Permit

Environmental Protection Act 1994

Environmental authority EPML03821316

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

Environmental authority number: EPML03821316

Environmental authority takes effect on 2 November 2017

The anniversary date of this environmental authority remains 23 December.

An annual return and the payment of the annual fee will be due each year on this day.

Environmental authority holder(s)

Name(s)	Registered address
PGH Bricks & Pavers Pty Limited	Level 5, Triniti 3 39 Delhi Road NORTH RYDE NSW 2113

Environmentally relevant activity and location details

Environmentally relevant activity/activities	Location(s)
Schedule 2A of the *Environmental Protection Regulation 2008* Mining – ML Claypit, dimension stone or gemstones-20(b)	ML1102 ML4552 ML4604 ML4628 ML4629 ML4632 ML4639 ML4640 ML4643 ML4654 ML4706 ML4713 ML50028 ML50144 ML1100 ML1106 ML1171 ML4622 ML50116

ABN 46 640 294 485

Environmentally relevant activity/activities	Location(s)
	ML50117 ML50183 ML4583

Additional information for applicants

Environmentally relevant activities

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

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

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

Contaminated land

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

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

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

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

Take effect

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

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

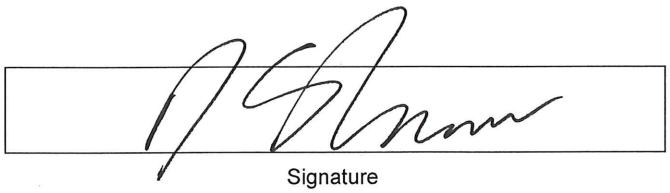
b) if the authority states a day or an event for it to take effect-on the stated day or when the stated event happens; or

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

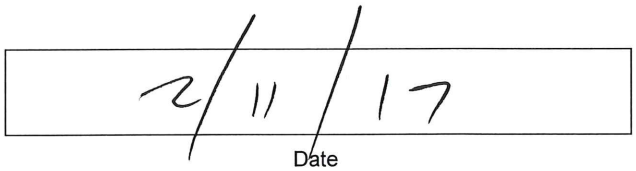
However, if the EA is authorising an activity that requires an additional authorisation (a relevant tenure for a resource activity, a development permit under the *Sustainable Planning Act 2009* or an SDA Approval under the *State Development and Public Works Organisation Act 1971*), this EA will not take effect until the additional authorisation has taken effect.

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

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



Signature



Date

Dean Sharpe
Department of Environment and Heritage Protection
Delegate of the administering authority
Environmental Protection Act 1994

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Obligations under the *Environmental Protection Act 1994*

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

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

Other permits required

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

Conditions of environmental authority

Location:

Location	Tenure
Oxley Quarry	ML1102
Dinmore Quarry	ML4552, ML4604, ML4639, ML4640, ML4706, ML50028, ML50144
Greenwich Village Quarry	ML4628, ML4629, ML4632, ML4643, ML4654, ML4713
Darra Quarry	ML1100
Redbank Plains	ML4622, ML50116, ML50117, ML4583
Strathpine	ML1106, ML1171, ML50183

Relevant activity: Mining - ML Claypit, dimension stone or gemstones - 20(b)

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

Conditions of environmental authority applying to activities undertaken on ML1102, ML4552, ML4604, ML4628, ML4629, ML4632, ML4639, ML4640, ML4643, ML4654, ML4706, ML4713, ML50028 & ML50144

Agency Interest: General

Financial assurance

(**PG1**) Provide a financial assurance in the amount and form required by the administering authority prior to the commencement of activities proposed under this environmental authority.

NOTE: The calculation of financial assurance must be in accordance with Guideline – Calculating Financial Assurance for Mining Projects or another publicly available document 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).

(**PG2**) The financial assurance is to remain in force until the administering authority is satisfied that no claim on the assurance is likely.

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

Maintenance of measures, plant and equipment

(PG3) The environmental authority holder must ensure:

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

Monitoring

(PG4) Record, compile and keep for a minimum of five years all monitoring results required by this environmental authority and make available for inspection all or any of these records upon request by the administering authority.

(PG5) Where monitoring is a requirement of this environmental authority, ensure that a competent person(s) conducts all monitoring.

Storage and handling of flammable and combustible liquids

(PG6) Spillage of all flammable and combustible liquids must be contained within an onsite containment system and controlled in a manner that prevents environmental harm (other than trivial harm) and maintained in accordance with AS:1940 - 2004 *Storage and Handling of Flammable and Combustible Liquids* or any subsequent updated version.

Definitions

(PG7) Words and phrases used throughout this environmental authority are defined in Attachment - 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 must be used.

Third Party Agreement for Reuse of Water

(PG8) The holder of this environmental authority must ensure that the quality of water given to another person for irrigation purposes or other uses is fit for its intended use.

(PG9) If the holder of this environmental authority gives or transfers ownership of the water to another person(s) the holder of this environmental authority must:

a) prior to giving such water or transferring ownership of such water to that person(s), obtain from that person details of how that person intends to comply with the general environmental duty provided for by Section 319 of the Act in respect of the use and disposal of such water, particularly in relation to environmental sustainability of any disposal, protection of public health and protection of environmental values of waters; and

b) only give or transfer ownership of such water in accordance with a written agreement between the holder of this environmental authority and that person(s); and

c) upon becoming aware that the person is not or is not likely to comply with the general environmental duty provided by Section 319 of the Act, cease the giving and transferring ownership of such water, as the case may be.

(PG10) The holder of this environmental authority must keep a copy of all agreements entered into to give or transfer ownership of such water and must:

a) provide a copy of the agreement to the administering authority within 30 days of the agreement being made; and

b) advise the administering authority in writing of rescission of any agreement within 30 days of such rescission.

NOTE: A third party re-use agreement must not in any form allow for the discharge of water via overland flow.

Agency Interest: Air

Dust nuisance

(PA1) Subject to Conditions PA2 and PA3 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.

(PA2) When requested by the administering authority, dust and particulate monitoring must be undertaken within a reasonable and practicable timeframe nominated by the administering authority to investigate any complaint (which is neither frivolous nor vexatious nor based on mistaken belief in the opinion of the authorised officer) of environmental nuisance at any sensitive or commercial place, and the results must be notified within 14 days to the administering authority following completion of monitoring.

(PA3) 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 Condition PA1:

a) Dust deposition of 120 milligrams per square metre per day, averaged over one month, when monitored in accordance with AS 3580.10.1:2003, Methods for sampling and analysis of ambient air - Determination of particulate matter – Deposited Matter - Gravimetric method; 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 24 hour averaging time, at a sensitive or commercial 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 3580.9.6:2003, 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; 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.

NOTE: You must propose which monitoring method is appropriate in accordance with condition PA3 a) or b) or both.

