Permit[1]

Environmental Protection Act 1994

Environmental authority

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

Permit[1] number: EPVX03291215

Project Name: Cheepie-Barcaldine Gas Pipeline

Environmental authority takes effect 7 July 2015

The anniversary date of this environmental authority is **3 August**. An annual return and the payment of the annual fee will be due each year on this day.

Environmental authority holder(s)

Name	Registered address
Ergon Energy Queensland Pty Ltd ACN: 087 646 062	34-64 Dalrymple Road GARBUTT QLD 4814

Environmentally relevant activity and location details

Environmentally relevant activity(ies)	Location(s)
Petroleum activity – A petroleum activity not otherwise prescribed in Schedule 2A of the Environmental Protection Regulation 2008.	Petroleum Pipeline Licence (PPL) 15

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

Department of Environment and Heritage Protection
www.ehp.qld.gov.au ABN 46 640 294 485

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).

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) 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.

A Langford	7/7/2015
Signature	Date

Andrew Langford
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)

Responsibilities under other legislation

An environmental authority pursuant to the *Environmental Protection Act 1994* does not remove the need to obtain any additional approval for the activity that might be required by other State and/or Commonwealth legislation. Other legislation for which a permit may be required includes but is not limited to the:

- *Aboriginal Cultural Heritage Act 2003*
- *contaminated land provisions of the Environmental Protection Act 1994*
- *Fisheries Act 1994*
- *Forestry Act 1959*
- *Nature Conservation Act 1992*
- *Petroleum and Gas (Production and Safety) Act 2004 / Petroleum Act 1923*
- *Queensland Heritage Act 1992*
- *Regional Planning Interests Act 2014*
- *Sustainable Planning Act 2009*
- *Water Act 2000*

Applicants are advised to check with all relevant statutory authorities and comply with all relevant legislation.

An environmental authority for petroleum activities is not an authority to negatively impact on water levels or pressure heads in groundwater aquifers in or surrounding formations. There are obligations to minimise or mitigate any such negative impact under other Queensland Government and Commonwealth Government legislation.

Conditions of environmental authority

Schedule A – Authorised activities

(A1) All reasonable steps must be taken to ensure the petroleum activities comply with the eligibility criteria for the activity.

(A2) The following types of petroleum activities are not authorised:

a) processing or storing petroleum or petroleum by-products that are not necessarily associated with pipeline construction or operation

b) extracting earthen materials (other than drilling waste rock or trench spoil) of more than 100,000t/year

c) extracting by dredging more than 1,000t/year of material from the bed of naturally occurring surface waters

d) construction of power lines (either above or below ground) outside the right of way (ROW) necessary for the pipeline.

(A3) Only low impact petroleum activities can be undertaken within Category A Environmentally Sensitive Areas (ESAs), or Category B ESAs or Category C ESAs other than state forests or timber reserves, or within the ESAs' primary protection zone.

(A4) Non-linear infrastructure is permitted within the secondary protection zone of ESAs provided the location is justified given other constraints and cannot be avoided and it can be demonstrated that there will be no negative impacts on the ESA.

(A5) Records demonstrating compliance with standard condition (A4) must be kept.

(A6) Despite conditions (A3), authorised petroleum pipeline activities and maintenance activities may be carried out within the Category C ESA, identified as the Gilmore Nature Reserve and the associated primary protection zone, provided the activities are carried out wholly within the ROW cleared as part of the construction process.

Schedule B – Protecting environmental values

(B1) Petroleum activities must not cause environmental nuisance from dust, odour, light, smoke or noise at a sensitive place, other than where an alternative arrangement is in place.

(B2) Contaminants must not be directly or indirectly released to land or air except for those releases authorised by conditions (C9), (C13), (C14), (C15), (C16), (D4), (D8), (D11), (D12) and (E3).

(B3) Petroleum activities must:

(a) firstly, avoid, then minimise, then mitigate any negative impacts on areas of vegetation or other areas of ecological value

(b) minimise disturbance to land that may otherwise result in land degradation

(c) minimise isolations, fragmentation or dissection of tracts of vegetation that would lead to a reduction in the current level of ecosystem functioning or ecological connectivity

(d) minimise clearing of mature or hollow bearing trees.

(B4) Where significant disturbance to land is to occur, records demonstrating compliance with standard condition (B3) must be kept.

Schedule C – General conditions

Documentation

(C1) All plans, procedures and reports must:

a) be certified by a suitably qualified person

b) be kept on record for a minimum of 5 years.

