activity, other than a mining activity. ☐ **Complete section 3A**
- ii) Public notice of a major amendment for a mining activity, authorised under a mining lease, and there is no certificate of public notice under the *Mineral Resources Act 1989* (Section 252A). ☐ **Complete section 3B**
- iii) Public notice of a major amendment for a mining activity, authorised under a mining lease, and there is a certificate of public notice under the *Mineral Resources Act 1989* (Section 252A). ☐ **Complete section 3B**

3A. PUBLIC NOTIFICATION CONSIDERATION – RESOURCE ACTIVITY MAJOR AMENDMENTS ONLY (s230)

Where an amendment application has been decided to be a **major amendment**, public notification requirements may be triggered. Resource activities other than a mining activity may trigger public notification requirements where an activity is determined to involve a substantial increase in the risk of environmental harm and a substantial change in the quantity or quality or the results of the release of a quantity or quality of contaminant permitted to be released into the environment.

Amendment applications – assessment level decision and public notice

Consideration	Yes/ No / N/A	Justification (If Required)
There is likely to be a substantial increase in the risk of environmental harm under the amended EA (s230(2)(a)) <u>and</u> the risk is the result of a substantial change in the quantity or quality of contaminant permitted to be released into the environment (s230(2)(b)(i)).	<select>	
There is likely to be a substantial increase in the risk of environmental harm under the amended EA (s230(2)(a)) <u>and</u> the risk is the result of a substantial change in the results of the release of a quantity or quality of contaminant permitted to be released into the environment (s230(2)(b)(ii)).	<select>	
<p><i>Without limiting the above items, the following is taken to be a substantial change:</i></p> <ul style="list-style-type: none"> - An increase of 10% or more in the quantity of a contaminant to be released into the environment - If the amendment application is for an environmental authority for a resource project, an amendment to add an ineligible ERA for the authority 		

Recommendation – public notification under s230

- ☐ If both considerations above are marked 'No' or "N/A", the application does not require public notification.
- ☐ If either of the considerations above are marked 'Yes', the application may require public notification.

Public Notification is not required ☐

- Send ALD Notice to applicant in accordance with s229 within 10 business days, stating the decision (i.e. a major amendment) and the reasons for the decision
- Proceed to information stage.

Public Notification is required ☐

- Send ALD Notice to applicant in accordance with s229 including public notification requirement (s230) and the reasons for the decision (s230(4)) within 10 business days after the ALD is made.
- Proceed to information and notification stages.

3B. PUBLIC NOTIFICATION – MINING ACTIVITY MAJOR AMENDMENTS ONLY (s233 OR s152)

Amendment applications – assessment level decision and public notice

Recommendation – Public Notification under s233 or s152Public notification is required under s152 ☐Public notification is required under s233 ☐

- Send ALD Notice to applicant in accordance with s229 within 10 business days, stating the decision (i.e. a major amendment) and the reasons for the decision.
- Proceed to information and notification stages.

Assessing Officer		Reviewing Officer	
Sign:	73(2)Irrelevant	Sign:	73(2)Irrelevant
Date:	6/01/2014	Date:	06/01/14
Name:	Dot Rosiak	Name:	Kerynne Birch
Position:	Environmental Officer	Position:	Principle Environmental Officer
Delegate			
Recommendation/s:		APPROVED / NOT APPROVED	
Sign:		Date:	
Name:	Shari Murphy		
Position:	Manager, Brisbane North		

Notice

Environmental Protection Act 1994

Amendment of an environmental authority (mining activities) by the administering authority

This notice is issued by the administering authority¹, pursuant to 211 and 220 of the Environmental Protection Act 1994 to advise that an environmental authority is being amended.

To: The Austral Brick Company Pty Ltd
PO Box 269
MOUNT GRAVATT QLD 4122

Our reference: 241391

Amendment of an environmental authority to correct a clerical or formal error

Environmental authority details

Environmental authority number EPML00912113 dated 26-Aug-2013.

Land description: ML1151; ML1152; ML1156; ML1165; ML4578; ML50035; ML50115; ML50165; ML50189.

1. Amendment

The administering authority has become aware that there are clerical errors on the environmental authority that require correction. This correction is minor in nature and will not adversely impact your interests or anyone else's. As a result, the following amendments have been made to your environmental authority:

- Numbering of conditions prescribed in Schedule D – Noise and Vibration, Noise Nuisance have been amended.
- The criterion of 'Commercial Place' has been inserted in Schedule D – Table 2: Noise Limits.
- Figures 1, 2 and 3 have been inserted in Appendix 4 of the environmental authority.

The amended environmental authority is enclosed with this notice.

2. Grounds for the decision

The above amendments were made in order to correct clerical errors on the environmental authority, pursuant to section 211 of the *Environmental Protection Act 1994*.

3. Review and appeal rights

You may apply to the administering authority for a review of this decision within 10 business days after receiving this notice. You may also appeal against this decision to the Land Court. Information about your review and appeal rights is attached to this notice. This information is guidance only and you may have other legal rights and obligations.

¹ The Department of Environment and Heritage Protection is the administering authority under the *Environmental Protection Act 1994*.

Amendment of an environmental authority by the administering authority

73(2) Irrelevant

Signature

Shari Murphy
Department of Environment and Heritage Protection
Delegate of the administering authority
Environmental Protection Act 1994

22 Jan 14

Date

Enquiries:

Dot Rosiak
ES-RSD-SER-Brisbane North
Level 8, 400 George Street
GPO Box 2454
BRISBANE CITY QLD 4000
Phone: (07) 3330 6372
Email: Dorota.Rosiak@ehp.qld.gov.au

Attachments

Information sheet: Internal Review and Appeal to Land Court (EM1157)

Amended environmental authority (reference EPML00912113)



Department of
**Environment and
Heritage Protection**

17-JAN-2014

To: The Austral Brick Company Pty Ltd
PO Box 269
MOUNT GRAVATT QLD 4122

Your reference: 531_640_002
Our reference: 241391

Application details

I refer to the application that was received by the administering authority on 10-DEC-2013.

Land description: **German Church Road REDLAND BAY QLD 4165** Lot 1 Plan RP854704; **103 Riverview Road, RIVERVIEW QLD 4303** Lot 1 Plan RP166658; **105 Gardner Rd ROCHEDALE QLD 4123** Lot 2 Plan RP844169.

Decision

Your application has been approved and your environmental authority (reference EPPR00411413) is attached.

Should you have any further enquiries, please contact Dorota Rosiak on telephone (07) 3330 6372.

Yours sincerely

73(2)Irrelevant

Signature

Date

Shari Murphy
Department of Environment and Heritage Protection
Delegate of the administering authority
Environmental Protection Act 1994

Enclosed

Permit - environmental authority (reference EPPR00411413)

Dorota Rosiak
ES-RSD-SER-Brisbane North
Level 8 400 George Street
GPO Box 2454
BRISBANE CITY QLD 4000
Phone: (07) 3330 6372
Email: Dorota.Rosiak@ehp.qld.gov.au
Website www.ehp.qld.gov.au
ABN 46 640 294 485



Department of
**Environment and
Heritage Protection**

17-JAN-2014

To: The Austral Brick Company Pty Ltd
PO Box 269
MOUNT GRAVATT QLD 4122

Your reference: 531_640_002
Our reference: 241391

Application details

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Land description: **German Church Road REDLAND BAY QLD 4165** Lot 1 Plan RP854704; **103 Riverview Road, RIVERVIEW QLD 4303** Lot 1 Plan RP166658; **105 Gardner Rd ROCHEDALE QLD 4123** Lot 2 Plan RP844169.

Decision

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Should you have any further enquiries, please contact Dorota Rosiak on telephone (07) 3330 6372.

Yours sincerely

73(2)Irrelevant

Signature

Date

Shari Murphy
Department of Environment and Heritage Protection
Delegate of the administering authority
Environmental Protection Act 1994

Enclosed

Permit - environmental authority (reference EPPR00411413)

Dorota Rosiak
ES-RSD-SER-Brisbane North
Level 8 400 George Street
GPO Box 2454
BRISBANE CITY QLD 4000
Phone: (07) 3330 6372
Email: Dorota.Rosiak@ehp.qld.gov.au
Website www.ehp.qld.gov.au
ABN 46 640 294 485



Department of
**Environment and
Heritage Protection**

26-MAY-2015

To: The Austral Brick Company Pty Ltd
PO Box 269
MOUNT GRAVATT QLD 4122

Your reference: EPPR00411413
Our reference: EPPR00411413

Application details

I refer to the application that was received by the administering authority on 28-APR-2015.

Land description: **German Church Road REDLAND BAY QLD 4165** Lot 1 Plan RP854704; **105 Gardner Rd ROCHEDALE QLD 4123** Lot 2 Plan RP844169.

Decision

Your application has been approved and your amended environmental authority (reference EPPR00411413) is attached.

Should you have any further enquiries, please contact Kimberley Marian on telephone (07) 3330 5527.

Yours sincerely

<div data-bbox="319 1361 467 1393" data-label="Text"><p>73(2)Irrelevant</p></div>	<div data-bbox="954 1400 1260 1467" data-label="Text"><p>26/05/2015</p></div>
<div data-bbox="529 1467 630 1491" data-label="Text"><p>Signature</p></div>	<div data-bbox="1120 1462 1182 1489" data-label="Text"><p>Date</p></div>

Kelly Gleeson
Department of Environment and Heritage Protection
Delegate of the administering authority
Environmental Protection Act 1994

Kimberley Marian
Industry and Development Assessment
Department of Environment and Heritage
Protection
GPO Box 2454
BRISBANE QLD 4001
Phone: 07 3330 5527
Email: kimberley.marian@ehp.qld.gov.au
Website www.ehp.qld.gov.au
ABN 46 640 294 485

Enclosed

Permit - environmental authority (reference EPPR00411413)

Published on DES Disclosure Log
RTI Act 2009

Department of Environment and Heritage Protection

Permit¹

Environmental Protection Act 1994

Environmental authority EPPR00411413

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

Permit¹ number: EPPR00411413

Environmental authority takes effect 26 May 2015

The anniversary date of this environmental authority remains as **24 April** each year.

Environmental authority holder(s)

Name	Registered address
The Austral Brick Company Pty Ltd	105 Gardner Road ROCHEDALE QLD 4123

Environmentally relevant activity and location details

Environmentally relevant activities	Locations
16-(2b) Extracting, other than by dredging, in a year, more than 100,000t but not more than 1,000,000t of material; 16-(3b) Screening, in a year, more than 100,000t but not more than 1,000,000t of material;	German Church Road REDLAND BAY - Lot 1 Plan RP854704
42-(a) Manufacturing 200t to 5,000t of clay or ceramic products in a year; 60-(2f) Operating a facility for disposing of, in a year, more than 50,000t but not more than 100,000t of waste.	105 Gardner Rd ROCHEDALE QLD 4123 - Lot 2 Plan RP844169

Additional information for applicants

Environmentally relevant activities

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

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

¹ Permit includes licences, approvals, permits, authorisations, certificates, sanctions or equivalent/similar as required by legislation

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 if an owner or occupier of land becomes aware a notifiable activity (as defined in Schedule 3 and Schedule 4) is being carried out on the land, or that the land has been, or is being, contaminated by a hazardous contaminant, the owner or occupier must, within 22 business days after becoming so aware, give written notice to the chief executive.

73(2) Irrelevant

Signature

26/05/2015

Date

Kelly Gleeson
Department of Environment and Heritage Protection
Delegate of the administering authority
Environmental Protection Act 1994

Enquiries:
Kimberley Marian
Industry and Development Assessment
Department of Environment and Heritage
Protection
GPO Box 2454
BRISBANE QLD 4001
Phone: 07 3330 5527
Email: kimberley.marian@ehp.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 – Site specific conditions

Location: German Church Road REDLAND BAY - Lot 1 Plan RP854704

Relevant activities:

- 16-(2b) Extracting in a year more than 100 000t but not more than 1000 000t of material;
- 16-(3b) Screening in a year more than 100 000t but not more than 1000 000t of material;

The environmentally relevant activities conducted at the location as described above must be conducted in accordance with the following **site specific conditions of environmental authority**.

Agency interest: General	
Condition number	Condition
G1-1	<p>Prevent and /or minimise likelihood of environmental harm</p> <p>In carrying out the environmentally relevant activities, you must take all reasonable and practicable measures to prevent and / or to minimise the likelihood of environmental harm being caused. Any environmentally relevant activity, that, if carried out incompetently, or negligently, may cause environmental harm, in a manner that could have been prevented, shall be carried out in a proper manner in accordance with the conditions of this environmental authority.</p> <p>NOTE: This environmental authority authorises the environmentally relevant activity. It does not authorise environmental harm unless a condition contained within this environmental authority explicitly authorises that harm. Where there is no condition or the environmental authority is silent on a matter, the lack of a condition or silence shall not be construed as authorising harm.</p>
G1-2	<p>Maintenance of measures, plant and equipment</p> <p>The holder must:</p> <ul style="list-style-type: none"> - install all measures, plant and equipment necessary to ensure compliance with the conditions of this environmental authority; and - maintain such measures, plant and equipment in a proper and efficient condition; and - operate such measures, plant and equipment in a proper and efficient manner.