(PA4) If monitoring indicates exceedance of the relevant limits in Condition PA3, then the environmental authority holder must:

a) address the complaint including the use of appropriate dispute resolution if required; or

b) immediately implement dust abatement measures so that emissions of dust from the activity do not result in further environmental nuisance.

(PA5) Where practicable a vegetation buffer zone at least 10m wide must be maintained around the perimeter of the operational land of each quarry to minimise visual impacts.

(PA6) Mining activities must not be conducted within the vegetation buffer zone except for the construction or removal of amenity banks, environmental control works and activities involved with access or provision of services to the lease areas within the buffer zone.

Agency Interest: Impacts on surrounds - neighbours opinions

Complaint response

(PI1) 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.

Agency Interest: Land - rehabilitation and subsequent use

Rehabilitation outcome — Industrial or residential

(**PL1**) Disturbed land nominated for industrial or residential rehabilitation outcomes in accordance with Attachments - Tables, Table 1, will be considered rehabilitated when the land is stabilised and does not, or will not have potential to cause environmental harm.

Note: To remove any doubt, the nomination of the final land use of industrial or residential in Attachments – Tables, Table 1, does not negate any local or state government planning or approval requirements for the development of that land.

Rehabilitation outcome — Native ecosystem

(PL2) Areas must be rehabilitated to a self-sustaining native ecosystem with a similar species and density of cover to that of the surrounding undisturbed land or vegetation that is appropriate for providing erosion control and stabilisation of the disturbed areas.

Progressive rehabilitation

(PL3) The holder of the environmental authority must ensure that the top layer and sub layers of the soil

profile are removed and stockpiled separately prior to causing significant disturbance and retained for the purpose of rehabilitation of disturbed areas.

(PL4) The holder of the environmental authority must commence progressive rehabilitation of significantly disturbed areas as soon as practicable or when:

a) the economic potential of the resource in that area has been exhausted;

b) the area is no longer required for the continuation of the mining activities; and

c) the area is of no further beneficial use to the mining operation.

(PL5) Complete an investigation into rehabilitation of disturbed areas and submit a report to the administering authority proposing acceptance criteria to meet the outcomes in Attachments – Tables, Table 1 by 30 June 2008.

Residual void outcome - (water filled)

(PL6) Residual voids must not cause any serious environmental harm to land, surface waters or any recognised groundwater aquifer, other than the environmental harm constituted by the existence of the residual void itself and subject to any other condition within this environmental authority.

(PL7) Complete an investigation into rehabilitation of residual voids and submit a report to the administering authority proposing acceptance criteria to meet the outcomes in Condition PL6. 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.

Infrastructure

(PL8) All infrastructure constructed by or for the holder of the environmental authority must be removed by the holder from the site and the site rehabilitated to meet the outcomes in Attachments – Tables, Table 1 prior to surrender of the environmental authority.

(PL9) Where infrastructure is to remain after surrender of the environmental authority the holder must obtain the written agreement of the administering authority and the current land owner/holder.

Depth Limitations

(PL10) Excavations for mining activities on ML50028 are restricted to the depths from the surface prescribed in Attachments – Tables, Table 6.

Agency Interest: Noise

(PN1) Subject to Conditions PN2 and PN3, noise from the mining activity must not cause an environmental nuisance, at any sensitive or commercial place.

(PN2) When requested by the administering authority, noise monitoring must be undertaken within a reasonable and practicable timeframe nominated by the administering authority to investigate any complaint (which is neither frivolous nor vexatious nor based on mistaken belief in the opinion of the authorised officer) of environmental nuisance at any sensitive or commercial place, and the results must be notified within 14 days to the administering authority following completion of monitoring.

(PN3) If the environmental authority holder can provide evidence through monitoring that the limits defined in Attachments - Tables, Table 2, are not being exceeded then the holder is not in breach of Condition

PN1. Monitoring must include:

a) LA, max adj, T ;

b) the level and frequency of occurrence of impulsive or tonal noise;

c) atmospheric conditions including wind speed and direction; and

d) location, date and time of recording.

(PN4) If monitoring indicates exceedance of the limits in Attachments - Tables, Table 2, then the environmental authority holder must:

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

(PN5) 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: Waste

(PW1) The holder of this environmental authority must not:

a) burn waste at or on the operational land;

b) allow waste to burn at or on the operational land; or

c) remove waste from the operational land and burn such waste else where.

(PW2) Regulated waste must not be stored or disposed within the operational land.

Agency Interest: Water

Releases to waters

(PW3) Water release limits for process water and storm water contaminated by mining activities must be monitored at the locations and frequencies defined in Attachments - Tables, Table 3 and Attachments - Figures, Figures 1, 2 and 3 and comply with the contaminant limits defined in Attachment - Tables, - Tables 4 and 5.

(PW4) Water contaminated by the mining activities must only be released in accordance with Attachment - Tables, Table 3.

(PW5) Erosion protection measures and sediment control measures must be implemented and maintained to minimise erosion and the release of sediment to any watercourse or waterway. The containment storage design of any sedimentation dam must be sufficient to contain run-off expected from a 1 in 10 year AEP 24 hour rainfall event, unless otherwise stated.

(PW6) The method of water sampling required by this environmental authority must comply with that set out in the latest edition of the administering authority's Water Quality Sampling Manual.

Attachments - Definitions

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

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

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

"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.

"ANZECC Guidelines" means the Australian water quality guidelines for fresh and marine waters. National Water Quality Management Strategy Paper No 4, Australian and New Zealand Environment and Conservation Council, Canberra.

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

"clean earth" means earth that has trace elements and contaminant levels within the interim ecologically-based investigation levels for urban land use under the document 'Schedule B(1)—Guidelines on the Investigation of Soil and Groundwater', forming part of the National Environment Protection (Assessment of Site Contamination) Measure 1999.

"clean earthen materials" means -

a) bricks, pavers, ceramics or concrete that does not contain embedded steel reinforcing rods, pulverised to size of no more than 100mm; or
b) clean earth.

"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.

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

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

"environmental authority holder" means the holder of this environmental authority.

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

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

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

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

"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.

"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, 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;
    - in a riverine area;
    - 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 20 persons are carrying out or will, at any one time, carry out the mining activities;

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

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

"protected area" means - a protected area under the *Nature Conservation Act 1992*; or

- a 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 operations are ongoing.

"regulated waste" - Schedule 9 of the *Environmental Protection Regulation 1998* defines regulated waste as non-domestic waste mentioned in schedule 7 (whether or not it has been treated or immobilised), and includes:

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

(e.g. Regulated waste commonly generated from mining projects include tyres, oils, cyanide, mercury and batteries)

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

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

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

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

"sensitive place" means;

- a 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 center 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.

"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 & 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.

"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.

"third-party agreement" is an agreement between the owner of a resource and a person that the owner is allowing to utilise the resource.

"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.

