

Environmental authority

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

Permit¹ number: EPPR00776113

Environmental authority takes effect 30 October 2014.

The first annual fee is payable within 20 business days of the effective date.

The anniversary date of this environmental authority is the same day each year as the effective date. An annual return and the payment of the annual fee which is currently \$1,828.00 will be due each year on this day.

Environmental authority holder(s)

Name	Registered address
Vale Coal Exploration Pty Ltd	Level 11, 100 Creek Street BRISBANE CITY QLD 4000

Environmentally relevant activity and location details

Environmentally relevant activity	Location
Mining - Exploration site specific	EPC858

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 approval 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.

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

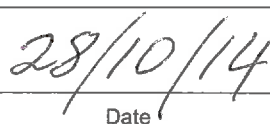
¹ Permit includes licences, approvals, permits, authorisations, certificates, sanctions or equivalent/similar as required by legislation

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.


Signature

Justin Cagney
Department of Environment and Heritage Protection
Delegate of the administering authority
Environmental Protection Act 1994


Date

Enquiries:
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Protection
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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)

Conditions of environmental authority

With the exception of any variations, the conditions of approval for this environmental authority include standard conditions contained within the attached document(s) entitled:

- Code of Environmental Compliance for Exploration & Mineral Development Projects

Additional advice about the approval

1. This approval pursuant to the *Environmental Protection Act 1994* does not remove the need to obtain any additional approval for this activity that might be required by other state and/or Commonwealth legislation. Other legislation administered by the administering authority for which a permit may be required includes but is not limited to the:
 - *Strategic Cropping Land Act 2011*;
 - *Wild Rivers Act 2005*;
 - *Aboriginal Cultural Heritage Act 2003*;
 - *Land Protection (Pest and Stock Route Management) Act 2002*;
 - *Nature Conservation Act 1992*;
 - *Vegetation Management Act 1999*;
 - *Mineral Resources Act 1989*;
 - *Water Act 2000*;
 - *Forestry Act 1959*; and
 - *Environmental Protection and Biodiversity Conservation Act 1999*.
2. This approval pursuant to the *Environmental Protection Act 1994* does not absolve the need for the environmental authority holder to adhere to any provision of the *Environmental Protection Act 1994* or of any relevant State and/or Commonwealth legislation. Such provisions include but are not limited to are:
 - Financial assurance Part 7 and section 367 *Environmental Protection Act 1994*;
 - General environmental duty section 319 *Environmental Protection Act 1994*; and
 - Duty to notify of environmental harm section 320 *Environmental Protection Act 1994*.
3. If there is any inconsistency between a standard environmental condition referred to in the *Code of Environmental Compliance for Exploration and Mineral Development Projects* and an additional condition in this environmental authority, the additional condition prevails to the extent of any inconsistency.

4. This environmental authority consists of the following Schedules and Appendices:

Schedule G General Conditions

Schedule L Land

Definitions

Appendix 1 EPC858 Environmentally Sensitive Areas Map – Mining Activities

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Schedule G: General

- G1** The conditions of this environmental authority are in force until surrender of the authority is accepted pursuant to the Environmental Protection Act 1994. The conditions apply unless an amendment is approved pursuant to the Environmental Protection Act 1994.
- G2** The environmental authority holder is to give the administering authority a financial assurance in the amount and form at a time required by the administering authority.
- G3** The environmental authority holder must comply with each of the Standard Environmental Conditions contained in the Code of Environmental Compliance for Exploration and Mineral Development Projects, except Condition 13, which is replaced by the conditions in this environmental authority.
- G4** If there is any inconsistency between a standard environmental condition referred to in (G3) and an additional condition in this environmental authority, the additional condition prevails to the extent of any inconsistency.

Schedule L: Land

- L1** The environmental authority holder must not carry out mining activities in a Category A Environmentally Sensitive Area, described as the Dipperu National Park. Activities involving machinery must not be carried out within 1km of a Category A Environmentally Sensitive Area.
- L2** The environmental authority holder is authorised to carry out mining activities in or within 500m of any Endangered Regional Ecosystem.
- L3** In carrying out mining activities on EPC 858, all reasonable and practicable measures must be taken to prevent or minimise the likelihood of environmental harm being caused to Endangered Regional Ecosystems 11.3.1, 11.3.11, 11.4.8, 11.4.9, 11.4.13, 11.9.1 and 11.9.5 identified in *Attachment A – Map 1*.
- L4** Mining activities undertaken must be consistent with the 'Environmental Management Plan – EPC858' and with the schedule of works proposed in the map entitled 'Nebo South EPC858 Exploration Program'.
- L5** When carrying out mining activities in or within 500m of any Endangered Regional Ecosystems, the holder of the environmental authority must do so in accordance with conditions (L6) to (L9).