(C2) All plans and procedures required to be developed must be implemented.

Plant and equipment

(C3) All plant and equipment reasonably necessary to ensure compliance with the standard conditions must be installed.

(C4) All plant and equipment must be maintained and operated in their proper and effective condition.

(C5) All measures reasonably necessary to ensure compliance with the standard conditions must be implemented.

Contingency and emergency response

(C6) Petroleum activities involving significant disturbance to land or which have the potential to cause environmental harm can only commence after the development of written contingency procedures which address the risks of non-compliance with Schedule B standard conditions.

(C7) The contingency procedures must include, but not necessarily be limited to:

a) environmental nuisance and complaint management procedures including:

i. a description of the petroleum activities that might result in non-compliance with Schedule B standard conditions and what mitigation measures are required to be implemented and

ii. the action that will be undertaken when a member of the public makes a valid complaint.

b) management procedures including details of what actions will be taken to protect environmental values and minimise potential environmental harm from petroleum activities as a result of floods, severe storms and fires

c) environmental emergency management procedures including details of the response and mitigation measures that will be actioned to reduce negative impacts to environmental values in the event of a non-compliance with Schedule B conditions.

Soil management

(C8) Measures must be implemented and maintained to minimise stormwater entry onto significantly disturbed land.

(C9) Sediment and erosion control measures to prevent soil loss and deposition beyond significantly disturbed land must be implemented and maintained.

(C10) The measures required by standard conditions (C8) and (C9) must be in accordance, to the greatest practicable extent, with the International Erosion Control Association (IECA) *Best Practice Erosion and Sediment Control (BPESC) document* and/or the Australian Pipeline Industry Association (APIA) *Code of Environmental Practice: Onshore Pipelines* (2013).

Chemical storage

(C11) Chemicals and fuels on the relevant tenures must be stored in, or serviced by, an effective containment system that meets Australian Standards, where such a standard is relevant.

Waste management

(C12) Measures must be implemented so that waste is managed in accordance with the waste and resource management hierarchy and the waste and resource management principles.

(C13) For waste fluids that can be stored in a container that is other than a low hazard dam, the container must either be an above ground container or a structure which contains the wetting front.

(C14) Waste, including waste fluids, must be transported off-site for lawful re-use, remediation, recycling or disposal unless the waste is specifically authorised by standard conditions (C15), (C16), (D8) and (E3) to be disposed of or used on-site.

(C15) Green waste may be used on-site for rehabilitation and/or sediment and erosion control purposes.

Treated sewage effluent

(C16) Treated sewage effluent or greywater can be released to land provided it:

a) meets or exceeds secondary treated class B standards for a treatment system with a daily peak design capacity of between 150EP and 1,500EP or

b) meets or exceeds secondary treated class C standards for a treatment system with a daily peak design capacity of less than 150EP and

c) is released within fenced and signed contaminant release area(s) and does not result in pooling or run-off or aerosols or spray drift or vegetation die-off.

Financial assurance

(C17) The holder of the environmental authority must provide a financial assurance in the amount and form required by the administering authority at the time of submission of the original or any amended work program or development plan.

NOTE: The calculation of financial assurance for condition (C17) must be in accordance with the guideline Financial assurance for petroleum activities. The amount is defined as the maximum total rehabilitation cost for complete rehabilitation of all disturbed areas at any one time, which may vary on an annual basis due to progressive rehabilitation. This includes any disturbance that occurred under a prerequisite or replaced petroleum authority. The amount required for the financial assurance must be the highest total rehabilitation cost calculated for any year of the environmental management plan.

(C18) The financial assurance is to remain in force until the administering authority is satisfied that no claim is likely to be made on the assurance.

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.

Schedule D – Operation and Maintenance conditions

(D1) Pipeline operation and maintenance must be in accordance, to the greatest practicable extent, with the relevant section of the APIA *Code of Environmental Practice: Onshore Pipelines* (2013) and/or AS 2885.1:2012.

Activities in watercourses, wetlands, lakes and springs

(D2) Unless otherwise authorised under this environmental authority, petroleum activities that require earthworks, vegetation clearing and/or placing fill, other than that associated with the maintenance of linear infrastructure, is not permitted in or within:

a) 200 metres from any wetland, lake or spring or

b) 100 metres of the high bank of any other watercourse.

(D3) The maintenance for linear infrastructure that will result in significant disturbance to a wetland, lake, spring or watercourse must be conducted in accordance with the following order of preference. Conducting works:

a) firstly, in times where there is no water present

b) secondly, in times of no flow

c) thirdly, in times of flow, but in a way that does not impede low flow.