"top layer" means the surface layer of a soil profile, which is usually more fertile, darker in colour, better structured and supports greater biological activity than underlying layers. The surface layer may vary in depth depending on soil forming factors, including parent material, location and slope, but generally is not greater than about 300mm in depth from natural surface.

"watercourse" - Means a river, creek or stream in which water flows permanently or intermittently in a visibly defined channel (natural, artificial or artificially improved) with:

(a) continuous bed and banks;
(b) an extended period of flow for some months after rain ceases, and
(c) an adequacy of flow that sustains basic ecological processes and maintains biodiversity.

"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) or any part-thereof.

"waterway" means a naturally occurring feature where surface water runoff normally collects, such as a clearly defined swale or gully, but only flows in response to a local rainfall event.

Attachments — Tables

Table 1 — Rehabilitation outcome and landform design

Mining Operation	Back fill criteria	Final void design	Rehabilitation outcomes
Oxley Quarry	Approved materials for backfilling and rehabilitation of voids and other mine disturbance shall be limited to: - Interburden and overburden from mining activities; - Clean earthen materials imported from sources external to the mining leases.	- Final voids must be regraded with a maximum slope gradient of 20° with a maximum slope length of 30m. - If voids and other mine disturbances are to be rehabilitated by filling with approved materials, the quantity of fill shall not exceed that required to reinstate the pre-mining landform allowing for appropriate compaction and development.	Industrial; Residential; Water filled residual void; Native ecosystem.
Dinmore Quarry	Approved materials for backfilling and rehabilitation of voids and other mine disturbance shall be limited to: - Interburden and overburden from mining activities; - Clean earthen materials imported from sources external to the mining leases.	- Final voids must be regraded with a maximum slope gradient of 20° with a maximum slope length of 30m. - If voids and other mine disturbances are to be rehabilitated by filling with approved materials, the quantity of fill shall not exceed that required to reinstate the pre-mining landform allowing for appropriate compaction and development.	Industrial; Residential; or Native ecosystem.
Greenwood Village Quarry	Approved materials for backfilling and rehabilitation of voids and other mine disturbance shall be limited to: - Interburden and overburden from mining activities; - Clean earthen materials imported from sources external to the mining leases.	- Final voids must be regraded with a maximum slope gradient of 20° with a maximum slope length of 30m. - If voids and other mine disturbances are to be rehabilitated by filling with approved materials, the quantity of fill shall not exceed that required to reinstate the pre-mining landform allowing for appropriate compaction and development.	Industrial; Residential; Water filled residual void; Native ecosystem.

Table 2 — 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

Note: The method of measurement and reporting of noise levels must comply with the latest edition of the administering authority's Noise Measurement Manual.

Table 3 — Release water monitoring locations and frequency

Quarry location	Release location	Monitoring point	Monitoring frequency
Oxley quarry	Discharge drain	Discharge drain	Once during discharge event
	N/A	IMW	Once during discharge event
Dinmore quarry	No water discharge is to occur off site.	N/A	N/A
Greenwood Village quarry	No 1 Sump	Discharge point from No. 1 Sump	Once during discharge event
	No 3 Sump	Discharge pipe from No. 3 Sump	Once during discharge event
	No 5 Sump	Discharge pipe from No. 5 Sump	Once during discharge event

Table 4 — Receiving water contaminant limits – Greenwood Village quarry

Parameter	Units	Minimum	Maximum
pH	-	6.5	8.5
TDS	mg/L	-	1000
TSS	mg/L	-	50

Table 5 — Receiving water contaminant limits — Oxley quarry

Parameter	Units	Minimum	Maximum
pH	-	6.5	8.5
TDS	mg/L	-	1000
TSS	mg/L	-	50 or not more than 110% of the value at IMW

Table 6 — Depth Limitations – Dinmore Quarry

Tenure ID	Real Property Details	Depth Limitations
ML50028	Lot 2 or RP895110	To the depth of 30.48m from the surface

Attachments — Figures

Figure 1 — Oxley Quarry: Aerial photograph of mining lease area, water discharge and monitoring locations.

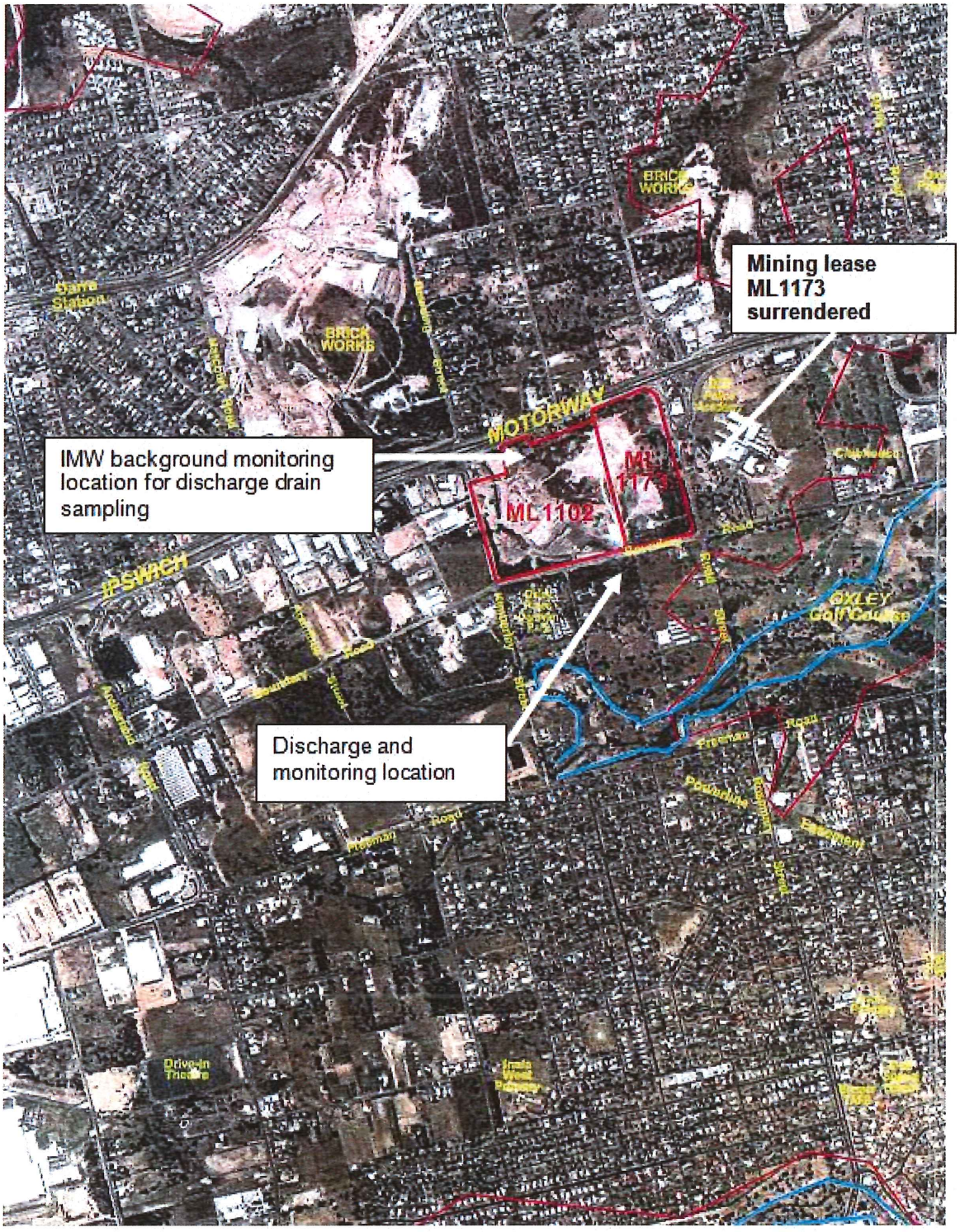


Figure 2 — Dinmore Quarry: Aerial photograph of mining lease area.