G1-3	<p>Site based management plan</p> <p>From commencement of the activity, 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 environmentally relevant activities that are carried out.</p> <p>The site based management plan must address the following matters:</p> <ul style="list-style-type: none"> - Environmental commitments - a commitment by senior management to achieve environmental goals. - Identification of environmental issues and potential impacts. - Control measures for routine operations to minimise likelihood of environmental harm. - Contingency plans and emergency procedures for non-routine situations. - Organisational structure and responsibility. - Effective communication. - Monitoring of the contaminant releases. - Conducting environmental impact assessments. - Staff training. - Record keeping. - Periodic review of environmental performance and continual improvement.
G1-4	<p>Records</p> <p>Record, compile and keep all monitoring results required by this document and present this information to the administering authority when requested, in a specified format.</p>
G1-5	<p>Acid sulphate soil (ASS)</p> <p>You must comply with the latest edition of the administering authority's '<i>Instructions for the Treatment and Management of Acid Sulphate Soils, 2001</i>', produced by the Queensland administering authority in consultation with the Department of Natural Resources and Mines and the Department of Primary Industries.</p>
G1-6	<p>Acid sulphate soils must be managed such that contaminants are not directly or indirectly released, as a result of the activity, to any waters or the bed and banks of any waters.</p>
G1-7	<p>Financial assurance</p> <p>Provide a financial assurance in the amount and form and at a time required by the administering authority.</p>
Agency interest: Air	
Condition number	Condition
A1-1	<p>Dust nuisance</p> <p>The release of dust and/or particulate matter resulting from the activity must not cause an environmental nuisance at any dust sensitive place.</p>

A1-2	<p>Exceedance of any of the following levels when measured at any dust sensitive place is an environmental nuisance for the purposes of condition A1-1.</p> <ul style="list-style-type: none"> - Dust deposition of 120 milligrams per square metre per day, when monitored in accordance with Australian Standard AS 3580.10 of 1991; or - A concentration of particulate matter with an aerodynamic diameter of less than 10 micrometre (µm) (PM10) suspended in the atmosphere of 150 micrograms per cubic metre over a 24 hour averaging time, at a dust sensitive place downwind of the site, when monitored in accordance with: <ul style="list-style-type: none"> - Australian Standard AS 3580.9.6 'Ambient air - Particulate matter - Determination of suspended particulate PM10 high-volume sampler with size-selective inlet - Gravimetric method'; or - any alternative method of monitoring PM10 which may be permitted by the 'Air Quality Sampling Manual' as published from time to time by the administering authority.
A1-3	<p>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:</p> <ul style="list-style-type: none"> - for a complaint alleging dust nuisance, dust deposition; and - for a complaint alleging adverse health effects caused by dust, the concentration per cubic metre of particulate matter with an aerodynamic diameter of less than 10 micrometre (µm) (PM10) suspended in the atmosphere over a 24hr averaging time.
Agency interest: Water	
Condition number	Condition
WA1-1	<p>Monitoring Monitoring must be undertaken and records kept of contaminant releases to waters from the discharge location for the parameters and not less frequently than specified in Appendix 2 - Table 1 (Release limits). All determinations of the quality of contaminants released must be:</p> <ul style="list-style-type: none"> - made in accordance with methods prescribed in the latest edition of the administering authority 'Water Quality Sampling Manual'; and - carried out on samples that are representative of the discharge.
WA1-2	<p>Erosion protection measures and sediment controls Erosion protection measures and sediment control measures must be implemented and maintained to minimise erosion and the release of sediment. 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 5 years. Sediment released to the bed of the receiving waters, effected by process water and stormwater contaminated by activities, can only be released when in compliance with the limits in Appendix 2 - Table 1 (Release limits).</p>
WA1-3	Prevent the release of sediment to waters or a build-up of sediment in any stormwater drain.
Agency interest: Noise & vibration	
Condition number	Condition
N1-1	<p>Noise nuisance Noise from activities must not cause an environmental nuisance at any noise affected premises.</p>

N1-2	All noise from the activities must not exceed the levels specified in Appendix 3 - Table 1 (Noise limits) when measured in accordance with the associated monitoring requirements. Any noise from the activities that exceed the levels specified in Appendix 3 - Table 1 (Noise limits) is considered an environmental nuisance.
N1-3	<p>Noise monitoring When requested by the administering authority, noise monitoring must be undertaken in accordance with the associated monitoring requirements of Appendix 3 – Table 1 (Noise limits), and the results notified within 14 days to the administering authority. Monitoring must include:</p> <ul style="list-style-type: none"> - LAeq,adj,T - Background noise (Background) as LA90,adj,T - MaxL_{pA,T} - 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.
N1-4	The method of measurement and reporting of noise levels must comply with the latest edition of the administering authority's 'Noise Measurement Manual' .
N1-5	Blasting activities must not exceed the limits for air blast overpressure in Appendix 3 - Table 2 (Blasting noise limits) when measured at any sensitive place or commercial place in accordance with the associated monitoring requirements.
N1-6	Blasting must be carried out in accordance with the current edition of the administering authority's 'Noise and vibration from blasting guideline' and with Australian Standard 2187.
N1-7	Unless prior approval is obtained from the administering authority : <ol style="list-style-type: none"> 1. blasting is only permitted during the hours of 9am to 3pm Monday to Friday, 2. blasting is not permitted at any time on Saturdays, Sundays and public holidays.
N1-8	When required by the administering authority , a blast monitoring program must be developed and implemented to monitor compliance with Appendix 3 - Table 2 (Blasting noise limits) at any sensitive place or commercial place .
N1-9	Vibration nuisance Vibration emitted from activities must not cause a nuisance at any vibration sensitive place .
N1-10	Vibration emitted from activities must not exceed the levels specified in Appendix 3 -Table 2 (Blasting noise limits) at any vibration sensitive place . Any vibration emitted from the activities that exceed the levels specified in Appendix 3 - Table 2 (Blasting noise limits) is considered an environmental nuisance.
N1-11	<p>Vibration monitoring When requested by the administering authority, vibration monitoring and recording must be undertaken in accordance with the most recent edition of the administering authority's 'Noise and Vibration from Blasting' guideline and Australian Standard 2187 to investigate any complaint of nuisance, and the results notified within 14 days to the administering authority. Monitoring must include:</p> <ul style="list-style-type: none"> - peak particle velocity (mm/s); and - location of the blast/s within the site (including which bench level); and - atmospheric conditions including temperature, relative humidity and wind speed and direction; and - the level and frequency of occurrence of impulsive or tonal noise; - atmospheric conditions including wind speed and direction; - effects due to extraneous factors; and - location, date and time of recording.

Agency interest: Land	
Condition number	Condition
L1-1	Rehabilitation landform criteria All areas significantly disturbed by activities must be rehabilitated in accordance with Appendix 4 - Table 1 (Final land use and rehabilitation outcome schedule).
L1-2	Rehabilitation Outcome – Industrial Disturbed land nominated for industrial or residential rehabilitation outcome will be considered rehabilitated when the land is stabilised and does not, or will not have potential to cause environmental harm to the environmental values.
L1-3	To remove any doubt, the nomination of the final land use of industrial, industrial (landfill) or residential in Appendix 4 - Table 1 (Final land use and rehabilitation outcome schedule), does not negate any local or state government planning or approval requirements for the development of that land .
L1-4	Rehabilitation Outcome – Native Ecosystem Areas that are to be rehabilitated to native ecosystem must comply with the following outcomes: a) achievement of a self-sustaining native ecosystem with a species composition and distribution similar to the pre-mining species composition and distribution; and b) the landform must be suitable to support the ecosystem in L1-4 a), not impede pre-mining fauna corridors and be stable and non-polluting.
L1-5	Complete an investigation into rehabilitation of disturbed areas and submit a report to the administering authority proposing acceptance criteria to meet the outcomes in L1-4. A report on the investigation, which will propose acceptance criteria , must be submitted to the administering authority by 30 June 2005.
L1-6	Rehabilitation Outcome – Wetland Type 1 (water filled voids) Areas that are to be rehabilitated to Wetland Type 1 outcome will be considered rehabilitated when the dams are revegetated with species appropriate to filter contaminants from the water, and water discharges from the dams do not exceed the total suspended solids value of the inflow to the pond.
Agency interest: Waste	
Condition number	Condition
W1-1	General The holder of this environmental authority must not: - burn waste at or on the authorised place ; or - allow waste to burn at or on the authorised place ; or - remove waste from the authorised place and burn such waste elsewhere.
Agency interest: Community	
Condition number	Condition
C1-1	Complaint response All complaints received must be recorded including investigations undertaken, conclusions formed and action taken. This information must be made available to the administering authority on request.

Part 2 – Site specific conditions

Location: 105 Gardner Rd ROCHEDALE QLD 4123 - Lot 2 Plan RP844169

Relevant activities: 42-(a) Manufacturing of 200t to 5000t of clay or ceramic products in a year;
60-(2f) Operating a facility for disposing of more than 50 000t but not more than 100 000t of waste a year;

The environmentally relevant activities conducted at the location as described above must be conducted in accordance with the following **site** specific conditions of environmental authority.

Agency interest: General	
Condition number	Condition
G2-1	<p>Prevent and /or minimise likelihood of environmental harm In carrying out the environmentally relevant activities, you must take all reasonable and practicable measures to prevent and / or to minimise the likelihood of environmental harm being caused. Any environmentally relevant activity, that, if carried out incompetently, or negligently, may cause environmental harm, in a manner that could have been prevented, shall be carried out in a proper manner in accordance with the conditions of this authority.</p> <p>NOTE: This authority authorises the environmentally relevant activity. It does not authorise environmental harm unless a condition contained within this authority explicitly authorises that harm. Where there is no condition or this authority is silent on a matter, the lack of a condition or silence shall not be construed as authorising harm.</p>
G2-2	<p>Maintenance of measures, plant and equipment The holder must: - install all measures, plant and equipment necessary to ensure compliance with the conditions of this environmental authority; and - maintain such measures, plant and equipment in a proper condition; and - operate such measures, plant and equipment in a proper manner.</p>
G2-3	<p>Records Record, compile and keep all monitoring results required by this environmental authority and present this information to the administering authority when requested, in a specified format.</p>
G2-4	<p>Storage and Handling of Flammable and Combustible Liquids Spillage of all flammable and combustible liquids must be contained within an on-site containment system and controlled in a manner that prevents environmental harm (other than trivial harm) and maintained in accordance with Section 5.9 of AS 1940 - <i>Storage and Handling of Flammable and Combustible Liquids of 1993</i>.</p>
G2-5	<p>Definitions Words and phrases used throughout this environmental authority are defined in Appendix 5 – Definitions. 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 in the <i>Environmental Protection Act 1994</i>, its Regulations and Environmental Protection Policies must be used.</p>

G2-6	Integrated Environmental Management System (IEMS) Prior to the commencement of any environmentally relevant activity ('the activities') under this environmental authority , the holder of this environmental authority must: <ul style="list-style-type: none"> - develop an Integrated Environmental Management System (IEMS) which provides for the effective management by the holder of the actual and potential environmental impacts resulting from the carrying out of the activities; and - implement and maintain the IEMS from the commencement of carrying out the activities.
G2-7	The IEMS must provide for at least the following functions: <ul style="list-style-type: none"> - Training staff in the awareness of environmental issues related to carrying out the activities, which must include at least: - The environmental policy of the holder, so that all persons that carry out the activities are aware of all relevant commitments to environmental management; and - Any relevant environmental objectives and targets, so that all staff are aware of the relevant performance objectives and can work towards these; and - Control procedures to be implemented for routine operations for day to day activities to minimise likelihood of environmental harm, however occasioned or caused; and - Contingency plans and emergency procedures to be implemented for non-routine situations to deal with foreseeable risks and hazards including corrective responses to prevent and mitigate environmental harm (including any necessary site rehabilitation); and - Organisational structure and responsibility to ensure that roles, responsibilities and authorities are appropriately defined to manage environmental issues effectively; and - Effective communication to ensure two-way communication on environmental matters between operational staff and higher management; - Their obligations in respect of monitoring, notification and record keeping obligations under the IEMS and relevant environmental authorities; and - Monitoring of the release of contaminants into the environment including procedures, methods, record keeping and notification of results; - Conducting assessment of the environmental impact of any release of contaminants into the environment; - Periodic conduct of energy audits and review of environmental performance and procedures adopted, not less frequently than annually; and - Waste prevention, treatment and disposal; and - A program for continuous improvement.
G2-8	The holder of this environmental authority must not implement or amend an IEMS (including any environmental management plan) that contravenes any condition of this environmental authority or any development condition applicable to carrying out the activities.
Agency interest: Air	
Condition number	Condition
A2-1	Nuisance The release of noxious or offensive odours or any other noxious or offensive airborne contaminants resulting from the activity must not cause a nuisance at any odour sensitive place .
A2-2	The Release of Contaminants to the Atmosphere The release of contaminants to the atmosphere from a point source must only occur from those release points identified in Appendix 1 - Table 2 (Release of contaminants) and must be directed vertically upwards without any impedance or hindrance.
A2-3	Contaminants must be released to the atmosphere from a release point at a height and a flow rate not less than the corresponding height and velocity stated for that release point in Appendix 1 - Table 2 (Release of contaminants) and not more than the efflux temperature stated for that release point in Appendix 1 - Table 2 (Release of contaminants).

A2-4	Contaminants must not be released to the atmosphere from a release point at a mass emission Rate/concentration, as measured at a monitoring point, in excess of that stated in Appendix 1 - Table 2 (Release of contaminants) and monitored not less frequently than Appendix 1 - Table 2 (Release of contaminants).
A2-5	Monitoring provisions and monitoring points must be provided for all the release points listed in Appendix 1 - Table 2 (Release of contaminants). The monitoring provisions and monitoring points must comply with the Australian Standard AS 4323.1 - 1995 "Stationary source emissions Method 1: Selection of sampling provisions".
A2-6	<p>The holder of this environmental authority must conduct a monitoring program of contaminant releases to the atmosphere at the release points, frequency, and for the parameters specified in Appendix 1 - Table 2 (Release of contaminants) and which complies with the following:</p> <p>(a) All determinations of the quality of contaminants released must be performed by a person or body possessing appropriate experience and qualifications to perform the required measurements.</p> <p>(b) All determinations of the quality and quantity of contaminants released to the atmosphere must be made in accordance with methods prescribed in the latest edition of administering authority's 'Air Quality Sampling Manual'.</p> <p>(c) The following tests must be performed for each required determination specified in Appendix 1 - Table 2 (Release of contaminants):</p> <ul style="list-style-type: none"> (i) gas velocity and volume flow rate; (ii) temperature; and (iii) water vapour concentration. <p>(d) Where practicable, samples taken must be representative of the contaminants discharged when emissions are expected to be maximum,</p> <p>(e) During the sampling period the following additional information must be gathered:</p> <ul style="list-style-type: none"> (i) production rate; (ii) equipment operating; (iii) product made; (iv) date of sampling; (v) start and end time of sampling; (vi) fuel rate; (vii) fluoride concentration in the mixture of clay used before and after fired; and (viii) proportion of each raw clay used. <p>(f) Oxides of nitrogen must be calculated as NO₂ at a seven percent (7%) oxygen level and total particulates must be determined where gas volume is calculated to twelve percent (12%) CO₂.</p>
A2-7	The only fuel to be used in the Swindell Dressler Tunnel Kiln (A1) and the Ceric Tunnel Kiln (A2) is natural gas.
A2-8	There must be no visible emission from release point numbers A1 or A2.
A2-9	The holder of this environmental authority must conduct a vegetation survey to detect chemical fumigation when there is non-compliance with any limit in Appendix 1 - Table 2 (Release of contaminants) and/or with the fluoride mass emission rate in Appendix 1 - Table 2 (Release of contaminants), or within three (3) years of the last vegetation survey submitted to the administering authority .
A2-10	The vegetation survey required by condition A2-9 must be conducted at Gardner Road and Prebble Street.
A2-11	A person or body possessing appropriate experience and qualifications must perform the vegetation survey required by condition A2-9 of this environmental authority .
A2-12	The holder of this environmental authority must ensure the data collected by conditions A2-11 and A2-9 of this environmental authority is analysed and interpreted to assess the nature and extent of any environmental impact of the environmentally relevant activity . The data, analysis and assessment must be submitted to the administering authority within three (3) months of the completion of any vegetation survey required by condition A2-9.