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L6 Drill sites:

- a) Where practical, drill sites must be located outside of Endangered Regional Ecosystems; and
- b) Operational area is to be no greater than 500m²; and
- c) Sump size is to be no greater than 10m²; and
- d) Topsoil stripping must be limited to sump area; and
- e) All clearing of mature trees must be prevented or minimised.

L7 Tracks:

- a) No new tracks are permitted to be constructed within Endangered Regional Ecosystems; and
- b) Existing access and fence line tracks must be used where possible and any tracks constructed must link natural clearings; and
- c) Track construction involving blade clearing or established ground cover vegetation and/or clearing of mature trees is prevent or minimised; and
- d) Line of site clearing must be avoided; and
- e) Construction of new crossings over watercourses must be avoided and is only permitted when no reasonable alternative is available; and
- f) All tracks must be constructed and maintained with adequate drainage to avoid accelerated erosion; and
- g) Spacing's between tracks must not be less than 200m; and
- h) Access tracks must be less than 5m in width.

L8 Other Land Disturbance:

- a) Activities must not include seismic lines, costeaning or bulk sampling within Endangered Regional Ecosystems; and
- b) All equipment such as earthmoving and drilling equipment must be used in a manner which prevents the spread of weeds, minimises unnecessary disturbance of topsoil and ground cover vegetation; and
- c) Campsites must not be established within Endangered Regional Ecosystems; and
- d) All waste must be removed and disposed offsite.

L9 Rehabilitation:

- a) Rehabilitation of areas disturbed in or within 500m of Endangered Regional Ecosystems must be completed as soon as practicable but no longer than 6 months after completion of the disturbance activity; and
- b) The environmental authority holder must revegetate disturbed areas of Endangered Regional Ecosystem (11.3.1, 11.3.11, 11.4.1, 11.4.8, 11.4.9, 11.4.13, 11.9.1 and 11.9.5) with native plant species endemic to the area that will promote the same vegetation type and density of cover to that of the surrounding undisturbed areas of Endangered Regional Ecosystems.

END OF CONDITIONS

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.

Administering authority -

- a) For a matter, the administration and enforcement of which has been devolved to a local government under section 514 of the *Environmental Protection Act 1994*; or
- b) For all other matters - the Chief Executive of the Environmental Protection Agency; or
- c) Another State Government Department, Authority, Storage Operator, Board or Trust, who's role is to administer provisions under other enacted legislation (e.g. Department of Natural Resources who licence referable dams under the Water Act 2000).

Approved form - A form approved by the administering authority.

Campsite - The area encompassing any dwelling, amenities (e.g. toilet block, power generator), sewage or general waste disposal facility and includes the office area and vehicle parking areas associated with a temporary or permanent mining camp.

Contaminant - The *Environmental Protection Act 1994* defines, under Section 11, a contaminant as:

- a) a gas, liquid or solid; or
- b) an odour; or
- c) an organism (whether alive or dead), including a virus; or
- d) energy, including noise, heat, radioactivity and electromagnetic radiation; or
- e) a combination of contaminants.

Contamination - Section 10 of the *Environmental Protection Act 1994* defines contamination of the environment as the release (whether by act or omission) of a contaminant into the environment.

Contaminated land - Schedule 3 of the *Environmental Protection Act 1994* defines contaminated land as land contaminated by a hazardous contaminant. (See below for a definition of hazardous contaminant.)

Contaminated land register - Means the register kept by the administering authority under section 541 of the *Environmental Protection Act 1994*.

Costeaning - The digging of a trench or pit across the seam or ore body for exposing, sampling and mapping of the ore body.

Density of cover - In reference to trees and/or shrubs, it means the number of trees or shrubs in a specified area (e.g. 50 trees per square kilometre). With reference to understorey plant species (e.g. grasses and forbs), it means the percentage of surface area covered by a particular species.

Disturbed - Any area that has had its natural state altered by the action or interference of carrying out an activity associated with the exploration project.