Figure 3 — Greenwood Village Quarry: Aerial photograph of mining lease area, water discharge and monitoring locations.



END OF CONDITIONS FOR ACTIVITIES UNDERTAKEN ON ML1102, ML4552, ML4604, ML4628, ML4629, ML4632, ML4639, ML4640, ML4643, ML4654, ML4706, ML4713, ML50028 & ML50144

Conditions of environmental authority applying to activities undertaken on ML1100, ML1106, ML1171, ML4622, ML50116, ML50117, ML50183 & ML4583

Schedule A - General conditions

Prevent or minimise likelihood of environmental harm

(A1-1) In carrying out the ERA the authority holder must take reasonable and practicable measures to prevent or minimise the likelihood of environmental harm being caused. Any ERA that, if carried out incompetently or negligently may cause environmental harm, shall be carried out in a proper manner in accordance with the conditions of this authority.

Note. This authority authorises the ERA. It does not authorise environmental harm unless a condition hereof explicitly authorises that harm. Where there is no such condition or the authority is silent on a matter, the lack of a condition or silence shall not be construed as authorising harm.

Maintenance of measures, plant and equipment

(A2-1) The authority holder must:

(a) install all measures, plant and equipment necessary to ensure compliance with the conditions of this authority;

(b) maintain such measures, plant and equipment in a proper and efficient condition; and

(c) operate such measures, plant and equipment in a proper and efficient manner.

Monitoring

(A3-1) Record, compile and keep for a minimum of five years the results of all monitoring required by this authority and make those records available for inspection upon request by the administering authority.

(A3-2) Where monitoring is required by this authority, ensure that a competent person conducts all monitoring.

Storage and handling of flammable or combustible liquids

(A4-1) Spillage of any flammable or combustible liquids must be contained on the site and rectified whereby environmental harm other than of a trivial nature is not caused.

(A4-2) All petroleum product storage must be designed, constructed and maintained in accordance with Australian Standard 1940 - Storage and Handling of Flammable or Combustible Liquids.

Financial assurance

(A5-1) Provide a financial assurance in the amount and form required by the administering authority prior to the commencement of the ERA.

NOTE: The calculation of financial assurance for condition (A5-1) must be in accordance with EPA Guideline 17 *Financial Assurance for Mining Activities* and may include a performance discount. The financial assurance amount is defined as the maximum total rehabilitation cost for complete rehabilitation of all significantly 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.

(A5-2) The financial assurance is to remain in force until the administering authority is satisfied that no claim on the assurance is likely.

NOTE: Where progressive rehabilitation is completed, progressive reductions to the financial assurance amount will be applicable where rehabilitation has been completed in accordance with the acceptance criteria prescribed by this environmental authority to the satisfaction of the administering authority.

Environmentally sensitive areas

(A6-1) Mining activities must not be carried out in Endangered Regional Ecosystem 12.3.3 as shown on Figure 4 in Schedule I hereof.

END OF CONDITIONS FOR SCHEDULE A

Schedule B – Air

Dust nuisance

(B1-1) The release of dust or other particulate matter resulting from the ERA must not cause an environmental nuisance at any sensitive place in the opinion of an authorised person.

(B1-2) For the purposes of condition (B1-1), the ERA will not cause environmental nuisance where dust or other particulate matter resulting from the ERA does not exceed the following limits when measured at any sensitive place:

(a) dust deposition of 120 milligrams per square metre per day, when monitored in accordance with Australian Standard 3580.10.1 Methods for sampling and analysis of ambient air – Determination of particulates – Deposited matter – Gravimetric method ; or

(b) a concentration of suspended particulate matter with an aerodynamic diameter of less than 10 micrometres (µm) (PM10) of 150 micrograms per cubic metre over a 24 hour averaging time at a sensitive place downwind, when monitored in accordance with:

(i) Australian Standard AS 3580.9.6 Methods for sampling and analysis of ambient air – Determination of particulate matter – PM (sub) 10 high-volume sampler with size-selective inlet - Gravimetric method; or

(ii) 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.

(B1-3) Dust or other particulate monitoring must be undertaken as directed by the administering authority to investigate any complaint of dust nuisance being caused by the ERA, which complaint in the opinion of an authorised person is not frivolous, vexatious

(a) for a complaint alleging dust nuisance, dust deposition; and

(b) for a complaint alleging adverse health effects caused by dust, the concentration per cubic metre of suspended PM10 over a 24hr averaging time.

(B1-4) If an authorised person's opinion is that monitoring results indicate environmental nuisance is being caused by dust or other particulate matter from the ERA, the authority holder must:

(a) address the complaint including the use of appropriate dispute resolution if required; or

(b) immediately implement abatement measures so that emission of dust or other particulate matter from the ERA does not result in further environmental nuisance.

Odour nuisance

(B2-1) Subject to condition (B2-2), the release of noxious or offensive odour or any other noxious or offensive airborne contaminant resulting from the ERA must not cause an environmental nuisance at any sensitive place in the opinion of an authorised person.

(B2-2) Odour monitoring must be undertaken as directed by the administering authority to investigate any complaint of odour nuisance being caused by the ERA, which in the opinion of an authorised person is not frivolous, vexatious or based on mistaken belief, and the results thereof notified to the administering authority within 14 days following completion of monitoring.

(B2-3) If an authorised person's opinion based on monitoring results or otherwise indicates that environmental nuisance is being caused by odour from the ERA, the authority holder must:

(a) address the complaint including the use of appropriate dispute resolution if required; or

(b) immediately implement odour abatement measures so that emission of odour from the ERA does not result in further environmental nuisance.

END OF CONDITIONS FOR SCHEDULE B

Schedule C – Water

Management of Stormwater

(C1-1) Stormwater runoff from the site must be managed in accordance with the following hierarchy:

(a) avoidance – eg. prevent the amount of contaminated stormwater generated;
(b) reuse – eg. reuse contaminated stormwater;
(c) recycle – eg. treat contaminated stormwater for reuse; and
(d) disposal – eg. dispose of contaminated stormwater in a way that causes the least environmental harm and in accordance with the conditions of this authority.