A2-13	<p>Dust nuisance</p> <p>Subject to conditions A2-14 and A2-15 the release of dust or particulate matter or both resulting from the mining activity must not cause an environmental nuisance, at any sensitive or commercial place.</p>
A2-14	<p>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 fourteen (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:</p> <ul style="list-style-type: none"> - for a complaint alleging dust nuisance, dust deposition; and - for a complaint alleging adverse health effects caused by dust, the concentration per cubic metre of particulate matter with an aerodynamic diameter of less than 10 micrometre (µm) (PM10) suspended in the atmosphere over a twenty-four (24) hour averaging time.
A2-15	<p>If the environmental authority holder can provide evidence through monitoring that the following limits are not being exceeded then the holder is not in breach of A2-13:</p> <ol style="list-style-type: none"> a) Dust deposition of 120 milligrams per square metre per day, averaged over one month, when monitored in accordance with AS 3580.10.1 <i>Methods for sampling and analysis of ambient air - Determination of particulates - Deposited matter - Gravimetric method of 1991</i>; and 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 twenty-four (24) hour averaging time, at a sensitive or commercial place downwind of the operational land, when monitored in accordance with: <ul style="list-style-type: none"> - Particulate matter - Determination of suspended particulate PM10 high-volume sampler with size-selective inlet - Gravimetric method, when monitored in accordance with AS 3580.9.6 <i>Methods for sampling and analysis of ambient air - Determination of suspended particulate matter - PM (sub) 10 high volume sampler with size-selective inlet - Gravimetric method of 1990</i>; or - Any alternative method of sampling PM10, which may be permitted by the 'Air Quality Sampling Manual' as published from time to time by the administering authority. <p>NOTE: You must propose which monitoring method is appropriate in accordance with condition A2-15 (a) or (b) or both.</p>
A2-16	<p>Dust Control</p> <p>Stockpiles must be maintained using all reasonable and practicable measures to minimise the release of wind-blown dust or particulate matter to the atmosphere. Reasonable and practicable measures may include but are not limited to anemometer switching systems which trigger operation of effective water spray systems during winds likely to generate such releases, use of dust suppressants, shielding and storage in bunkers.</p>
A2-17	<p>Trafficable areas must be maintained using all reasonable and practicable measures to minimise the release of wind-blown dust or traffic generated dust to the atmosphere. Reasonable and practicable measures may include but are not limited to sealing with bitumen or other suitable material, keeping surfaces clean, use of water sprays, adoption and adherence to speed limits, use of dusts suppressants and wind breaks.</p>
A2-18	<p>Raw material preparation plants and external transfer conveyors must be operated and maintained using all reasonable and practicable measures to minimise the release of wind-blown dust or particulate matter to the atmosphere. Reasonable and practicable measures may include but are not limited to transfer of materials in a moist state, enclosure of conveyors and buildings, use of water sprays at transfer points, shielding and wind breaks.</p>

Agency interest: Water	
Condition number	Condition
WA2-1	Release to waters Process water, storm water and/or receiving waters must be monitored at the locations and frequencies defined in Appendix 2 - Table 2 (Water monitoring locations and frequency) and comply with the contaminant limits defined in Appendix 2 - Table 3 (Discharge contaminant limits).
WA2-2	Stormwater Management Plan The holder of this environmental authority must have developed and implemented an effective and appropriate Stormwater Management Plan which details how the holder of this environmental authority will manage the actual and potential environmental impacts resulting from the contamination of stormwater at the approved place.
WA2-3	The Stormwater Management Plan must address at least the following matters: a) prevention of incident stormwater and stormwater runoff from contacting wastes or contaminants; and b) diversion of upstream runoff away from areas containing wastes or contaminants; and c) minimisation of the size of contaminated areas; and d) cleaning of contaminated areas without water; and e) installation and maintenance of pollution control equipment such as oil separators, silt and rubbish traps, and stormwater diversion systems; and f) installation and maintenance of sediment control measures for stormwater such as by means of coagulation, sedimentation, dissolved air flotation, settling basins or other suitable means; and g) paving and roofing of contaminated areas; and h) revegetation of exposed or disturbed areas; and i) diversion of upstream runoff from exposed or disturbed areas and stockpiles; and j) sampling and monitoring of stormwater discharges from the approved place to waters for parameters including the following: i) suspended solids, and ii) pH.
Agency interest: Noise	
Condition number	Condition
N2-1	Noise from activities must not cause an environmental nuisance at any noise affected premises .
N2-2	All noise from activities must not exceed the levels specified in Appendix 3 - Table 4 (Noise limits) at any noise affected premises .
N2-3	When requested by the administering authority , noise monitoring must be undertaken to investigate any complaint of noise nuisance, which is neither frivolous or vexatious or based on mistaken belief on the opinion of the authorised officer, and the results notified within fourteen (14) days to the administering authority . Monitoring must include: <ul style="list-style-type: none"> - L_A 10, adj, 10 mins - L_A 1, 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.
N2-4	The method of measurement and reporting of noise levels must comply with the latest edition of the administering authority's 'Noise Measurement Manual' .

Agency interest: Land	
Condition number	Condition
L2-1	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 .
Agency interest: Waste	
Condition number	Condition
W2-1	Waste Management Plan (WMP) The holder of this environmental authority must develop and implement an effective and appropriate Waste Management Plan which details how the holder of this environmental authority will manage the actual and potential environmental impacts resulting from all wastes produced at the approved place.
W2-2	The Waste Management Plan must address at least the following matters: (a) the quantity and nature of each waste produced; (b) the current method of disposal; (c) proposed methods of pre-treatment or disposal; (d) expected reduction in quantity of waste produced through waste minimisation and cleaner production; (e) investigation and evaluation of alternative treatment options; (f) areas to be set aside for the segregation and storage of recyclable solid wastes; (g) where a no-cost recycling service is available, reasonable and practicable steps must be taken to ensure recyclable waste is not deposited in the general waste stream. Such steps may include, but are not limited to provision of receptacles; suitable signage; and promotion of awareness among staff of the recycling service. (h) provisions for carrying out and submitting to the administering authority a waste audit within twelve (12) months from the date of issue of this environmental authority and thereafter every five (5) years.
W2-3	A copy of the Waste Management Plan and subsequent amendments must be kept at the approved place and must be made available to any authorised person or the administering authority on request.
W2-4	The holder of this environmental authority must not implement a Waste Management Plan or amend a Waste Management Plan where such implementation or amendment would result in a contravention of any condition of this environmental authority .
W2-5	On Site Waste Disposal The defined on site waste disposal area is described as "Waste Disposal Area" delineated in Appendix 5 - Definitions.
W2-6	Only the following general waste, which is generated by the brickworks operation, is to be disposed of at the Waste Disposal Area: (i) broken and reject bricks, pavers and other ceramic products; (ii) timber; (iii) plastic, paper and cardboard; and (iv) concrete and concrete products with or without reinforcing steel.

W2-7	Where general waste associated with the manufacture of bricks or pavers on the approved place is disposed of on the premises (other than as permitted by another schedule of this environmental authority), the holder of this environmental authority must monitor and record: (a) the date, quantity and type of waste disposed; and (b) the location of disposal of the waste; and (c) the method of disposal of the waste.
W2-8	Appropriate signs must be prominently displayed at the waste disposal area or appropriate written instructions must be given to all persons responsible for depositing waste. The signs or written instructions must at least indicate: (i) the types of waste that may be disposed; (ii) the types of waste which must not be disposed; (iii) the location where the wastes must be deposited within the general waste disposal area, and (iv) that open burning of waste is prohibited.
W2-9	Wastes must not be deposited beyond the boundaries of the waste disposal area.
W2-10	Regulated waste must not be stored or disposed of or deposited in the waste disposal area.
W2-11	Security The holder of this environmental authority must prevent any unauthorised disposal of waste on or in the approved place.
W2-12	The holder of this environmental authority must ensure that all access gates are locked when the approved place is unattended.
W2-13	General The holder of this environmental authority must not: (i) burn waste at or on the approved place; nor (ii) allow waste to burn or be burnt at or on the approved place; nor (iii) remove waste from the approved place and burn such waste elsewhere.
W2-14	Off Site Movement Where regulated waste is removed from the approved place (other than by a release as permitted under another schedule of this environmental authority), the holder of this environmental authority must monitor and record the following: (a) the date, quantity and type of waste removed; and (b) name of the waste transporter and/or disposal operator that removed the waste; and (c) the intended treatment/disposal destination of the waste. (NOTE: Records of documents maintained in compliance with a waste tracking system established under the <i>Environmental Protection Act 1994</i> or any other law for regulated waste will be deemed to satisfy this condition).
W2-15	Regulated waste must not be sent for disposal at any facility without the written approval of the person operating that facility.
W2-16	Records Records must be maintained for a period of five (5) years for all wastes mentioned in this schedule.
W2-17	Notification of Improper Disposal of Regulated Waste If the holder of this environmental authority becomes aware that a person has removed regulated waste from the approved place and disposed of the regulated waste in a manner which is not authorised by this environmental authority or which is 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: Community	

Condition number	Condition
C2-1	Complaint response All complaints received must be recorded including details of complainant, reasons for the complaint, investigations undertaken, conclusions formed and actions taken. This information must be made available for inspection by the administering authority on request.

Appendix 1 – Air

103 Riverview Road and RIVERVIEW - Lot 1 Plan RP166658

Table 1 (Release of contaminants)

Release point number	Minimum release height (metres)	Minimum velocity (m/sec)	Minimum efflux temp (°C)	Contaminant	Release Limit	Sampling frequency
Riverview Plant A1 - Swindell Dressler Tunnel Kiln	25	8	n/a	Concentration total particulates	0.25 g/m3	Not less frequently than annually
				Mass emission total particulates	n/a	Not less frequently than annually
				Concentration nitrogen oxides	0.35 g/m3	Not less frequently than annually
				Mass emission nitrogen oxides	n/a	Not less frequently than annually

105 Gardner Rd ROCHEDALE QLD 4123 - Lot 2 Plan RP844169

Table 2 (Release of contaminants)

Release point number	Minimum release height (metres)	Minimum velocity (m/sec)	Minimum efflux temp (°C)	Contaminant	Release Limit	Sampling frequency
Rochedale Plant A1 - Swindell Dressler Tunnel Kiln	30	8.7	126	Total particulates	0.25 g/m3	Not less frequently than annually
				Mass emission total particulates	n/a	Not less frequently than annually
				Nitrogen oxides	0.35 g/m3	Not less frequently than annually
				Mass emission nitrogen oxides	n/a	Not less frequently than annually
				Total fluoride (mass emission rate) g/sec	1.35	Not less frequently than annually
				Concentration total fluoride	n/a	Not less frequently than annually
Rochedale Plant A2 – Ceric Tunnel Kiln	15	9.5	124	Total particulates	0.25 g/m3	Not less frequently than annually
				Mass emission total particulates	n/a	Not less frequently than annually
				Nitrogen oxides	0.35 g/m3	Not less frequently than annually
				Mass emission nitrogen oxides	n/a	Not less frequently than annually
				Total fluoride (mass emission rate) g/sec	1.88	Not less frequently than annually
				Concentration total fluoride	n/a	Not less frequently than annually

Appendix 2 – Water

German Church Road REDLAND BAY - Lot 1 Plan RP854704

Table 1 (Release limits)

Monitoring point	Discharge location	Co-ordinates		Quality characteristics	Release Limits		Monitoring frequency
		Easting	Northing		Minimum	Maximum	
RB1, RB2, RB3	Moogurrapum Creek (RB1&2) Native Dog Creek (RB3)	526590	6943600	pH	6.0	9.0	Event release
		526350	6943600	Dissolved Oxygen (mg/L)	6.0	-	Event release
		526160	6943250	SS	-	50mg/l	Event release

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Table 2 (Water monitoring locations and frequency)

Monitoring Point	Monitoring Type	Co-ordinates (AMG)		Frequency
		Easting	Northing	
R1	Background for point R3	511580	6951560	When point R3 is sampled
R3	Discharge	511040	6951970	"Event Release"

Table 3 (Discharge containment limits)

Monitoring Point	Parameter	Minimum	Maximum
R3	pH	6.5	9
	Total Suspended Solids (mg/L)	-	50mg/L or not more than 110% of the value at R1*

* For the same monitoring event

Appendix 3 – Noise

German Church Road REDLAND BAY - Lot 1 Plan RP854704

Table 1 (Noise limits)

Noise level measured in dB(A)	Monday to Friday			Saturday	
	6am – 7am	7am – 6pm	6pm – 6am	7am – 4pm	4pm – 7am
	Noise measured at a nuisance sensitive place				
L_{Aeq, adj, T}	Background +3	Background +5	Background +0	Background +5	Background +0
MaxL_{pA, T}	Background +8	Background +10	Background +5	Background +10	Background +5
	Noise measured at a commercial place				
L_{Aeq, adj, T}	Background +8	Background +10	Background +5	Background +10	Background +5
MaxL_{pA, T}	Background +13	Background +15	Background +10	Background +15	Background +10

Associated monitoring requirements

1. All monitoring devices must be correctly calibrated and maintained.
2. Any monitoring of noise emission from the activity must be undertaken when the activity is in operation.
3. Sundays / Public Holidays - no Audible Noise.
4. The minimum value for T must be:
 - 15 minutes for continuous steady noises,
 - 1 hour for intermittent noises.

Table 2 (Blasting noise limits)

Blasting criteria	Blasting limits
Airblast overpressure	115 dB (Linear) Peak for 9 out of 10 consecutive blasts initiated and not greater than 120 dB (Linear) Peak at any time.
Ground vibration peak particle velocity	5mm/second peak particle velocity for 9 out of 10 consecutive blasts and not greater than 10mm/second peak particle velocity at any time.

Associated monitoring requirements

1. All monitoring devices must be correctly calibrated and maintained.

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Table 3 (Noise limits)

Noise level dB(A) measured as	Monday to Saturday			Sundays and public holidays		
	7am - 6pm	6pm - 10pm	10pm - 7am	9am - 6pm	6pm - 10pm	10pm - 9am
	Noise measured at a 'Noise sensitive place'					
L_{A10, adj, 10 mins}	b/g+5	b/g+5	b/g+3	b/g+5	b/g+5	b/g+0
L_{A1, adj, 10 mins}	b/g+10	b/g+10	b/g+5	b/g+10	b/g+10	b/g+5
	Noise measured at a 'Commercial place'					
L_{A10, adj, 10 mins}	b/g+10	b/g+10	b/g+8	b/g+10	b/g+10	b/g+5
L_{A1, adj, 10 mins}	b/g+15	b/g+15	b/g+10	b/g+15	b/g+15	b/g+10

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Table 4 (Noise limits)

Noise level dB(A) measured as	Monday to Saturday			Sundays and public holidays		
	7am - 6pm	6pm - 10pm	10pm - 7am	9am - 6pm	6pm - 10pm	10pm - 9am
	Noise measured at a 'Residential place'					
L _{A10} , adj, 10 mins	b/g+5	b/g+5	b/g+3	b/g+5	b/g+5	b/g+0
L _{A1} , adj, 10 mins	b/g+10	b/g+10	b/g+5	b/g+10	b/g+10	b/g+5
	Noise measured at a 'Commercial place'					
L _{A10} , adj, 10 mins	b/g+10	b/g+10	b/g+8	b/g+10	b/g+10	b/g+5
L _{A1} , adj, 10 mins	b/g+15	b/g+15	b/g+10	b/g+15	b/g+15	b/g+10

Appendix 4 – Land

German Church Road REDLAND BAY - Lot 1 Plan RP854704

Table 1 (Final land use and rehabilitation outcome schedule)

Disturbance Type	Projective Surface Area (ha)	Rehabilitation Outcome
Mine void	17.2	Industrial Native ecosystem
Sediment traps / water basins	1	Wetland Type 1
Roads	0.8	No rehabilitation required - retain
Buffer	4	Native Ecosystem

Appendix 5 - Definitions

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

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

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

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

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

annual return means the return required by the annual notice under the *Environment Protection Act, 1994*.

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

blasting is the use of explosives to fracture:

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

commercial place means a place used as a workplace, an office or for business or commercial purposes and includes a place within the curtilage of such a place reasonably used by persons at that place.

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

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

dust sensitive place means:

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

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

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

event release means when water is released and which must occur at least four times per year.

holder means the person who made an application for the **environmental authority**; or the person to whom the transferred **environmental authority** has been issued.

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*.

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

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

mg/L means milligrams per litre.