Environment - Section 8 of the *Environmental Protection Act 1994* defines the environment as:

- a) ecosystems and their constituent parts, including people and communities; and
- b) all natural and physical resources; and
- c) the qualities and characteristics of locations, places and areas, however large or small, that contribute to their biological diversity and integrity, intrinsic or attributed scientific value or interest, amenity, harmony and sense of community; and
- d) the social, economic, aesthetic and cultural conditions that affect, or are affected by, things mentioned in paragraphs (a) to (c).

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Environmental authority - Means a licence or approval issued by the administering authority under the *Environmental Protection Act 1994*.

Environmental protection policy - Means an environmental protection policy approved under chapter 2 of the *Environmental Protection Act 1994*.

Environmental relevant activity - Means an activity prescribed by regulation as an environmental relevant activity.

Environmentally sensitive areas - Refers to locations, however large or small, that have environmental values that contribute to maintaining biological diversity and integrity, have intrinsic or attributed scientific, historical or cultural heritage value, or are important in providing amenity, harmony or sense of community. Refer to Appendix A.

Environmental value - Section 9 of the *Environmental Protection Act 1994* defines an environmental value as:

- a) a quality or physical characteristic of the environment that is conducive to ecological health or public amenity or safety; or
- b) another quality of the environment identified and declared to be an environmental value under an Environmental Protection Policy or Regulation (e.g. water suitable for swimming in or drinking)

Financial assurance - Means a security deposit, either cash or a bank guarantee that is held by the administering authority to cover the potential:

- a) costs to rehabilitate areas disturbed by mining activities; and
- b) costs to restore property improvements disturbed by mining activities; and
- c) failure of the tenure holder to pay rents and royalties.

Hazardous contaminant - Schedule 3 of the *Environmental Protection Act 1994* defines a hazardous contaminant as "a contaminant that, if improperly treated, stored, disposed of or otherwise managed, is likely to cause serious or material environmental harm because of:

- a) its quantity, concentration, acute or chronic toxic effects, carcinogenicity, teratogenicity, mutagenicity, corrosiveness, explosiveness, radioactivity, flammability; or
- b) its physical, chemical or infectious characteristics (e.g.: spills of mercury, cyanide, petrol, diesel or oil)".

Infrastructure - Project infrastructure includes roads, tracks, bridges, culverts, dams, bores, buildings, fixed machinery, hardstand areas, pipelines, powerlines, airstrips, helipads etc, which are constructed or installed specifically for the project.

Lake - A natural or artificial body of water, either permanent or intermittent.

Landowner - Schedule 3 of the *Environmental Protection Act 1994* defines the owner of the land as –

1. The "owner" of land is—
 - a) for freehold land—the person recorded in the freehold land register as the person entitled to
 - b) the fee simple interest in the land; or
 - c) for land held under a lease, licence or permit under an Act—the person who holds the lease,
 - d) licence or permit; or
 - e) for trust land under the *Land Act 1994*—the trustees of the land; or
 - f) for Aboriginal land under the *Aboriginal Land Act 1991*—the persons to whom the land has been transferred or granted; or
 - g) for Torres Strait Islander land under the *Torres Strait Islander Land Act 1991*—the persons to whom the land has been transferred or granted; or
 - h) for land for which there is a native title holder under the Commonwealth Native Title Act— each registered native title party in relation to the land.

2. Also, a mortgagee of land is the owner of the land if—

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- a) the mortgagee is acting as a mortgagee in possession of the land and has the exclusive management and control of the land; or
- b) the mortgagee, or a person appointed by the mortgagee, is in possession of the land and has the exclusive management and control of the land.

Licensed general waste disposal facility - A site authorised by the administering authority to receive general waste or limited regulated waste (e.g. a rubbish dump).

Limited regulated waste - Schedule 9 of the *Environmental Protection Regulation 1998*, defines limited regulated waste. The only limited regulated wastes relevant to mining projects as asbestos and tyres.

Material environmental harm - Section 16 of the *Environmental Protection Act 1994* defines material environmental harm as:

- (1) material environmental harm is environmental harm (other than environmental nuisance)-
 - a) that is not trivial or negligible in nature, extent or context; or
 - b) that causes actual or potential loss or damage to property of an amount of, or amounts totalling, more than the threshold amount but less than the maximum amount; or
 - c) that results in costs of more than the threshold amount but less than the maximum amount being incurred in taking appropriate action to -
 - i. prevent or minimise the harm; and
 - ii. rehabilitate or restore the environment to its condition before the harm.