(C1-2) Erosion protection measures and sediment control measures must be implemented and maintained to minimise erosion and the release of sediment to any waters outside the site.

(C1-3) The storage design criteria of any stormwater containment dam must be sufficient to contain the runoff expected from a 1 in 10 year AEP 24 hour rainfall event.

Release to waters

(C2-1) Stormwater runoff from disturbed areas on the site must only be released to waters outside the site from the release points shown in Schedule I and listed in Schedule C – Table 1. Release of stormwater is permitted from the release points if caused by a rainfall event in excess of, or equal to, a 1 in 10 year AEP 24 hour rainfall event, for a period of no longer than 24 hours after cessation of the rainfall event, or otherwise when water is in compliance with the release limits stated in Schedule C - Table 2.

Schedule C - Table 1 (Release points)

Release point	Easting (GDA94)	Northing (GDA94)
① - ML 1100	496384	6950444
② - ML4622	483623	6943958
③ - ML4622	483675	6943375
④ - ML1106	496103	6978144

Schedule C - Table 2 (Release limits)

Parameter	Units	Minimum	Maximum
pH	-	6.5	8.5
Total Suspended Solids	mg/L	-	50
Conductivity	µs/cm	-	1500

(C2-2) Contaminants must not be released from the site to any waters or to the bed and banks of any waters outside the site except in accordance with condition (C2-1).

END OF CONDITIONS FOR SCHEDULE C

Schedule D - Noise

Noise nuisance

(D1-1) Subject to conditions (D1-2) and (D1-3), noise from the ERA must not cause an environmental nuisance at any sensitive place in the opinion of an authorised person.

(D1-2) Noise monitoring must be undertaken as directed by the administering authority to investigate any complaint of noise nuisance being caused by the ERA, which in the opinion of an authorised person is not frivolous, vexatious or based on mistaken belief, and the results thereof notified to the administering authority within 14 days following completion of monitoring. For the purposes of this condition, noise monitoring must be done in accordance with the latest edition of the Environmental Protection Agency *Noise Measurement Manual* and include:

(a) $L_{A, max\ adj, T}$;

(b) relevant background sound level;

(c) the level and frequency of occurrence of impulsive or tonal noise;

(d) atmospheric conditions including wind speed and direction; and

(e) location, date and time of recording.

(D1-3) For the purposes of condition (D1-1), the ERA will not cause environmental nuisance where noise from the ERA does not exceed the limits specified in Schedule D - Table 1.

(D1-4) If an authorised person's opinion is that monitoring results indicate environmental nuisance is being caused by noise from the ERA, the authority holder must:

(a) address the complaint including the use of appropriate dispute resolution if required; or

(b) immediately implement noise abatement measures so that emissions of noise from the ERA do not result in further environmental nuisance.

Schedule D - Table 1 (Noise limits) *

Noise level dB(A) measured as	*Monday to Saturday*			*Sundays and public holidays*		
	7am - 6pm	*6pm - 10pm*	*10pm - 7am*	*9am - 6pm*	*6pm - 10pm*	*10pm - 9am*
	Noise measured at a 'Noise sensitive place'					
$L_{A, max\ adj, T}$	Background + 5 dB(A)	Background + 5 dB(A)	Background +3 dB(A)	Background +3 dB(A)	Background +0 dB(A)	Background + 0 dB(A)
	Noise measured at a 'Commercial place'					
$L_{A, max\ adj, T}$	Background + 10 dB(A)	Background + 10 dB(A)	Background + 5 dB(A)	Background + 5 dB(A)	Background + 3 dB(A)	Background + 3 dB(A)

Where "T" is 10 minutes and "Background" means background sound pressure level measured in accordance with the latest edition of the Environmental Protection Agency *Noise Measurement Manual*.

* Schedule D Table 1 does not purport to set operating hours for the ERA.

END OF CONDITIONS FOR SCHEDULE D

Schedule E – Waste

There are no conditions prescribed for this schedule.

END OF CONDITIONS FOR SCHEDULE E

Schedule F – Land

(F1-1) The environmental authority holder must rehabilitate all significantly disturbed land caused by the mining activities in a manner that ensures rehabilitated areas achieve the following rehabilitation objectives:

a) Safe for humans and wildlife;

b) Non-polluting;

c) Stable;

d) Able to sustain an agreed post-mining land-use; and

e) Compliant with all conditions of this environmental authority.

Buffer zones

(F2-1) There must be no mining activities in the buffer zones shown on Figures 2 and 3 in Schedule I hereof other than for environmental control works (eg. noise bunds), access or provision of services and excepting for abutting mining lease boundaries where the mining leases are held by the holder of this environmental authority.

Rehabilitation landform criteria

(F3-1) Areas disturbed by mining activities must meet the requirements detailed in Schedule F – Table 1.

(F3-2) Final void designs must meet the requirements detailed in Schedule F – Table 2.

(F3-3) Prior to the commencement of filling voids with the use of clean earthen materials or clean earth, landowner consent to the activities must be provided to the administering authority.

(F3-4) Prior to the surrender of this environmental authority, a suitably qualified and experienced person must submit to the administering authority, a geotechnical report demonstrating the filled final voids on Darra, Strathpine and Redbank Plains sites are suitable for the intended post mine land use identified in Schedule F – Table 1.

Rehabilitation outcomes acceptance criteria (Industrial and Residential)

(F4-1) For the purposes of Schedule F – Table 1, significantly disturbed land nominated for an industrial or residential rehabilitation outcome will be considered rehabilitated once a surrender application under the *Environmental Protection Act 1994* has been approved.

(F4-2) Despite condition (F4-1) and pending approval for surrender of this authority, the use of significantly disturbed land and/or mine voids remaining at the end of mine life for an industrial or residential rehabilitation outcome is subject to the operation of relevant legislation (eg. '*Sustainable Planning Act 2009*').

(F4-3) Where requisite statutory approval(s) for a final land use and rehabilitation outcome described in Schedule F - Table 1 are not obtained, an alternative rehabilitation outcome must be nominated to the administering authority.