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

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

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

nuisance sensitive place includes:

- a **dwelling**, residential allotment, mobile home or caravan park, residential marina or other residential premises; or
- a motel, hotel or hostel; or
- a kindergarten, school, university or other educational institution; or
- a medical centre or hospital; or
- a **protected area** under the *Nature Conservation Act 1992*, the *Marine Parks Act 1992* or a World Heritage Area; or
- a public thoroughfare, park or gardens; or
- a place used as a workplace, an office or for business or commercial purposes and includes a place within the curtilage of such a place reasonably used by persons at that place.

noise affected premises means a 'noise sensitive place' or a 'commercial place'.

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

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

protected area means:

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

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

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

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

sensitive place means:

- a dwelling, residential allotment, mobile home or caravan park, residential marina or other residential premises; or
- a motel, hotel or hostel; or
- an 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 park or gardens; or
- a place used as a workplace, an office or for business or commercial purposes which is not part of the mining activity and does not include employees accommodation or public roads.

significant disturbance – includes land:

- (a) if it is contaminated land; or
- (b) it has been disturbed and human intervention is needed to rehabilitate it.
 - i) to a state required under the relevant **environmental authority**; or
 - ii) if the **environmental authority** does not require the land to be rehabilitated to a particular state – to its state immediately before the disturbance.

Some examples of disturbed land include:

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

However, the following areas are not included:

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

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

stable means geotechnical stability of the rehabilitated landform where instability related to the excessive settlement and subsidence caused by consolidation / settlement of the wastes deposited, and sliding / slumping instability has ceased.

this authority means **this environmental authority**.

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.

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

German Church Road REDLAND BAY - Lot 1 Plan RP854704 – specific definitions

airblast overpressure is the energy transmitted from the blast site within the atmosphere in the form of pressure waves. As these waves pass a given position, the pressure of the air rises very rapidly then falls more slowly then returns to the ambient value after a number of oscillations. The pressure wave consists of both audible (noise) and inaudible (concussion) energy. The maximum excess pressure in this wave is known as the peak air overpressure, generally measured in decibels using the linear frequency-weighting.

background means noise, measured in the absence of the noise under investigation, as L A90,T being the A-weighted sound pressure level exceeded for 90 per cent of the time period of not less than 15 minutes, using Fast response.

LAeq adj,T means the adjusted A weighted equivalent continuous sound pressure level measures on fast response, adjusted for tonality and impulsiveness, during the time period T, where T is measured for a period no less than 15 minutes when the activity is causing a steady state noise, and no shorter than one hour when the approved activity is causing an intermittent noise.

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

substantial low frequency noise means a noise emission that has an unbalanced frequency spectrum shown in a one-third octave band measurement, with a predominant component within the frequency range 10 to 200Hz. It includes any noise emission likely to cause an overall sound pressure level at a sensitive place exceeding 55dB(Z).

vibration is the oscillating or periodic motion of a particle, group of particles, or solid object about its equilibrium position.

vibration sensitive place means a noise sensitive place or a commercial place.

105 Gardner Rd ROCHEDALE QLD 4123 - Lot 2 Plan RP844169 – specific definitions

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

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

flowable substance means matter or mixture of materials which can be forced to or otherwise flow under any conditions possible in a situation. It includes water, other liquids or a mixture that includes water or any other liquid or suspended solids.

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

IEMS / Project EMOS document titled '*Environmental Management Overview Strategy (consolidating mining project numbers PJ50036, 50134, 50128 and 50150) incorporating Integrated Environmental Management*

System (mining, manufacturing and extractive industries). Prepared for The Austral Brick Company Pty Ltd. Prepared by Groundwork Environmental Management Services Pty Ltd. October 2002'.

LA 10, adj, 10 mins means the A-weighted sound pressure level, (*adjusted for tonal character and impulsiveness of the sound*) exceeded for ten percent (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 one percent (1%) of any 10-minute measurement period, using Fast response.

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

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

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

mandatory reporting level means the volume below the spillway crest, equivalent to the lower of the AEP, seventy-two (72) hour storm or the AEP wave allowance (AEP is the annual exceedence probability).

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

- the mining activities do not or will not cause more than 10 ha of land to be significantly disturbed at any one time;
- the mining activities do not or will not cause more than 5 ha of land to be significantly disturbed at any one time;
 - (a) in a riverine area;
 - (b) because of mine workings;
- the mining activities are not or will not be carried out in, or within 2 km of a category A *Environmentally Sensitive Area*;
- the mining activities are not or will not be carried out in, or within 1 km of a category B environmentally sensitive area;
- the mining activities do not include a level 1 environmentally relevant activity
- no more than twenty (20) persons are carrying out or will, at any one time, carry out the mining activities;

open area means those parts of the mining lease that are cleared in preparation for, or to conduct mining, but have not had rehabilitation commence. Open area excludes permanent roads, fixed plant and water quality control devices.

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

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

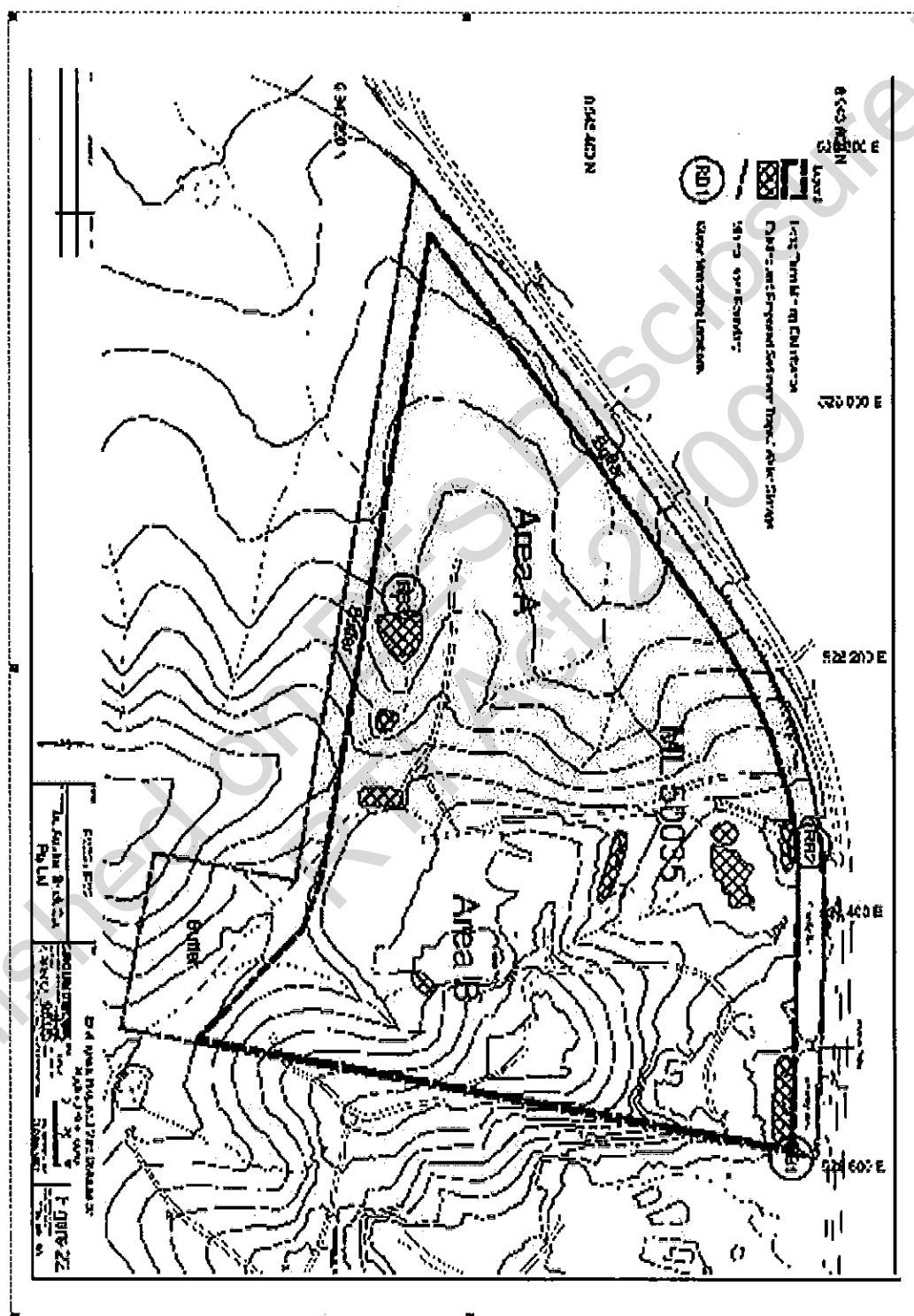
residual void means an open pit resulting from the removal of ore and/or waste rock which will remain following the cessation of all mining activities and completion of rehabilitation processes.

spillway means passage or outlet from the dam through which surplus water flows.

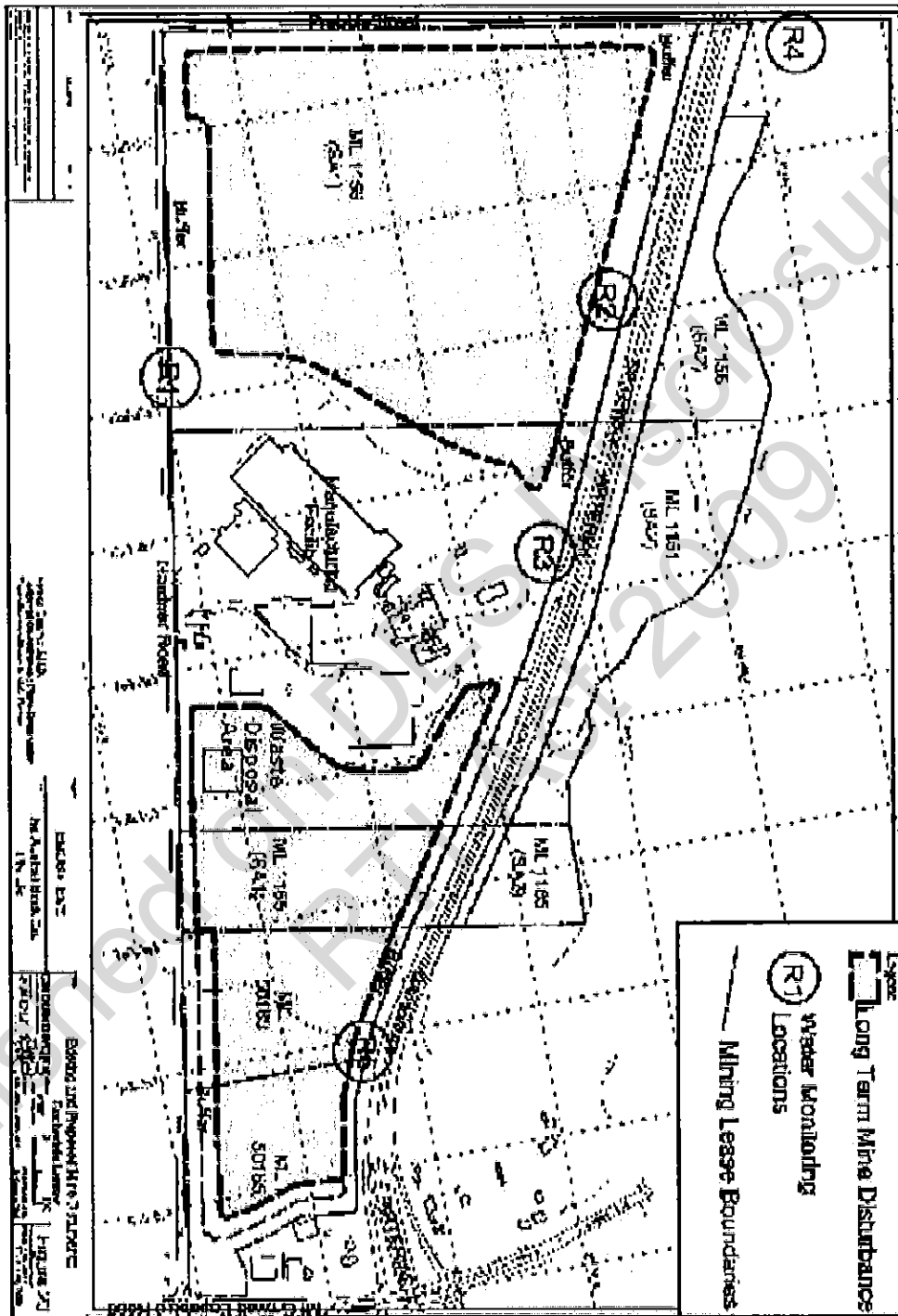
trivial harm means environmental harm which is not material or serious environmental harm and will not cause actual or potential loss or damage to property of an amount of, or amounts totalling more than \$5,000.

Appendix 6 – Maps/Plans

German Church Road REDLAND BAY - Lot 1 Plan RP854704



105 Gardner Rd ROCHEDALE QLD 4123 - Lot 2 Plan RP844169



END OF PERMIT



Department of
**Environment and
Heritage Protection**

17-JAN-2014

To: The Austral Brick Company Pty Ltd
PO Box 269
MOUNT GRAVATT QLD 4122

Your reference: 531_640_002
Our reference: 241391

Application details

I refer to the application that was received by the administering authority on 10-DEC-2013.

Land description: **German Church Road REDLAND BAY QLD 4165** Lot 1 Plan RP854704; **103 Riverview Road, RIVERVIEW QLD 4303** Lot 1 Plan RP166658; **105 Gardner Rd ROCHEDALE QLD 4123** Lot 2 Plan RP844169.

Decision

Your application has been approved and your environmental authority (reference EPPR00411413) is attached.

Should you have any further enquiries, please contact Dorota Rosiak on telephone (07) 3330 6372.

Yours sincerely

73(2)Irrelevant

Signature

Date

Shari Murphy
Department of Environment and Heritage Protection
Delegate of the administering authority
Environmental Protection Act 1994

Enclosed

Permit - environmental authority (reference EPPR00411413)

Dorota Rosiak
ES-RSD-SER-Brisbane North
Level 8 400 George Street
GPO Box 2454
BRISBANE CITY QLD 4000
Phone: (07) 3330 6372
Email: Dorota.Rosiak@ehp.qld.gov.au
Website www.ehp.qld.gov.au
ABN 46 640 294 485

Department of Environment and Heritage Protection

Permit¹

Environmental Protection Act 1994

Environmental authority EPPR00411413

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

Permit¹ number: EPPR00411413

Environmental authority takes effect 17 January 2014

The anniversary date of this environmental authority remains as **24 April** each year.

Environmental authority holder(s)

Name	Registered address
The Austral Brick Company Pty Ltd	105 Gardner Road ROCHEDALE QLD 4123

Environmentally relevant activity and location details

Environmentally relevant activities	Locations
16-(2b) Extracting in a year more than 100 000t but not more than 1000 000t of material; 16-(3b) Screening in a year more than 100 000t but not more than 1000 000t of material;	German Church Road REDLAND BAY - Lot 1 Plan RP854704
16-(3b) Screening in a year more than 100 000t but not more than 1000 000t of material; 42-(a) Manufacturing of 200t to 5000t of clay or ceramic products in a year;	103 Riverview Road and RIVERVIEW - Lot 1 Plan RP166658
42-(a) Manufacturing of 200t to 5000t of clay or ceramic products in a year; 60-(2f) Operating a facility for disposing of more than 50 000t but not more than 100 000t of waste a year;	105 Gardner Rd ROCHEDALE QLD 4123 - Lot 2 Plan RP844169

Additional information for applicants

Environmentally relevant activities

The description of any environmentally relevant **activity** (ERA) for which an environmental authority is issued is a restatement of the ERA as defined by legislation at the time the **environmental authority** is issued. Where there is any inconsistency between that description of an ERA and the conditions stated by an environmental

¹ Permit includes licences, approvals, permits, authorisations, certificates, sanctions or equivalent/similar as required by legislation



authority as to the scale, intensity or manner of carrying out an ERA, then the conditions prevail to the extent of the inconsistency.