In this section -

“maximum amount” means the threshold amount for serious environmental harm.

“threshold amount” means \$5 000 or, if a greater amount is prescribed by regulation, the greater amount.

Mine - Section 6A of the *Mineral Resources Act 1989*, defines mining as –

- (1) **“Mine”** means to carry on an operation with a view to, or for the purpose of -
 - a) winning mineral from a place where it occurs; or
 - b) extracting mineral from its natural state; or
 - c) disposing of mineral in connection with, or waste substances resulting from, the winning or extraction.
- (2) For subsection (2), extracting includes the physical, chemical, electrical, magnetic or other way of separation of a mineral.
- (3) Extracting includes, for example, crushing, grinding, concentrating, screening, washing, jigging, tabling, electro winning, solvent extraction electro winning (SX-EW), heap leaching, flotation, fluidised bedding, carbon-in-leach (CIL) and carbon-in-pulp (CIP) processing.
- (4) However, extracting does not include -
 - a) a process in a smelter, refinery or anywhere else by which mineral is changed to another substance; or
 - b) testing or assaying small quantities of mineral in teaching institutions or laboratories, other than laboratories situated on a mining lease; or
 - c) an activity, prescribed under a regulation, that is not directly associated with winning mineral from a place where it occurs.
- (5) For subsection (1)(c), includes the disposal of tailings and waste rock.
- (6) A regulation under subsection (4)(c) may prescribe an activity by reference to the quantities of minerals extracted or to any other specified circumstances.

Native vegetation - Vegetation that occurs naturally in a certain area.

Noise sensitive place - Means any of the following places –

- a) a dwelling;
- b) a library, childcare centre, kindergarten, school, college, university or other educational institution;
- c) a hospital, surgery or other medical institution;
- d) a protected area or an area identified under a conservation plan as a critical habitat or an area of major interest, under the *Nature Conservation Act 1992*;
- e) a marine park under the *Marine Parks Act 1982*; and

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

Progressive rehabilitation – Means rehabilitation (defined below) undertaken progressively or a staged approach to rehabilitation as mining operations are ongoing.

Rehabilitation processes – The measures and actions taken to achieve rehabilitation outcomes, including any or all of the following:

- removing all unwanted infrastructure;
- backfilling mine excavations (e.g. pits) and capping drill holes;
- reshaping the land surface to a stable landform similar to that of surrounding undisturbed areas;
- spreading of topsoil;
- spreading seed or planting seedlings to promote revegetation;
- benching ridge cuts and removing any overhanging material.

Serious environmental harm – Section 17 of the *Environmental Protection Act 1994* defines serious environmental harm as –

(1) environmental harm (other than environmental nuisance)

- a) that causes actual or potential harm to environmental values that is irreversible, of a high impact or widespread; or
- b) that causes actual or potential harm to environmental values of an area of high conservation value or special significance; or
- c) that causes actual or potential loss or damage to property of an amount of, or
- d) amounts totalling, more than the threshold amount; or
- e) that results in costs of more than the threshold amount being incurred in taking appropriate action to-
 - a. prevent or minimise the harm; and
 - b. rehabilitate or restore the environment to its condition before the harm.

In this section – “**Threshold amount**” means \$50 000 or, if a greater amount is prescribed by regulation, the greater amount.

Significantly disturbed land – Land is significantly disturbed if –

- a) it is contaminated land; or
- b) it has been disturbed and human intervention is needed to rehabilitate it.

Significantly disturbed land includes:

- 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 project 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 has ceased; or
- areas where land has been contaminated.

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 EPA, areas previously significantly disturbed which have not achieved the rehabilitation objectives due to circumstances beyond the control of the mine operator (such as climatic conditions);

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- 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 EPA;
- disturbances that pre-existed the grant of the tenure unless those areas are disturbed during the term of the tenure.

Site management plan - Means a site management plan approved under chapter 7, part 8 of the *Environmental Protection Act 1994*.

Standard criteria - Are defined in schedule 3 of the *Environmental Protection Act 1994*.