Schedule F - Table 1 (Final Land Use and Rehabilitation Outcome Schedule)

Tenure ID	Surface Disturbance Area (ha)	Rehabilitation Outcome
ML1100	16.43	Residential
ML1106	21.48	Industrial or Residential
ML1171	12.75	Industrial or Residential
ML50183	2.05	Industrial or Residential
ML4622	38.60	Industrial (landfill)
ML50116	12.95	Industrial (landfill)
ML50117	10.67	Industrial (landfill)
ML4583	0	Industrial (landfill)

Schedule F - Table 2 (Rehabilitation Outcome and Landform Design)

Mining Operations	Back fill criteria	Final void design	Rehabilitation Outcome
Strathpine (ML1106, ML1171 and ML50183)	Approved materials for backfilling and rehabilitation of voids and other mine disturbance shall be limited to: • Interburden and overburden from mining activities; • Clean earthen materials imported from sources external to the mining leases.	• Final voids must be rehabilitated to meet requirements in condition F1-1 If voids and other mine disturbances are to be rehabilitated by filling with approved materials, the quantity of fill shall not exceed that required to reinstate the pre-mining landform allowing for appropriate compaction and development.	Industrial or Residential
Darra (ML1100)	Approved materials for backfilling and rehabilitation of voids and other mine disturbance shall be limited to: • Interburden and overburden from mining activities; • Clean earthen materials imported from sources external to the mining leases.	• Final voids must be rehabilitated to meet requirements in condition F1-1 If voids and other mine disturbances are to be rehabilitated by filling with approved materials, the quantity of fill shall not exceed that required to reinstate the pre-mining landform allowing for appropriate compaction and development.	Residential

Mining Operations	Back fill criteria	Final void design	Rehabilitation Outcome
Redbank Plains (ML4622, ML50116, ML50117 and ML4583)	Approved materials for backfilling and rehabilitation of voids and other mine disturbance shall be limited to: • Interburden and overburden from mining activities; • Clean earthen materials imported from sources external to the mining leases.	• Final voids must be rehabilitated to meet requirements in condition F1-1 • If voids and other mine disturbances are to be rehabilitated by filling with approved materials, the quantity of fill shall not exceed that required to reinstate the pre-mining landform allowing for appropriate compaction and development.	Industrial (landfill)

Progressive rehabilitation

(F5-1) The top layer and sub layers of the soil profile must be removed and stockpiled separately and retained for the purpose of rehabilitation of significantly disturbed areas.

(F5-2) Commence progressive rehabilitation of significantly disturbed areas as soon as practicable or when:

(a) the economic potential of the mineral resource in an area has been exhausted;
(b) an area is no longer required for the continuation of the mining activities; and
(c) an area is of no further beneficial use to the mining operation.

Infrastructure

(F6-1) All infrastructure for the ERA including water storage structures, must be removed from the site prior to surrender hereof, except where otherwise agreed to in writing by the land owner and Mining Registrar at the relevant time.

NOTE: This condition is not applicable to the landowner also being the environmental authority holder at the relevant time.

END OF CONDITIONS FOR SCHEDULE F

Schedule G – Community

Complaint response

(G1-1) 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.

END OF CONDITIONS FOR SCHEDULE G

Schedule H - Definitions

Definitions

Words and phrases used in this authority are defined in Schedule H – Definitions. Where a definition for a term used in this authority is sought and the term is not defined herein, the definitions in the Environmental Protection Act 1994, regulations made under that Act, Environmental Protection Policies as amended from time to time or ordinary meaning must be used.

Interpretation

"EMOS" means the Environmental Management Overview Strategy report titled "Boral Bricks Pty Ltd Brisbane District Operations Environmental Management Overview Strategy" dated January 2003. Where required, interpretation of this environmental authority should be in the context of the EMOS.

"acceptance criteria" means the standards by which the actions implemented to rehabilitate land are deemed to be complete. The acceptance criteria relate to 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 re-colonisation of specific fauna groups such as collembola, 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 ground water levels and catchment yields.

"AEP" means "annual exceedence probability" in relation to a given rainfall event, is the probability that the given event will be exceeded within a one year period. The AEP is usually expressed as "1 in n" (years) or as a percentage. The *given rainfall event* comprises a stated depth of rainfall received during a stated period: for example, 750 mm in one year, or 95 mm in 24 hours. If the 24-hour rainfall event having an AEP of 5% is, say, 120 mm, this means that for each year there will be 5% chance that the 24-hour rainfall will be 120 mm, or greater. Another way of expressing this is to say the Average Recurrence Interval is 20 years (Note that this does not mean only 1 occurrence in every 20 years, or only 5 occurrences per century).

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

"annual return" means the return required by the annual notice (under section 316 of the Environment Protection Act, 1994) for an environmental authority.

"approval" means development permit or preliminary approval decision notice or referral agency response under the Integrated Planning Act 1997.

"authorised place" means the place, land or premises authorised under this authority or approval for the carrying out of the specified environmentally relevant activities.

"authority" means level 1 licence, level 1 approval, level 2 approval or environmental authority (mining activities) under the Environmental Protection Act 1994.

"clean earth" means earth that has trace elements and contaminant levels within the interim ecologically-based investigation levels for urban land use under the document 'Schedule B(1)—Guidelines on the Investigation of Soil and Groundwater', forming part of the *National Environment Protection (Assessment of Site Contamination) Measure 1999.*
Note—

The *National Environment Protection (Assessment of Site Contamination) Measure 1999* made under the *National Environment Protection Council Act 1994 (Cwlth)*, section 14(1), is available at government bookshops.

Editor's note—
On the day this regulation was notified in the gazette the document was also available on the Environment Protection and Heritage Council's website at <www.ephc.gov.au>.

"clean earthen materials" means bricks, pavers, ceramics or concrete that does not contain embedded steel reinforcing rods, pulverised to a size of no more than 100mm; or clean earth.

"commercial place" means a place used as an office or for business or commercial purposes other than such a place on the land the subject of this environmental authority.

"competent person" means a person with sufficient demonstrated skill, knowledge and qualifications required to carry out a task to a necessary standard for protection of the environment.

"dam" means a containment whether permanent or temporary, which is designed to contain, divert or control flowing substances. The term does not include a fabricated or manufactured tank or container designed to a recognised standard.

"disturbed areas" or words to that effect means areas that comprise the active mine area, the process plant and the tailings area.

"dwelling" means any of the following structures or vehicles that is principally used as a place for human habitation-

- 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; and
- a water craft in a marina.

"authority holder" means the person to whom an environmental authority is issued or transferred to, or a person acting under an environmental authority.

"environmental harm" has the meaning given in the *Environmental Protection Act 1994*.

"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.

"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, reference should be made to Australian Standard 1055.2 - 1997 Acoustics - Description and Measurement of Environmental Noise Part 2 - Application to Specific Situations.

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

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

"$L_{A,\ max\ adj,\ T}$" means the average maximum A-weighted sound pressure level (adjusted for tonal character and impulsiveness of the sound) and measured over any 10 minute period, using Fast response.

"land" includes waters and the atmosphere.

"mg/L" means milligrams per litre.

"noise sensitive place" means -
- a dwelling, mobile home or caravan park, residential marina or other residential premises;
- a motel, hotel or hostel;
- a kindergarten, school, university or other educational institution;
- a medical centre or hospital;
- a protected area; and
- a park or gardens;

and includes the curtilage of any such place.

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

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

"progressive rehabilitation" means rehabilitation (defined below) undertaken progressively or in stages as mining activities or operations are ongoing.