An environmental authority authorises the carrying out of an ERA and does not authorise any environmental harm unless a condition stated by the authority 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 if an owner or occupier of land becomes aware a notifiable **activity** (as defined in Schedule 3 and Schedule 4) is being carried out on the land, or that the land has been, or is being, contaminated by a hazardous contaminant, the owner or occupier must, within 22 business days after becoming so aware, give written notice to the chief executive.

<div style="border: 1px solid red; background-color: white; padding: 2px; margin-bottom: 5px;">73(2) Irrelevant</div> <div style="border: 1px solid black; height: 40px; width: 100%;"></div> <div style="text-align: center; margin-top: 5px;">Signature</div>	<div style="border: 1px solid black; height: 40px; width: 100%;"></div> <div style="text-align: center; margin-top: 5px;">Date</div>
---	--

Shari Murphy
Department of Environment and Heritage Protection
Delegate of the administering authority
Environmental Protection Act 1994

Enquiries:
Dorota Rosiak
ES-RSD-SER-Brisbane North
Level 8 400 George Street
GPO Box 2454
BRISBANE CITY QLD 4000
Phone: (07) 3330 6372
Email: Dorota.Rosiak@ehp.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 – Site specific conditions

Location: German Church Road REDLAND BAY - Lot 1 Plan RP854704

Relevant activities:

- 16-(2b) Extracting in a year more than 100 000t but not more than 1000 000t of material;
- 16-(3b) Screening in a year more than 100 000t but not more than 1000 000t of material;

The environmentally relevant activities conducted at the location as described above must be conducted in accordance with the following **site specific conditions of environmental authority**.

Agency interest: General	
Condition number	Condition
G1-1	<p>Prevent and /or minimise likelihood of environmental harm In carrying out the environmentally relevant activities, you must take all reasonable and practicable measures to prevent and / or to minimise the likelihood of environmental harm being caused. Any environmentally relevant activity, that, if carried out incompetently, or negligently, may cause environmental harm, in a manner that could have been prevented, shall be carried out in a proper manner in accordance with the conditions of this environmental authority.</p> <p>NOTE: This environmental authority authorises the environmentally relevant activity. It does not authorise environmental harm unless a condition contained within this environmental authority explicitly authorises that harm. Where there is no condition or the environmental authority is silent on a matter, the lack of a condition or silence shall not be construed as authorising harm.</p>
G1-2	<p>Maintenance of measures, plant and equipment The holder must:</p> <ul style="list-style-type: none"> - install all measures, plant and equipment necessary to ensure compliance with the conditions of this environmental authority; and - maintain such measures, plant and equipment in a proper and efficient condition; and - operate such measures, plant and equipment in a proper and efficient manner.

G1-3	<p>Site based management plan</p> <p>From commencement of the activity, 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 environmentally relevant activities that are carried out.</p> <p>The site based management plan must address the following matters:</p> <ul style="list-style-type: none"> - Environmental commitments - a commitment by senior management to achieve environmental goals. - Identification of environmental issues and potential impacts. - Control measures for routine operations to minimise likelihood of environmental harm. - Contingency plans and emergency procedures for non-routine situations. - Organisational structure and responsibility. - Effective communication. - Monitoring of the contaminant releases. - Conducting environmental impact assessments. - Staff training. - Record keeping. - Periodic review of environmental performance and continual improvement.
G1-4	<p>Records</p> <p>Record, compile and keep all monitoring results required by this document and present this information to the administering authority when requested, in a specified format.</p>
G1-5	<p>Acid sulphate soil (ASS)</p> <p>You must comply with the latest edition of the administering authority's '<i>Instructions for the Treatment and Management of Acid Sulphate Soils, 2001</i>', produced by the Queensland administering authority in consultation with the Department of Natural Resources and Mines and the Department of Primary Industries.</p>
G1-6	<p>Acid sulphate soils must be managed such that contaminants are not directly or indirectly released, as a result of the activity, to any waters or the bed and banks of any waters.</p>
G1-7	<p>Financial assurance</p> <p>Provide a financial assurance in the amount and form and at a time required by the administering authority.</p>
Agency interest: Air	
Condition number	Condition
A1-1	<p>Dust nuisance</p> <p>The release of dust and/or particulate matter resulting from the activity must not cause an environmental nuisance at any dust sensitive place.</p>

73(2)Irrelevant

A1-2	<p>Exceedance of any of the following levels when measured at any dust sensitive place is an environmental nuisance for the purposes of condition A1-1.</p> <ul style="list-style-type: none"> - Dust deposition of 120 milligrams per square metre per day, when monitored in accordance with Australian Standard AS 3580.10 of 1991; or - A concentration of particulate matter with an aerodynamic diameter of less than 10 micrometre (µm) (PM10) suspended in the atmosphere of 150 micrograms per cubic metre over a 24 hour averaging time, at a dust sensitive place downwind of the site, when monitored in accordance with: <ul style="list-style-type: none"> - Australian Standard AS 3580.9.6 'Ambient air - Particulate matter - Determination of suspended particulate PM10 high-volume sampler with size-selective inlet - Gravimetric method'; or - any alternative method of monitoring PM10 which may be permitted by the 'Air Quality Sampling Manual' as published from time to time by the administering authority.
A1-3	<p>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:</p> <ul style="list-style-type: none"> - for a complaint alleging dust nuisance, dust deposition; and - for a complaint alleging adverse health effects caused by dust, the concentration per cubic metre of particulate matter with an aerodynamic diameter of less than 10 micrometre (µm) (PM10) suspended in the atmosphere over a 24hr averaging time.
Agency interest: Water	
Condition number	Condition
WA1-1	<p>Monitoring</p> <p>Monitoring must be undertaken and records kept of contaminant releases to waters from the discharge location for the parameters and not less frequently than specified in Appendix 2 - Table 1 (Release limits).</p> <p>All determinations of the quality of contaminants released must be:</p> <ul style="list-style-type: none"> - made in accordance with methods prescribed in the latest edition of the administering authority 'Water Quality Sampling Manual'; and - carried out on samples that are representative of the discharge.
WA1-2	<p>Erosion protection measures and sediment controls</p> <p>Erosion protection measures and sediment control measures must be implemented and maintained to minimise erosion and the release of sediment. 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 5 years. Sediment released to the bed of the receiving waters, effected by process water and stormwater contaminated by activities, can only be released when in compliance with the limits in Appendix 2 - Table 1 (Release limits).</p>
WA1-3	Prevent the release of sediment to waters or a build-up of sediment in any stormwater drain.
Agency interest: Noise & vibration	
Condition number	Condition
N1-1	<p>Noise nuisance</p> <p>Noise from activities must not cause an environmental nuisance at any noise affected premises.</p>

73(2) Irrelevant

N1-2	All noise from the activities must not exceed the levels specified in Appendix 3 - Table 1 (Noise limits) when measured in accordance with the associated monitoring requirements. Any noise from the activities that exceed the levels specified in Appendix 3 - Table 1 (Noise limits) is considered an environmental nuisance.
N1-3	<p>Noise monitoring When requested by the administering authority, noise monitoring must be undertaken in accordance with the associated monitoring requirements of Appendix 3 – Table 1 (Noise limits), and the results notified within 14 days to the administering authority. Monitoring must include:</p> <ul style="list-style-type: none"> - $L_{Aeq,adj,T}$ - Background noise (Background) as $L_{A90,adj,T}$ - $MaxL_{pA,T}$ - 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.
N1-4	The method of measurement and reporting of noise levels must comply with the latest edition of the administering authority's 'Noise Measurement Manual'.
N1-5	Blasting activities must not exceed the limits for air blast overpressure in Appendix 3 - Table 2 (Blasting noise limits) when measured at any sensitive place or commercial place in accordance with the associated monitoring requirements.
N1-6	Blasting must be carried out in accordance with the current edition of the administering authority's 'Noise and vibration from blasting guideline' and with Australian Standard 2187.
N1-7	Unless prior approval is obtained from the administering authority : <ol style="list-style-type: none"> 1. blasting is only permitted during the hours of 9am to 3pm Monday to Friday, 2. blasting is not permitted at any time on Saturdays, Sundays and public holidays.
N1-8	When required by the administering authority , a blast monitoring program must be developed and implemented to monitor compliance with Appendix 3 - Table 2 (Blasting noise limits) at any sensitive place or commercial place .
N1-9	<p>Vibration nuisance Vibration emitted from activities must not cause a nuisance at any vibration sensitive place.</p>
N1-10	Vibration emitted from activities must not exceed the levels specified in Appendix 3 -Table 2 (Blasting noise limits) at any vibration sensitive place . Any vibration emitted from the activities that exceed the levels specified in Appendix 3 - Table 2 (Blasting noise limits) is considered an environmental nuisance.
N1-11	<p>Vibration monitoring When requested by the administering authority, vibration monitoring and recording must be undertaken in accordance with the most recent edition of the administering authority's 'Noise and Vibration from Blasting' guideline and Australian Standard 2187 to investigate any complaint of nuisance, and the results notified within 14 days to the administering authority. Monitoring must include:</p> <ul style="list-style-type: none"> - peak particle velocity (mm/s); and - location of the blast/s within the site (including which bench level); and - atmospheric conditions including temperature, relative humidity and wind speed and direction; and - the level and frequency of occurrence of impulsive or tonal noise; - atmospheric conditions including wind speed and direction; - effects due to extraneous factors; and - location, date and time of recording.

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Agency interest: Land	
Condition number	Condition
L1-1	Rehabilitation landform criteria All areas significantly disturbed by activities must be rehabilitated in accordance with Appendix 4 - Table 1 (Final land use and rehabilitation outcome schedule).
L1-2	Rehabilitation Outcome – Industrial Disturbed land nominated for industrial or residential rehabilitation outcome will be considered rehabilitated when the land is stabilised and does not, or will not have potential to cause environmental harm to the environmental values.
L1-3	To remove any doubt, the nomination of the final land use of industrial, industrial (landfill) or residential in Appendix 4 - Table 1 (Final land use and rehabilitation outcome schedule), does not negate any local or state government planning or approval requirements for the development of that land .
L1-4	Rehabilitation Outcome – Native Ecosystem Areas that are to be rehabilitated to native ecosystem must comply with the following outcomes: a) achievement of a self-sustaining native ecosystem with a species composition and distribution similar to the pre-mining species composition and distribution; and b) the landform must be suitable to support the ecosystem in L1-4 a), not impede pre-mining fauna corridors and be stable and non-polluting.
L1-5	Complete an investigation into rehabilitation of disturbed areas and submit a report to the administering authority proposing acceptance criteria to meet the outcomes in L1-4. A report on the investigation, which will propose acceptance criteria , must be submitted to the administering authority by 30 June 2005.
L1-6	Rehabilitation Outcome – Wetland Type 1 (water filled voids) Areas that are to be rehabilitated to Wetland Type 1 outcome will be considered rehabilitated when the dams are revegetated with species appropriate to filter contaminants from the water, and water discharges from the dams do not exceed the total suspended solids value of the inflow to the pond.
Agency interest: Waste	
Condition number	Condition
W1-1	General The holder of this environmental authority must not: - burn waste at or on the authorised place ; or - allow waste to burn at or on the authorised place ; or - remove waste from the authorised place and burn such waste elsewhere.
Agency interest: Community	
Condition number	Condition
C1-1	Complaint response All complaints received must be recorded including investigations undertaken, conclusions formed and action taken. This information must be made available to the administering authority on request.

Part 2 – Site specific conditions

Location: 103 Riverview Road and RIVERVIEW - Lot 1 Plan RP166658

Relevant activities: 16-(3b) Screening in a year more than 100 000t but not more than 1000 000t of material;
42-(a) Manufacturing of 200t to 5000t of clay or ceramic products in a year,

The environmentally relevant activities conducted at the location as described above must be conducted in accordance with the following **site specific conditions of environmental authority**.

Agency interest: General	
Condition number	Condition
G2-1	<p>Prevent and /or minimise likelihood of environmental harm In carrying out the environmentally relevant activities, you must take all reasonable and practicable measures to prevent and / or to minimise the likelihood of environmental harm being caused. Any environmentally relevant activity, that, if carried out incompetently, or negligently, may cause environmental harm, in a manner that could have been prevented, shall be carried out in a proper manner in accordance with the conditions of this authority.</p> <p>NOTE: This authority authorises the environmentally relevant activity. It does not authorise environmental harm unless a condition contained within this authority explicitly authorises that harm. Where there is no condition or the authority is silent on a matter, the lack of a condition or silence shall not be construed as authorising harm.</p>
G2-2	<p>Maintenance of measures, plant and equipment The holder must:</p> <ul style="list-style-type: none"> - install all measures, plant and equipment necessary to ensure compliance with the conditions of this environmental authority; and - maintain such measures, plant and equipment in a proper condition; and - operate such measures, plant and equipment in a proper manner.
G2-3	<p>Records Record, compile and keep all monitoring results required by this environmental authority and present this information to the administering authority when requested, in a specified format.</p>
G2-4	<p>Storage and Handling of Flammable and Combustible Liquids Spillage of all flammable and combustible liquids must be contained within an on-site containment system and controlled in a manner that prevents environmental harm (other than trivial harm) and maintained in accordance with Section 5.9 of AS 1940 - <i>Storage and Handling of Flammable and Combustible Liquids of 1993</i>.</p>
G2-5	<p>Definitions Words and phrases used throughout this environmental authority are defined in Appendix 5 – Definitions. 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 in the <i>Environmental Protection Act 1994</i>, its Regulations and Environmental Protection Policies must be used.</p>
G2-6	<p>Integrated Environmental Management System (IEMS) Prior to the commencement of any environmentally relevant activity ('the activities') under this environmental authority, the holder of this environmental authority must:</p> <ul style="list-style-type: none"> - develop an Integrated Environmental Management System (IEMS) which provides for the effective management by the holder of the actual and potential environmental impacts resulting from the carrying out of the activities; and - implement and maintain the IEMS from the commencement of carrying out the activities.