They are:

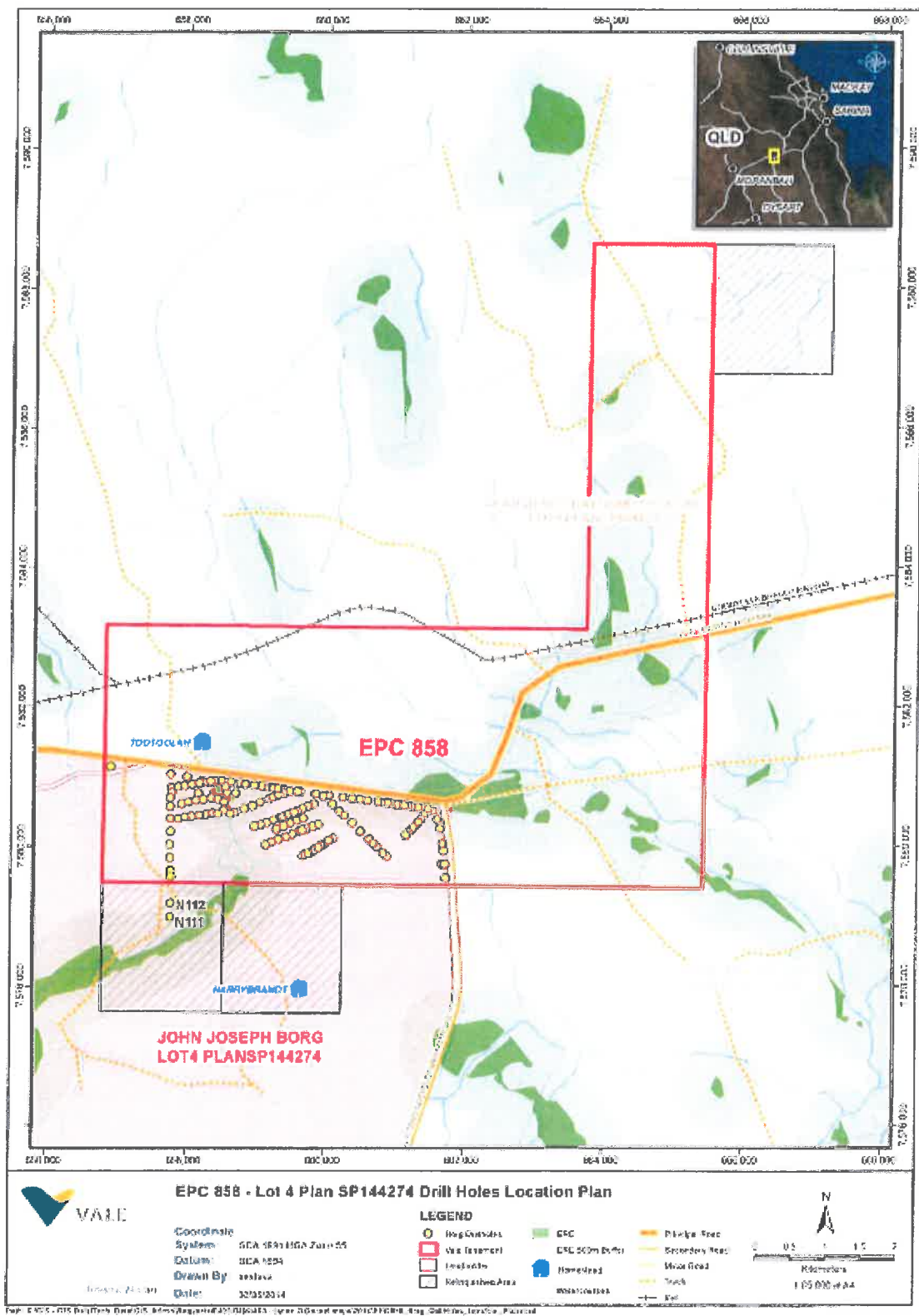
- a) the principles of ecological sustainable development; and
- b) any applicable environmental protection policy; and
- c) any applicable Commonwealth, State or local government plans, standards, agreements or requirements; and
- d) any applicable environmental impact study, assessment or report; and
- e) the character, resilience and values of the receiving environment; and
- f) all submissions made by the applicant and interested parties; and
- g) best practice environmental management; and
- h) financial implications; and
- i) the public interest; and
- j) any applicable site management plan; and
- k) any other matter prescribed under a regulation.

Standard environmental conditions - For an environmental authority, means the standard environmental conditions approved for the authority under section 549 of the *Environmental Protection Act 1994*.

Standard mining activity - Means a mining activity decided to be a standard activity under section 151 of the *Environmental Protection Act 1994*.

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 clear bed and banks and evidence of biological dependence.

Figure 4: EPC 858 Drilling Location Plan
(boreholes N111 and N112 located on relinquished area)



END OF PERMIT

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