"protected area" means -
- a protected area under the Nature Conservation Act 1992;
- a marine park under the Marine Parks Act 2004; and
- a World Heritage Area.

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

"rehabilitation" means the process of reshaping and revegetating land to restore it to a stable post mining state and in accordance with the acceptance criteria, 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 to different phases of mining activities.

"sensitive place" means;
- a dwelling, residential allotment, mobile home or caravan park, residential marina or other residential premises excluding accommodation for persons engaged in the mining activities;
- a motel, hotel or hostel;
- an educational institution;
- a medical centre or hospital;
- a public park or gardens (including a protected area); and
- a commercial place;

and includes the curtilage of any such place.

"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.

"significantly disturbed" or words to that effect means -

(a) contaminated land; or

(b) land that has been disturbed and human intervention is needed to rehabilitate it;
  (i) including:
    - 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 waters where mining project activities occur;
    - areas submerged by tailings or hazardous contaminant storage dams in all cases;

- areas under temporary infrastructure eg. roads, tracks, bridges, culverts, dams, bores, buildings, fixed machinery, hardstand areas, airstrips, helipads which is to be removed after mining has ceased; or

(ii) not including

- areas off mining 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 objectives due to circumstances beyond the control of the authority holder (such as climatic conditions);
- areas under permanent infrastructure eg. roads, tracks, bridges, culverts, dams, bores, buildings, fixed machinery, hardstand areas, airstrips, helipads which is to be lawfully left on the site post authority surrender.
- disturbances that pre-existed the grant of the mining tenure unless those areas are disturbed during the term of the tenure.

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

"stable" means geotechnical stability of a rehabilitated landform where instability caused by settlement and subsidence has ceased.

"Suitably qualified and experienced person" means a person who is a Registered Professional Engineer of Queensland (RPEQ) under the provisions of the *Professional Engineers Act 2002*, and has demonstrated competency and relevant experience:

- for the decommissioning of final mine voids, an RPEQ who is a civil engineer with the required qualifications in geotechnical design.

"µs/cm" means micro semen per centimetre.

"waters" includes any watercourse, lake, lagoon, pond, swamp, wetland, bed and bank of any waters, non-tidal or tidal waters (including the sea), stormwater channel, stormwater drain, roadside gutter, stormwater run-off or groundwater.