73(2)Irrele

G2-7	<p>The IEMS must provide for at least the following functions:</p> <ul style="list-style-type: none"> - Training staff in the awareness of environmental issues related to carrying out the activities, which must include at least: - The environmental policy of the holder, so that all persons that carry out the activities are aware of all relevant commitments to environmental management; and - Any relevant environmental objectives and targets, so that all staff are aware of the relevant performance objectives and can work towards these; and - Control procedures to be implemented for routine operations for day to day activities to minimise likelihood of environmental harm, however occasioned or caused; and - Contingency plans and emergency procedures to be implemented for non-routine situations to deal with foreseeable risks and hazards including corrective responses to prevent and mitigate environmental harm (including any necessary site rehabilitation); and - Organisational structure and responsibility to ensure that roles, responsibilities and authorities are appropriately defined to manage environmental issues effectively; and - Effective communication to ensure two-way communication on environmental matters between operational staff and higher management; - Their obligations in respect of monitoring, notification and record keeping obligations under the IEMS and relevant environmental authorities; and - Monitoring of the release of contaminants into the environment including procedures, methods, record keeping and notification of results; - Conducting assessment of the environmental impact of any release of contaminants into the environment; - Periodic conduct of energy audits and review of environmental performance and procedures adopted, not less frequently than annually, and - Waste prevention, treatment and disposal; and - A program for continuous improvement.
G2-8	The holder of this environmental authority must not implement or amend an IEMS (including any environmental management plan) that contravenes any condition of this environmental authority or any development condition applicable to carrying out the activities.
Agency interest: Air	
Condition number	Condition
A2-1	<p>Nuisance</p> <p>The release of noxious or offensive odours or any other noxious or offensive airborne contaminants resulting from the activity must not cause a nuisance at any odour sensitive place.</p>
A2-2	<p>The Release of Contaminants to the Atmosphere</p> <p>The release of contaminants to the atmosphere from a point source must only occur from those release points identified in Appendix 1 - Table 1 (Release of contaminants) and must be directed vertically upwards without any impedance or hindrance.</p>
A2-3	Contaminants must be released to the atmosphere from a release point at a height and a flow rate not less than the corresponding height and velocity stated for that release point in Appendix 1 - Table 1 (Release of contaminants) and not more than the efflux temperature stated for that release point in Appendix 1 - Table 1 (Release of contaminants).
A2-4	Contaminants must not be released to the atmosphere from a release point at a mass emission Rate/concentration, as measured at a monitoring point, in excess of that stated in Appendix 1 - Table 1 (Release of contaminants) and monitored not less frequently than Appendix 1 - Table 1 (Release of contaminants).
A2-5	Monitoring provisions and monitoring points must be provided for all the release points listed in Appendix 1 - Table 1 (Release of contaminants). The monitoring provisions and monitoring points must comply with the Australian Standard AS 4323.1 - 1995 " <i>Stationary source emissions Method 1: Selection of sampling provisions</i> ".

A2-6	<p>The holder of this environmental authority must conduct a monitoring program of contaminant releases to the atmosphere at the release points, frequency, and for the parameters specified in Appendix 1 - Table 1 (Release of contaminants) and which complies with the following:</p> <p>(a) All determinations of the quality of contaminants released must be performed by a person or body possessing appropriate experience and qualifications to perform the required measurements.</p> <p>(b) All determinations of the quality and quantity of contaminants released to the atmosphere must be made in accordance with methods prescribed in the latest edition of the administering authority's 'Air Quality Sampling Manual'.</p> <p>(c) The following tests must be performed for each required determination specified in Appendix 1 - Table 1 (Release of contaminants):</p> <ul style="list-style-type: none"> (i) gas velocity and volume flow rate; (ii) temperature; and (iii) water vapour concentration. <p>(d) Where practicable, samples taken must be representative of the contaminants discharged when emissions are expected to be maximum.</p> <p>(e) During the sampling period the following additional information must be gathered:</p> <ul style="list-style-type: none"> (i) production rate; (ii) equipment operating; (iii) product made; (iv) date of sampling; (v) start and end time of sampling; (vi) fuel rate. <p>(f) Oxides of nitrogen must be calculated as NO₂ at a seven percent (7%) oxygen level and total particulates must be determined where gas volume is calculated to twelve percent (12%) CO₂.</p>
A2-7	Total Fluoride emissions from the release point numbered A1 at the Riverview Plant must not result in Ground Level Concentrations (GLC's) in excess of 3.7µg/m ³ for an averaging time of twelve (12) hours and 0.5µg/m ³ for an averaging time of ninety (90) days, beyond the boundaries of the approved place.
A2-8	For the purposes of checking conformity with condition A2-7, the results of the Fluoride monitoring as required in Appendix 1 - Table 1 (Release of contaminants) must be expressed as µg HF/m ³ and modelled using an Appropriate Air Pollution Dispersion Modelling Program to determine the Ground Level Concentrations for the twelve (12) hour and ninety (90) day averaging time.
A2-9	The only fuel to be used in the Swindell Dressler Tunnel Kiln is natural gas.
A2-10	There must be no visible emission from release point number A1.
A2-11	<p>Dust nuisance</p> <p>Subject to Conditions A2-12 and A2-13 the release of dust or particulate matter or both resulting from the mining activity must not cause an environmental nuisance, at any sensitive or commercial place.</p>
A2-12	<p>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 fourteen (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:</p> <ul style="list-style-type: none"> - for a complaint alleging dust nuisance, dust deposition; and - for a complaint alleging adverse health effects caused by dust, the concentration per cubic metre of particulate matter with an aerodynamic diameter of less than 10 micrometre (µm) (PM10) suspended in the atmosphere over a twenty-four (24) hour averaging time.

73(2)Irrele

A2-13	<p>If the environmental authority holder can provide evidence through monitoring that the following limits are not being exceeded then the holder is not in breach of A2-11:</p> <p>a) Dust deposition of 120 milligrams per square metre per day, averaged over one month, when monitored in accordance with AS 3580.10.1 <i>Methods for sampling and analysis of ambient air - Determination of particulates - Deposited matter - Gravimetric method of 1991</i>; and</p> <p>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 twenty-four (24) hour averaging time, at a sensitive or commercial place downwind of the operational land, when monitored in accordance with:</p> <ul style="list-style-type: none"> - Particulate matter - Determination of suspended particulate PM10 high-volume sampler with size-selective inlet - Gravimetric method, when monitored in accordance with AS 3580.9.6 <i>Methods for sampling and analysis of ambient air - Determination of suspended particulate matter - PM (sub) 10 high volume sampler with size-selective inlet - Gravimetric method of 1990</i>; or - Any alternative method of sampling PM10, which may be permitted by the 'Air Quality Sampling Manual' as published from time to time by the administering authority. <p>NOTE: You must propose which monitoring method is appropriate in accordance with condition A2-13 (a) or (b) or both.</p>
A2-14	<p>Dust Control</p> <p>Stockpiles must be maintained using all reasonable and practicable measures to minimise the release of wind-blown dust or particulate matter to the atmosphere. Reasonable and practicable measures may include but are not limited to anemometer switching systems which trigger operation of effective water spray systems during winds likely to generate such releases, use of dust suppressants, shielding and storage in bunkers.</p>
A2-15	<p>Trafficable areas must be maintained using all reasonable and practicable measures to minimise the release of wind-blown dust or traffic generated dust to the atmosphere. Reasonable and practicable measures may include but are not limited to sealing with bitumen or other suitable material, keeping surfaces clean, use of water sprays, adoption and adherence to speed limits, use of dusts suppressants and wind breaks.</p>
A2-16	<p>Raw material preparation plants and external transfer conveyors must be operated and maintained using all reasonable and practicable measures to minimise the release of wind-blown dust or particulate matter to the atmosphere. Reasonable and practicable measures may include but are not limited to transfer of materials in a moist state, enclosure of conveyors and buildings, use of water sprays at transfer points, shielding and wind breaks.</p>
Agency interest: Noise	
Condition number	Condition
N2-1	Noise from activities must not cause an environmental nuisance at any noise affected premises .
N2-2	All noise from activities must not exceed the levels specified in Appendix 3 - Table 3 (Noise limits) at any noise affected premises .

73(2)Irrelevant

N2-3	When requested by the administering authority , noise monitoring must be undertaken to investigate any complaint of noise nuisance, which is neither frivolous or vexatious or based on mistaken belief on the opinion of the authorised officer, and the results notified within fourteen (14) days to the administering authority . Monitoring must include: - LA 10, adj, 10 mins; - LA 1, 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.
N2-4	The method of measurement and reporting of noise levels must comply with the latest edition of the administering authority's 'Noise Measurement Manual'.
Agency interest: Land	
Condition number	Condition
L2-1	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 .
Agency interest: Waste	
Condition number	Condition
W2-1	General The holder of this environmental authority must not: (i) burn waste at or on the approved place, nor (ii) allow waste to burn or be burnt at or on the approved place; nor (iii) remove waste from the approved place and burn such waste elsewhere.
W2-2	Off Site Movement Where regulated waste is removed from the approved place (other than by a release as permitted under another schedule of this environmental authority), the holder of this environmental authority must monitor and record the following: (a) the date, quantity and type of waste removed; and (b) name of the waste transporter and/or disposal operator that removed the waste; and (c) the intended treatment/disposal destination of the waste. (NOTE: Records of documents maintained in compliance with a waste tracking system established under the <i>Environmental Protection Act 1994</i> or any other law for regulated waste will be deemed to satisfy this condition).
W2-3	Regulated waste must not be sent for disposal at any facility without the written approval of the person operating that facility.
W2-4	Records Records must be maintained for a period of five (5) years for all wastes mentioned in this schedule.
W2-5	Notification of Improper Disposal of Regulated Waste If the holder of this environmental authority becomes aware that a person has removed regulated waste from the approved place and disposed of the regulated waste in a manner which is not authorised by this environmental authority or which is 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: Community	
Condition number	Condition
C2-1	Complaint response All complaints received must be recorded including details of complainant, reasons for the complaint, investigations undertaken, conclusions formed and actions taken. This information must be made available for inspection by the administering authority on request.

Part 3 – Site specific conditions

Location: 105 Gardner Rd ROCHEDALE QLD 4123 - Lot 2 Plan RP844169

Relevant activities: 42-(a) Manufacturing of 200t to 5000t of clay or ceramic products in a year;
 60-(2f) Operating a facility for disposing of more than 50 000t but not more than 100 000t of waste a year;

The environmentally relevant activities conducted at the location as described above must be conducted in accordance with the following **site** specific conditions of environmental authority.

Agency interest: General	
Condition number	Condition
G3-1	Prevent and /or minimise likelihood of environmental harm In carrying out the environmentally relevant activities, you must take all reasonable and practicable measures to prevent and / or to minimise the likelihood of environmental harm being caused. Any environmentally relevant activity , that, if carried out incompetently, or negligently, may cause environmental harm, in a manner that could have been prevented, shall be carried out in a proper manner in accordance with the conditions of this authority . NOTE: This authority authorises the environmentally relevant activity . It does not authorise environmental harm unless a condition contained within this authority explicitly authorises that harm. Where there is no condition or this authority is silent on a matter, the lack of a condition or silence shall not be construed as authorising harm.
G3-2	Maintenance of measures, plant and equipment The holder must: <ul style="list-style-type: none"> - install all measures, plant and equipment necessary to ensure compliance with the conditions of this environmental authority; and - maintain such measures, plant and equipment in a proper condition; and - operate such measures, plant and equipment in a proper manner.
G3-3	Records Record, compile and keep all monitoring results required by this environmental authority and present this information to the administering authority when requested, in a specified format.
G3-4	Storage and Handling of Flammable and Combustible Liquids Spillage of all flammable and combustible liquids must be contained within an on-site containment system and controlled in a manner that prevents environmental harm (other than trivial harm) and maintained in accordance with Section 5.9 of AS 1940 - <i>Storage and Handling of Flammable and Combustible Liquids of 1993</i> .

73(2)Irrelevant

G3-5	Definitions Words and phrases used throughout this environmental authority are defined in Appendix 5 – Definitions. 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 in the <i>Environmental Protection Act 1994</i> , its Regulations and Environmental Protection Policies must be used
G3-6	Integrated Environmental Management System (IEMS) Prior to the commencement of any environmentally relevant activity ('the activities') under this environmental authority , the holder of this environmental authority must: <ul style="list-style-type: none"> - develop an Integrated Environmental Management System (IEMS) which provides for the effective management by the holder of the actual and potential environmental impacts resulting from the carrying out of the activities; and - implement and maintain the IEMS from the commencement of carrying out the activities.
G3-7	The IEMS must provide for at least the following functions: <ul style="list-style-type: none"> - Training staff in the awareness of environmental issues related to carrying out the activities, which must include at least: - The environmental policy of the holder, so that all persons that carry out the activities are aware of all relevant commitments to environmental management; and - Any relevant environmental objectives and targets, so that all staff are aware of the relevant performance objectives and can work towards these; and - Control procedures to be implemented for routine operations for day to day activities to minimise likelihood of environmental harm, however occasioned or caused; and - Contingency plans and emergency procedures to be implemented for non-routine situations to deal with foreseeable risks and hazards including corrective responses to prevent and mitigate environmental harm (including any necessary site rehabilitation); and - Organisational structure and responsibility to ensure that roles, responsibilities and authorities are appropriately defined to manage environmental issues effectively; and - Effective communication to ensure two-way communication on environmental matters between operational staff and higher management; - Their obligations in respect of monitoring, notification and record keeping obligations under the IEMS and relevant environmental authorities; and - Monitoring of the release of contaminants into the environment including procedures, methods, record keeping and notification of results; - Conducting assessment of the environmental impact of any release of contaminants into the environment; - Periodic conduct of energy audits and review of environmental performance and procedures adopted, not less frequently than annually; and - Waste prevention, treatment and disposal; and - A program for continuous improvement.
G3-8	The holder of this environmental authority must not implement or amend an IEMS (including any environmental management plan) that contravenes any condition of this environmental authority or any development condition applicable to carrying out the activities.
Agency interest: Air	
Condition number	Condition
A3-1	Nuisance The release of noxious or offensive odours or any other noxious or offensive airborne contaminants resulting from the activity must not cause a nuisance at any odour sensitive place .
A3-2	The Release of Contaminants to the Atmosphere The release of contaminants to the atmosphere from a point source must only occur from those release points identified in Appendix 1 - Table 2 (Release of contaminants) and must be directed vertically upwards without any impedance or hindrance.

73(2)Irrelevant

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A3-3	Contaminants must be released to the atmosphere from a release point at a height and a flow rate not less than the corresponding height and velocity stated for that release point in Appendix 1 - Table 2 (Release of contaminants) and not more than the efflux temperature stated for that release point in Appendix 1 - Table 2 (Release of contaminants).
A3-4	Contaminants must not be released to the atmosphere from a release point at a mass emission Rate/concentration, as measured at a monitoring point, in excess of that stated in Appendix 1 - Table 2 (Release of contaminants) and monitored not less frequently than Appendix 1 - Table 2 (Release of contaminants).
A3-5	Monitoring provisions and monitoring points must be provided for all the release points listed in Appendix 1 - Table 2 (Release of contaminants). The monitoring provisions and monitoring points must comply with the Australian Standard AS 4323.1 - 1995 "Stationary source emissions Method 1: Selection of sampling provisions".
A3-6	<p>The holder of this environmental authority must conduct a monitoring program of contaminant releases to the atmosphere at the release points, frequency, and for the parameters specified in Appendix 1 - Table 2 (Release of contaminants) and which complies with the following:</p> <p>(a) All determinations of the quality of contaminants released must be performed by a person or body possessing appropriate experience and qualifications to perform the required measurements.</p> <p>(b) All determinations of the quality and quantity of contaminants released to the atmosphere must be made in accordance with methods prescribed in the latest edition of administering authority's 'Air Quality Sampling Manual'.</p> <p>(c) The following tests must be performed for each required determination specified in Appendix 1 - Table 2 (Release of contaminants):</p> <ul style="list-style-type: none"> (i) gas velocity and volume flow rate; (ii) temperature; and (iii) water vapour concentration. <p>(d) Where practicable, samples taken must be representative of the contaminants discharged when emissions are expected to be maximum.</p> <p>(e) During the sampling period the following additional information must be gathered:</p> <ul style="list-style-type: none"> (i) production rate; (ii) equipment operating; (iii) product made; (iv) date of sampling; (v) start and end time of sampling; (vi) fuel rate; (vii) fluoride concentration in the mixture of clay used before and after fired; and (viii) proportion of each raw clay used. <p>(f) Oxides of nitrogen must be calculated as NO₂ at a seven percent (7%) oxygen level and total particulates must be determined where gas volume is calculated to twelve percent (12%) CO₂.</p>
A3-7	The only fuel to be used in the Swindell Dressler Tunnel Kiln (A1) and the Ceric Tunnel Kiln (A2) is natural gas.
A3-8	There must be no visible emission from release point numbers A1 or A2.
A3-9	The holder of this environmental authority must conduct a vegetation survey to detect chemical fumigation when there is non-compliance with any limit in Appendix 1 - Table 2 (Release of contaminants) and/or with the fluoride mass emission rate in Appendix 1 - Table 2 (Release of contaminants), or within three (3) years of the last vegetation survey submitted to the administering authority .
A3-10	The vegetation survey required by condition A3-9 must be conducted at Gardner Road and Prebble Street.
A3-11	A person or body possessing appropriate experience and qualifications must perform the vegetation survey required by condition A3-9 of this environmental authority .