END OF CONDITIONS FOR SCHEDULE H

Schedule I – Maps / Plans

Figure 1 - Darra



Figure 2 – Redbank Plains

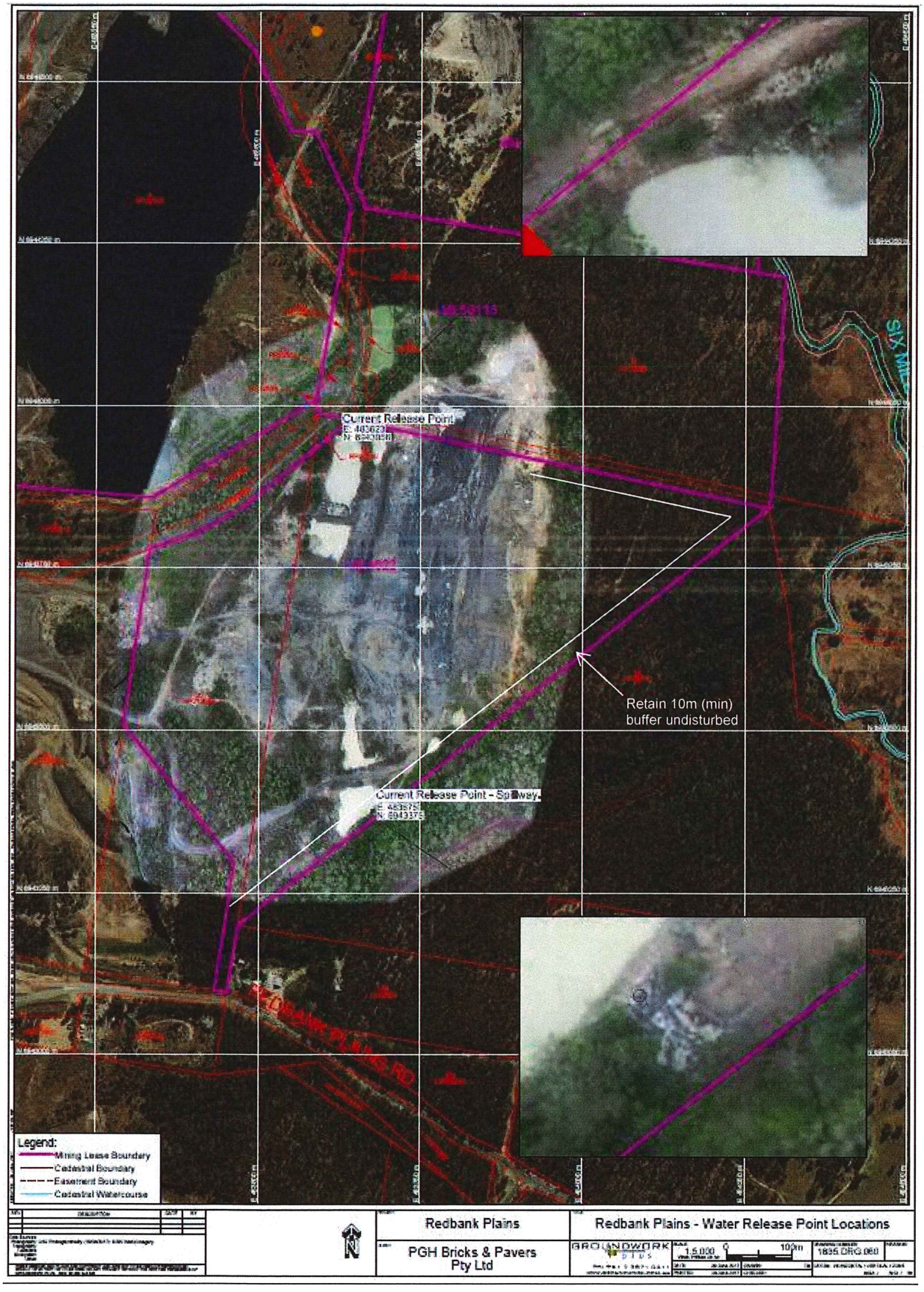


Figure 3 – Strathpine

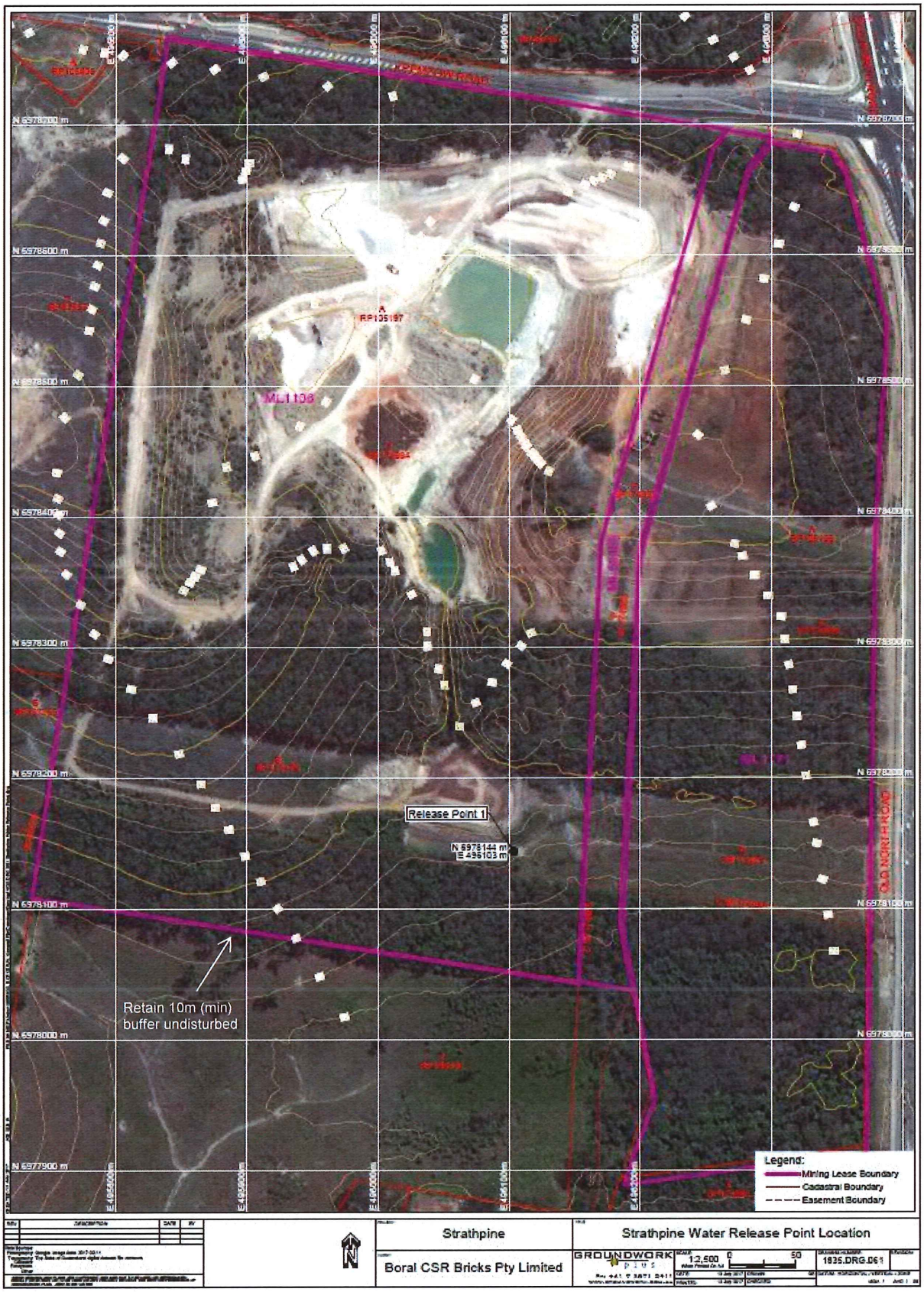
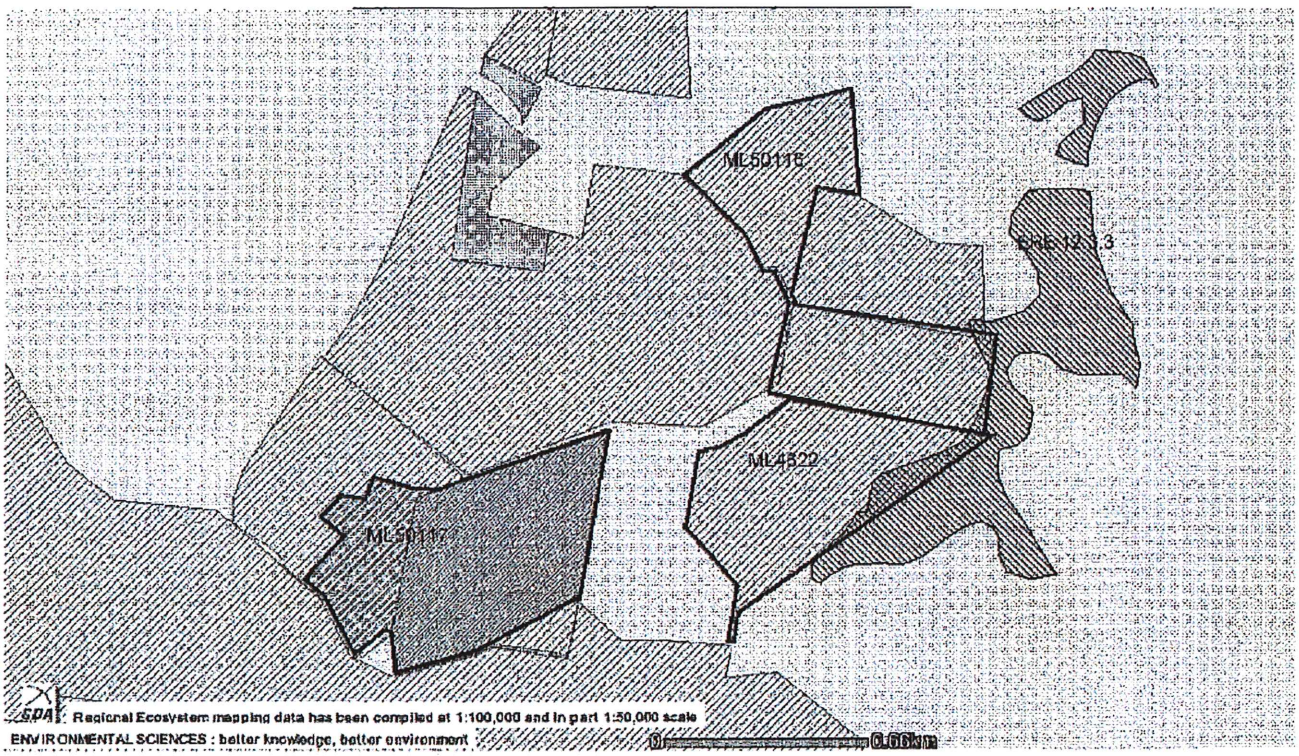


Figure 4– Endangered Regional Ecosystem 12.3.3



END OF CONDITIONS FOR SCHEDULE I

END OF CONDITIONS FOR ACTIVITIES UNDERTAKEN ON ML1100, ML1106, ML1171, ML4622, ML50116, ML50117, ML50183 & ML4583

END OF ENVIRONMENTAL AUTHORITY