A3-12	The holder of this environmental authority must ensure the data collected by conditions A3-11 and A3-9 of this environmental authority is analysed and interpreted to assess the nature and extent of any environmental impact of the environmentally relevant activity . The data, analysis and assessment must be submitted to the administering authority within three (3) months of the completion of any vegetation survey required by condition A3-9.
A3-13	Dust nuisance Subject to conditions A3-14 and A3-15 the release of dust or particulate matter or both resulting from the mining activity must not cause an environmental nuisance, at any sensitive or commercial place .
A3-14	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 fourteen (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: <ul style="list-style-type: none"> - for a complaint alleging dust nuisance, dust deposition; and - for a complaint alleging adverse health effects caused by dust, the concentration per cubic metre of particulate matter with an aerodynamic diameter of less than 10 micrometre (μm) (PM10) suspended in the atmosphere over a twenty-four (24) hour averaging time.
A3-15	If the environmental authority holder can provide evidence through monitoring that the following limits are not being exceeded then the holder is not in breach of A3-13: a) Dust deposition of 120 milligrams per square metre per day, averaged over one month, when monitored in accordance with AS 3580.10.1 <i>Methods for sampling and analysis of ambient air - Determination of particulates - Deposited matter - Gravimetric method of 1991</i> ; and 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 twenty-four (24) hour averaging time, at a sensitive or commercial place downwind of the operational land , when monitored in accordance with: <ul style="list-style-type: none"> - Particulate matter - Determination of suspended particulate PM10 high-volume sampler with size-selective inlet - Gravimetric method, when monitored in accordance with AS 3580.9.6 <i>Methods for sampling and analysis of ambient air - Determination of suspended particulate matter - PM (sub) 10 high volume sampler with size-selective inlet - Gravimetric method of 1990</i>; or - Any alternative method of sampling PM10, which may be permitted by the 'Air Quality Sampling Manual' as published from time to time by the administering authority. <p>NOTE: You must propose which monitoring method is appropriate in accordance with condition A3-15 (a) or (b) or both.</p>
A3-16	Dust Control Stockpiles must be maintained using all reasonable and practicable measures to minimise the release of wind-blown dust or particulate matter to the atmosphere. Reasonable and practicable measures may include but are not limited to anemometer switching systems which trigger operation of effective water spray systems during winds likely to generate such releases, use of dust suppressants, shielding and storage in bunkers.
A3-17	Trafficable areas must be maintained using all reasonable and practicable measures to minimise the release of wind-blown dust or traffic generated dust to the atmosphere. Reasonable and practicable measures may include but are not limited to sealing with bitumen or other suitable material, keeping surfaces clean, use of water sprays, adoption and adherence to speed limits, use of dusts suppressants and wind breaks.
A3-18	Raw material preparation plants and external transfer conveyors must be operated and maintained using all reasonable and practicable measures to minimise the release of wind-blown dust or particulate matter to the atmosphere. Reasonable and practicable measures may include but are not limited to transfer of materials in a moist state, enclosure of conveyors and buildings, use of water sprays at transfer points, shielding and wind breaks.

73(2) Irrelevant

Agency interest: Water	
Condition number	Condition
WA3-1	Release to waters Process water, storm water and/or receiving waters must be monitored at the locations and frequencies defined in Appendix 2 - Table 2 (Water monitoring locations and frequency) and comply with the contaminant limits defined in Appendix 2 - Table 3 (Discharge contaminant limits).
WA3-2	Stormwater Management Plan The holder of this environmental authority must have developed and implemented an effective and appropriate Stormwater Management Plan which details how the holder of this environmental authority will manage the actual and potential environmental impacts resulting from the contamination of stormwater at the approved place.
WA3-3	The Stormwater Management Plan must address at least the following matters: a) prevention of incident stormwater and stormwater runoff from contacting wastes or contaminants; and b) diversion of upstream runoff away from areas containing wastes or contaminants; and c) minimisation of the size of contaminated areas; and d) cleaning of contaminated areas without water; and e) installation and maintenance of pollution control equipment such as oil separators, silt and rubbish traps, and stormwater diversion systems; and f) installation and maintenance of sediment control measures for stormwater such as by means of coagulation, sedimentation, dissolved air flotation, settling basins or other suitable means; and g) paving and roofing of contaminated areas; and h) revegetation of exposed or disturbed areas; and i) diversion of upstream runoff from exposed or disturbed areas and stockpiles; and j) sampling and monitoring of stormwater discharges from the approved place to waters for parameters including the following: i) suspended solids, and ii) pH.
Agency interest: Noise	
Condition number	Condition
N3-1	Noise from activities must not cause an environmental nuisance at any noise affected premises .
N3-2	All noise from activities must not exceed the levels specified in Appendix 3 - Table 4 (Noise limits) at any noise affected premises .
N3-3	When requested by the administering authority , noise monitoring must be undertaken to investigate any complaint of noise nuisance, which is neither frivolous or vexatious or based on mistaken belief on the opinion of the authorised officer, and the results notified within fourteen (14) days to the administering authority . Monitoring must include: - LA 10, adj, 10 mins - LA 1, 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.
N3-4	The method of measurement and reporting of noise levels must comply with the latest edition of the administering authority's 'Noise Measurement Manual' .

73(2) Irrelevant

Agency interest: Land	
Condition number	Condition
L3-1	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 .
Agency interest: Waste	
Condition number	Condition
W3-1	Waste Management Plan (WMP) The holder of this environmental authority must develop and implement an effective and appropriate Waste Management Plan which details how the holder of this environmental authority will manage the actual and potential environmental impacts resulting from all wastes produced at the approved place.
W3-2	The Waste Management Plan must address at least the following matters: (a) the quantity and nature of each waste produced; (b) the current method of disposal; (c) proposed methods of pre-treatment or disposal; (d) expected reduction in quantity of waste produced through waste minimisation and cleaner production; (e) investigation and evaluation of alternative treatment options; (f) areas to be set aside for the segregation and storage of recyclable solid wastes; (g) where a no-cost recycling service is available, reasonable and practicable steps must be taken to ensure recyclable waste is not deposited in the general waste stream. Such steps may include, but are not limited to provision of receptacles; suitable signage; and promotion of awareness among staff of the recycling service. (h) provisions for carrying out and submitting to the administering authority a waste audit within twelve (12) months from the date of issue of this environmental authority and thereafter every five (5) years.
W3-3	A copy of the Waste Management Plan and subsequent amendments must be kept at the approved place and must be made available to any authorised person or the administering authority on request.
W3-4	The holder of this environmental authority must not implement a Waste Management Plan or amend a Waste Management Plan where such implementation or amendment would result in a contravention of any condition of this environmental authority .
W3-5	On Site Waste Disposal The defined on site waste disposal area is described as "Waste Disposal Area" delineated in Appendix 5 - Definitions.
W3-6	Only the following general waste, which is generated by the brickworks operation, is to be disposed of at the Waste Disposal Area. (i) broken and reject bricks, pavers and other ceramic products; (ii) timber; (iii) plastic, paper and cardboard; and (iv) concrete and concrete products with or without reinforcing steel.

73(2)Irrele

W3-7	Where general waste associated with the manufacture of bricks or pavers on the approved place is disposed of on the premises (other than as permitted by another schedule of this environmental authority), the holder of this environmental authority must monitor and record: (a) the date, quantity and type of waste disposed; and (b) the location of disposal of the waste; and (c) the method of disposal of the waste.
W3-8	Appropriate signs must be prominently displayed at the waste disposal area or appropriate written instructions must be given to all persons responsible for depositing waste. The signs or written instructions must at least indicate: (i) the types of waste that may be disposed; (ii) the types of waste which must not be disposed; (iii) the location where the wastes must be deposited within the general waste disposal area, and (iv) that open burning of waste is prohibited.
W3-9	Wastes must not be deposited beyond the boundaries of the waste disposal area.
W3-10	Regulated waste must not be stored or disposed of or deposited in the waste disposal area.
W3-11	Security The holder of this environmental authority must prevent any unauthorised disposal of waste on or in the approved place.
W3-12	The holder of this environmental authority must ensure that all access gates are locked when the approved place is unattended.
W3-13	General The holder of this environmental authority must not: (i) burn waste at or on the approved place; nor (ii) allow waste to burn or be burnt at or on the approved place; nor (iii) remove waste from the approved place and burn such waste elsewhere.
W3-14	Off Site Movement Where regulated waste is removed from the approved place (other than by a release as permitted under another schedule of this environmental authority), the holder of this environmental authority must monitor and record the following: (a) the date, quantity and type of waste removed; and (b) name of the waste transporter and/or disposal operator that removed the waste; and (c) the intended treatment/disposal destination of the waste. (NOTE: Records of documents maintained in compliance with a waste tracking system established under the <i>Environmental Protection Act 1994</i> or any other law for regulated waste will be deemed to satisfy this condition).
W3-15	Regulated waste must not be sent for disposal at any facility without the written approval of the person operating that facility.
W3-16	Records Records must be maintained for a period of five (5) years for all wastes mentioned in this schedule.
W3-17	Notification of Improper Disposal of Regulated Waste If the holder of this environmental authority becomes aware that a person has removed regulated waste from the approved place and disposed of the regulated waste in a manner which is not authorised by this environmental authority or which is 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: Community	

73(2)Irrelevant

Condition number	Condition
C3-1	Complaint response All complaints received must be recorded including details of complainant, reasons for the complaint, investigations undertaken, conclusions formed and actions taken. This information must be made available for inspection by the administering authority on request.

73(2)Irrelev

Appendix 1 – Air

103 Riverview Road and RIVERVIEW - Lot 1 Plan RP166658

Table 1 (Release of contaminants)

Release point number	Minimum release height (metres)	Minimum velocity (m/sec)	Minimum efflux temp (°C)	Contaminant	Release Limit	Sampling frequency
Riverview Plant A1 - Swindell Dressler Tunnel Kiln	25	8	n/a	Concentration total particulates	0.25 g/m3	Not less frequently than annually
				Mass emission total particulates	n/a	Not less frequently than annually
				Concentration nitrogen oxides	0.35 g/m3	Not less frequently than annually
				Mass emission nitrogen oxides	n/a	Not less frequently than annually

105 Gardner Rd ROCHEDALE QLD 4123 - Lot 2 Plan RP844169

Table 2 (Release of contaminants)

Release point number	Minimum release height (metres)	Minimum velocity (m/sec)	Minimum efflux temp (°C)	Contaminant	Release Limit	Sampling frequency
Rochedale Plant A1 - Swindell Dressler Tunnel Kiln	30	8.7	126	Total particulates	0.25 g/m3	Not less frequently than annually
				Mass emission total particulates	n/a	Not less frequently than annually
				Nitrogen oxides	0.35 g/m3	Not less frequently than annually
				Mass emission nitrogen oxides	n/a	Not less frequently than annually
				Total fluoride (mass emission rate) g/sec	1.35	Not less frequently than annually
				Concentration total fluoride	n/a	Not less frequently than annually
Rochedale Plant A2 – Ceric Tunnel Kiln	15	9.5	124	Total particulates	0.25 g/m3	Not less frequently than annually
				Mass emission total particulates	n/a	Not less frequently than annually
				Nitrogen oxides	0.35 g/m3	Not less frequently than annually
				Mass emission nitrogen oxides	n/a	Not less frequently than annually
				Total fluoride (mass emission rate) g/sec	1.88	Not less frequently than annually
				Concentration total fluoride	n/a	Not less frequently than annually

73(2)Irrelevant

Appendix 2 – Water

German Church Road REDLAND BAY - Lot 1 Plan RP854704

Table 1 (Release limits)

Monitoring point	Discharge location	Co-ordinates		Quality characteristics	Release Limits		Monitoring frequency
		Easting	Northing		Minimum	Maximum	
RB1, RB2, RB3	Moogurrapum Creek (RB1&2) Native Dog Creek (RB3)	526590	6943600	pH	6.0	9.0	Event release
		526350	6943600	Dissolved Oxygen (mg/L)	6.0	-	Event release
		526160	6943250	SS	-	50mg/l	Event release

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Table 2 (Water monitoring locations and frequency)

Monitoring Point	Monitoring Type	Co-ordinates (AMG)		Frequency
		Easting	Northing	
R1	Background for point R3	511580	6951560	When point R3 is sampled
R3	Discharge	511040	6951970	"Event Release"

Table 3 (Discharge containment limits)

Monitoring Point	Parameter	Minimum	Maximum
R3	pH	6.5	9
	Total Suspended Solids (mg/L)	-	50mg/L or not more than 110% of the value at R1*

* For the same monitoring event

73(2)Irrele

Appendix 3 – Noise

German Church Road REDLAND BAY - Lot 1 Plan RP854704

Table 1 (Noise limits)

Noise level measured in dB(A)	Monday to Friday			Saturday	
	6am – 7am	7am – 6pm	6pm – 6am	7am – 4pm	4pm – 7am
	Noise measured at a nuisance sensitive place				
L_{Aeq, adj, T}	Background +3	Background +5	Background +0	Background +5	Background +0
MaxL_{pA, T}	Background +8	Background +10	Background +5	Background +10	Background +5
	Noise measured at a commercial place				
L_{Aeq, adj, T}	Background +8	Background +10	Background +5	Background +10	Background +5
MaxL_{pA, T}	Background +13	Background +15	Background +10	Background +15	Background +10

Associated monitoring requirements

- All monitoring devices must be correctly calibrated and maintained.
- Any monitoring of noise emission from the activity must be undertaken when the activity is in operation.
- Sundays / Public Holidays - no Audible Noise.
- The minimum value for T must be:
 - 15 minutes for continuous steady noises,
 - 1 hour for intermittent noises.

Table 2 (Blasting noise limits)

Blasting criteria	Blasting limits
Airblast overpressure	115 dB (Linear) Peak for 9 out of 10 consecutive blasts initiated and not greater than 120 dB (Linear) Peak at any time.
Ground vibration peak particle velocity	5mm/second peak particle velocity for 9 out of 10 consecutive blasts and not greater than 10mm/second peak particle velocity at any time.

Associated monitoring requirements

- All monitoring devices must be correctly calibrated and maintained.

103 Riverview Road and RIVERVIEW - Lot 1 Plan RP166658

Table 3 (Noise limits)

Noise level dB(A) measured as	Monday to Saturday			Sundays and public holidays		
	7am - 6pm	6pm - 10pm	10pm - 7am	9am - 6pm	6pm - 10pm	10pm - 9am
	Noise measured at a 'Noise sensitive place'					
L_{A10, adj, 10 mins}	b/g+5	b/g+5	b/g+3	b/g+5	b/g+5	b/g+0
L_{A1, adj, 10 mins}	b/g+10	b/g+10	b/g+5	b/g+10	b/g+10	b/g+5
	Noise measured at a 'Commercial place'					
L_{A10, adj, 10 mins}	b/g+10	b/g+10	b/g+8	b/g+10	b/g+10	b/g+5
L_{A1, adj, 10 mins}	b/g+15	b/g+15	b/g+10	b/g+15	b/g+15	b/g+10

73(2)Irrelevant

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Table 4 (Noise limits)

Noise level dB(A) measured as	Monday to Saturday			Sundays and public holidays		
	7am - 6pm	6pm - 10pm	10pm - 7am	9am - 6pm	6pm - 10pm	10pm - 9am
Noise measured at a 'Noise sensitive place'						
L _{A10} , adj, 10 mins	b/g+5	b/g+5	b/g+3	b/g+5	b/g+5	b/g+0
L _{A1} , adj, 10 mins	b/g+10	b/g+10	b/g+5	b/g+10	b/g+10	b/g+5
Noise measured at a 'Commercial place'						
L _{A10} , adj, 10 mins	b/g+10	b/g+10	b/g+8	b/g+10	b/g+10	b/g+5
L _{A1} , adj, 10 mins	b/g+15	b/g+15	b/g+10	b/g+15	b/g+15	b/g+10

Appendix 4 – Land

German Church Road REDLAND BAY - Lot 1 Plan RP854704

Table 1 (Final land use and rehabilitation outcome schedule)

Disturbance Type	Projective Surface Area (ha)	Rehabilitation Outcome
Mine void	17.2	Industrial Native ecosystem
Sediment traps / water basins	1	Wetland Type 1
Roads	0.8	No rehabilitation required - retain
Buffer	4	Native Ecosystem

73(2)Irreleval

Appendix 5 - Definitions

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

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

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

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

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

annual return means the return required by the annual notice under the *Environment Protection Act, 1994*.

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

blasting is the use of explosives to fracture:

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

commercial place means a place used as a workplace, an office or for business or commercial purposes and includes a place within the curtilage of such a place reasonably used by persons at that place.

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

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

dust sensitive place means:

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

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

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

73(2) Irrelevant

event release means when water is released and which must occur at least four times per year.

holder means the person who made an application for the **environmental authority**; or the person to whom the transferred **environmental authority** has been issued.

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*.

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

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

mg/L means milligrams per litre.

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

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

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

nuisance sensitive place includes:

- a **dwelling**, residential allotment, mobile home or caravan park, residential marina or other residential premises; or
- a motel, hotel or hostel; or
- a kindergarten, school, university or other educational institution; or
- a medical centre or hospital; or
- a **protected area** under the *Nature Conservation Act 1992*, the *Marine Parks Act 1992* or a World Heritage Area; or
- a public thoroughfare, park or gardens; or
- a place used as a workplace, an office or for business or commercial purposes and includes a place within the curtilage of such a place reasonably used by persons at that place.

noise affected premises means a 'noise sensitive place' or a 'commercial place'.

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

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

protected area means:

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

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

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

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

sensitive place means:

- a dwelling, residential allotment, mobile home or caravan park, residential marina or other residential premises; or
- a motel, hotel or hostel; or
- an 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 park or gardens; or
- a place used as a workplace, an office or for business or commercial purposes which is not part of the mining activity and does not include employees accommodation or public roads.

significant disturbance – includes land:

- (a) if it is contaminated land; or
- (b) it has been disturbed and human intervention is needed to rehabilitate it.
 - i) to a state required under the relevant **environmental authority**; or
 - ii) if the **environmental authority** does not require the land to be rehabilitated to a particular state – to its state immediately before the disturbance.

Some examples of disturbed land include:

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

However, the following areas are not included:

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

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

stable means geotechnical stability of the rehabilitated landform where instability related to the excessive settlement and subsidence caused by consolidation / settlement of the wastes deposited, and sliding / slumping instability has ceased.

this authority means **this environmental authority**.

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.

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

German Church Road REDLAND BAY - Lot 1 Plan RP854704 – specific definitions

airblast overpressure is the energy transmitted from the blast site within the atmosphere in the form of pressure waves. As these waves pass a given position, the pressure of the air rises very rapidly then falls more slowly then returns to the ambient value after a number of oscillations. The pressure wave consists of both audible (noise) and inaudible (concussion) energy. The maximum excess pressure in this wave is known as the peak air overpressure, generally measured in decibels using the linear frequency-weighting.

background means noise, measured in the absence of the noise under investigation, as L A90,T being the A-weighted sound pressure level exceeded for 90 per cent of the time period of not less than 15 minutes, using Fast response.

L_{Aeq} adj,T means the adjusted A weighted equivalent continuous sound pressure level measures on fast response, adjusted for tonality and impulsiveness, during the time period T, where T is measured for a period no less than 15 minutes when the activity is causing a steady state noise, and no shorter than one hour when the approved activity is causing an intermittent noise.

MaxL_{pA,T} means the maximum A-weighted sound pressure level measured over a time period T of not less than 15 minutes, using Fast response.

substantial low frequency noise means a noise emission that has an unbalanced frequency spectrum shown in a one-third octave band measurement, with a predominant component within the frequency range 10 to 200Hz. It includes any noise emission likely to cause an overall sound pressure level at a sensitive place exceeding 55dB(Z).

vibration is the oscillating or periodic motion of a particle, group of particles, or solid object about its equilibrium position.

vibration sensitive place means a noise sensitive place or a commercial place.

103 Riverview Road and RIVERVIEW - Lot 1 Plan RP166658 & 105 Gardner Rd ROCHEDALE QLD 4123 - Lot 2 Plan RP844169 – specific definitions

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

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

flowable substance means matter or mixture of materials which can be forced to or otherwise flow under any conditions possible in a situation. It includes water, other liquids or a mixture that includes water or any other liquid or suspended solids.

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

IEMS / Project EMOS document titled '*Environmental Management Overview Strategy (consolidating mining project numbers PJ50036, 50134, 50128 and 50150) incorporating Integrated Environmental Management System (mining, manufacturing and extractive industries). Prepared for The Austral Brick Company Pty Ltd. Prepared by Groundwork Environmental Management Services Pty Ltd. October 2002*'.

LA 10, adj, 10 mins means the A-weighted sound pressure level, (*adjusted for tonal character and impulsiveness of the sound*) exceeded for ten percent (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 one percent (1%) of any 10-minute measurement period, using Fast response.

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

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

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

mandatory reporting level means the volume below the spillway crest, equivalent to the lower of the AEP, seventy-two (72) hour storm or the AEP wave allowance (AEP is the annual exceedence probability).

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

- the mining activities do not or will not cause more than 10 ha of land to be significantly disturbed at any one time;
- the mining activities do not or will not cause more than 5 ha of land to be significantly disturbed at any one time;
 - (a) in a riverine area;
 - (b) because of mine workings;
- the mining activities are not or will not be carried out in, or within 2 km of a category A *Environmentally Sensitive Area*;
- the mining activities are not or will not be carried out in, or within 1 km of a category B environmentally sensitive area;
- the mining activities do not include a level 1 environmentally relevant activity
- no more than twenty (20) persons are carrying out or will, at any one time, carry out the mining activities;

open area means those parts of the mining lease that are cleared in preparation for, or to conduct mining, but have not had rehabilitation commence. Open area excludes permanent roads, fixed plant and water quality control devices.

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

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

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

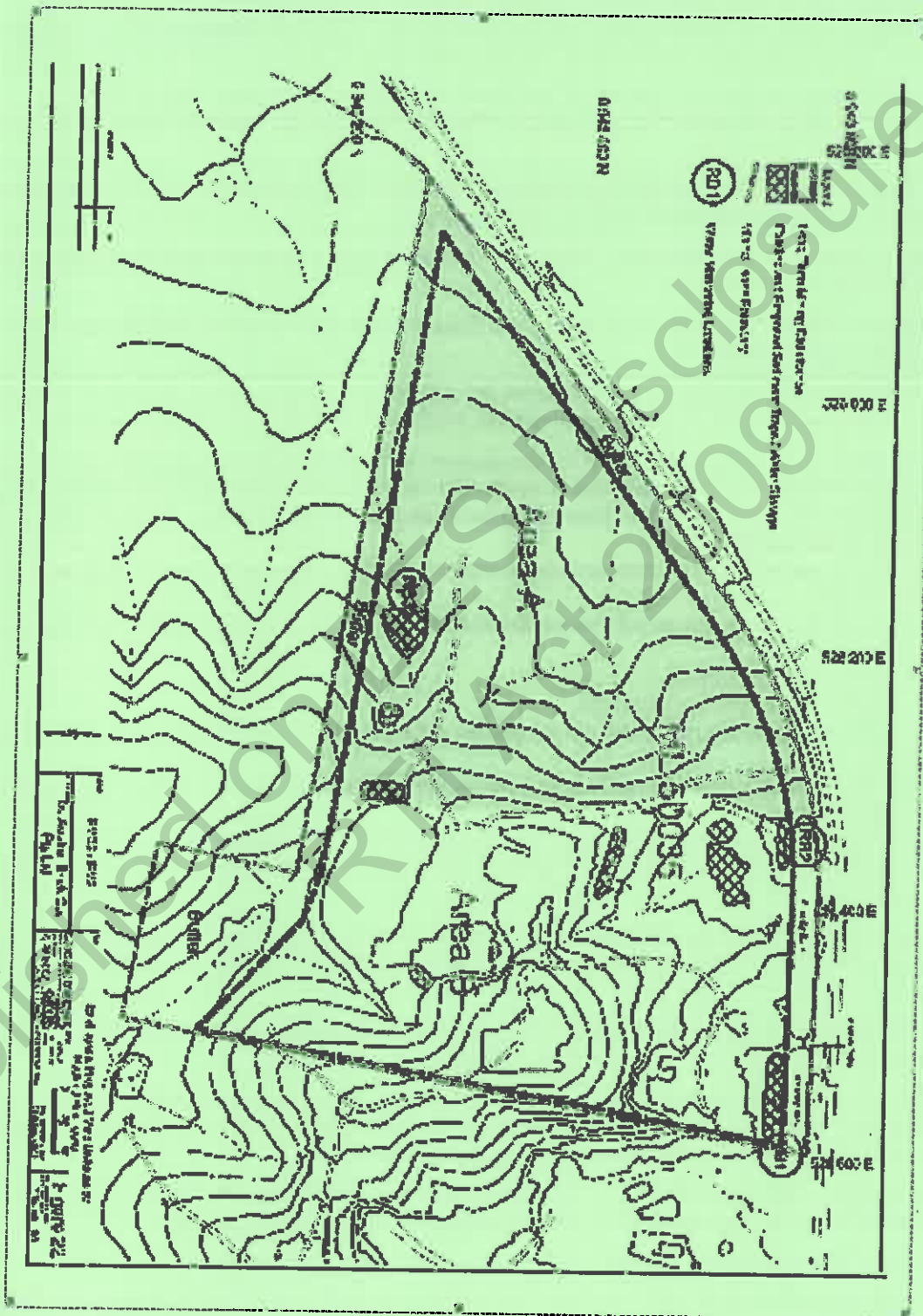
spillway means passage or outlet from the dam through which surplus water flows.

trivial harm means environmental harm which is not material or serious environmental harm and will not cause actual or potential loss or damage to property of an amount of, or amounts totalling more than \$5,000.

73(2) Irrelevant

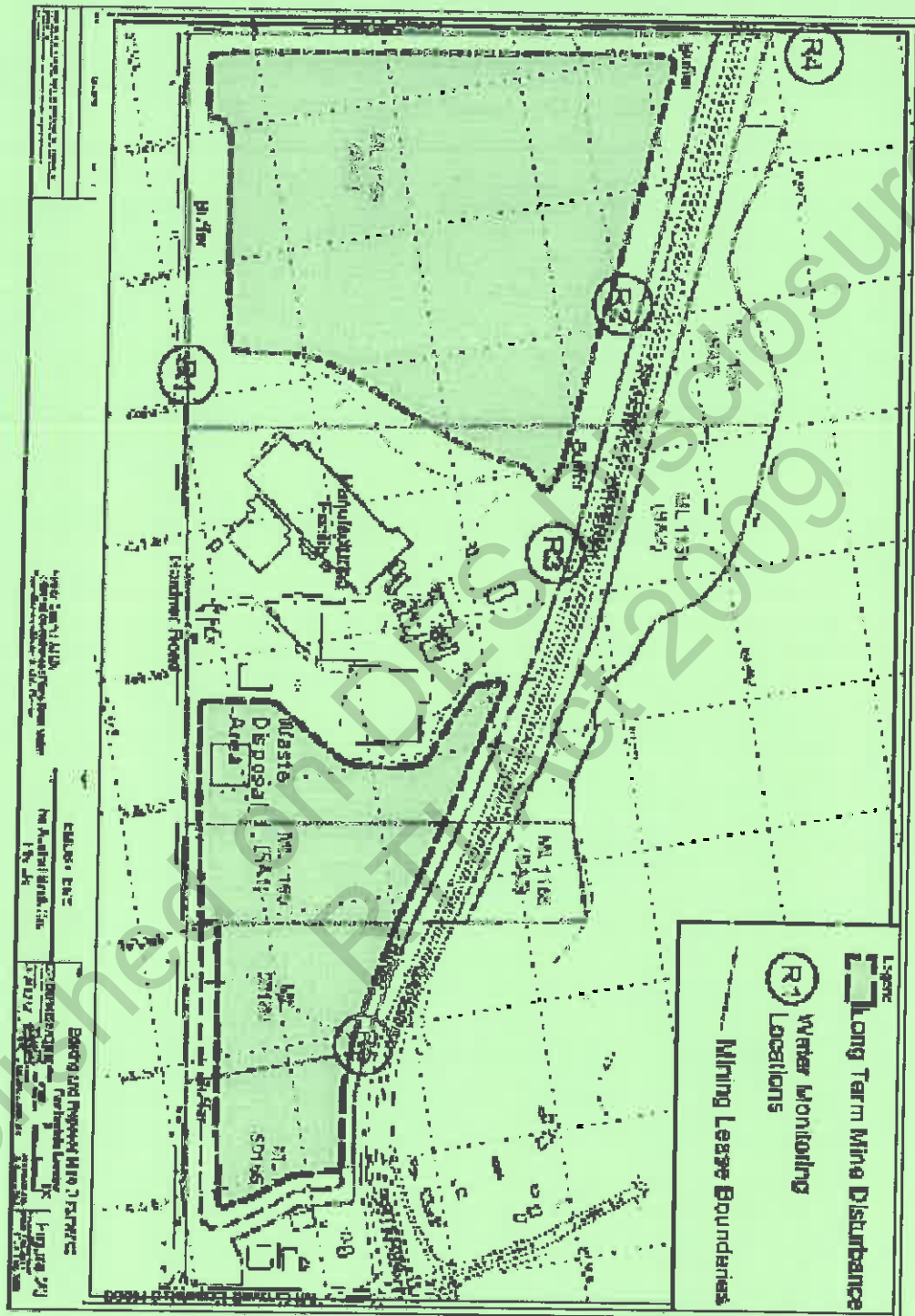
Appendix 6 – Maps/Plans

German Church Road REDLAND BAY - Lot 1 Plan RP854704



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105 Gardner Rd ROCHEDALE QLD 4123 - Lot 2 Plan RP844169



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