(D4) Petroleum activities must not result in water turbidity increases of more than 10% in high ecological value waters outside contained maintenance areas or the ROW.

(D5) The maintenance for linear infrastructure that will result in significant disturbance to a lake, spring or watercourse must be designed and undertaken by a suitably qualified person in accordance with the guideline *Activities in a watercourse, lake or spring associated with a resource activity or mining operations.*

(D6) The maintenance for linear infrastructure that will result in significant disturbance to a wetland must be designed and undertaken by a suitably qualified person taking into consideration sections 5 and 6 of the guideline *Activities in a watercourse, lake or spring associated with a resource activity or mining operations.*

Waste

(D8) Trench water, hydrostatic testing water or water from low point drains, may be released to land provided that it:

a) can be demonstrated to meet the acceptable standards for release to land

b) is released in a way that does not cause visible scouring or erosion.

(D9) If hydrostatic testing water quality does not or cannot be treated to meet the requirements of standard condition (D8), it must be managed in accordance with standard conditions (C13) or (C14).

Blasting

(D10) A Blast Management Plan must be developed for each blasting activity in accordance with Australian Standard 2187.

(D11) Blasting operations must be designed to not exceed an airblast overpressure level of 120dB (linear peak) at any time, when measured at or extrapolated to any sensitive place.

(D12) Blasting operations must be designed to not exceed a ground-borne vibration peak particle velocity of 10mm/s at any time, when measured at or extrapolated to any sensitive place.

Structures that are dams or levees

(D13) The hazard category of any dam or levee to be used in carrying out petroleum activities must be assessed in accordance with the Queensland Government *Manual for Assessing Hazard Categories and Hydraulic Performance of Dams*.

(D14) Low hazard dams must be:

(a) constructed, operated and maintained in accordance with accepted engineering standards currently appropriate for the purpose for which the dam is intended to be used; and

(b) designed with a floor and sides made of material that will contain the wetting front and any entrained contaminants within the bounds of the containment system during both its operational life and including any period of decommissioning and rehabilitation.

(D15) All low hazard dams must be monitored for early signs of loss of structural or hydraulic integrity as specified in the initial hazard assessment.

(D16) When no longer required all low hazard dams must be decommissioned to no longer accept inflow from the petroleum activities and be either:

(a) rehabilitated; or

(b) agreed to in writing by the administering authority and the landholder to remain in situ following the cessation of the petroleum activity(ies) associated with the dam, with the contained water of a quality suitable for the intended ongoing uses(s) by that landholder.

Pipeline reinstatement and revegetation

(D17) Pipeline trenches must be backfilled and topsoils reinstated within 3 months after pipe laying.

(D18) Reinstatement and revegetation of the pipeline right of way must commence within 6 months after completion of petroleum activities for the purpose of pipeline construction.

(D19) Backfilled, reinstated and revegetated pipeline trenches and right of way must be:

a) a stable landform

b) re-profiled to a level consistent with surrounding soils

c) re-profiled to original contours and established drainage lines

d) vegetated with groundcover which is not a declared pest species, and which is established and self-sustaining.

Schedule E – Post-construction conditions including operations, maintenance and decommissioning

(E1) Pipeline operation and maintenance must be in accordance, to the greatest practicable extent, with the relevant section of the APIA *Code of Environmental Practice: Onshore Pipelines* (2013) and/or AS 2885.3:2012.

(E2) Written procedures must be developed to ensure operations and maintenance of the pipeline complies with the conditions of the environmental authority.

(E3) Flush water may be released to land provided that it meets the requirements of standard condition (D8).

Rehabilitation

(E4) As soon as practicable and within six months (or longer period agreed in writing by the administering authority) of the end of petroleum activities causing significant disturbance to land, the holder of the environmental authority must:

a) remediate contaminated land (e.g. evaporation ponds containing hazardous waste) in accordance with *Environmental Protection Act 1994* requirements;

b) reshape all significantly disturbed land to a stable landform similar to that of surrounding undisturbed areas; and

c) on all significantly disturbed land, take all reasonable and practicable measures to:

i. re-establish surface drainage lines;

ii. reinstate the top layer of the soil profile; and

iii. promote establishment of vegetation of the same species and density of cover to that of the surrounding undisturbed areas.

Schedule F – Monitoring and reporting conditions

Monitoring

(F1) All monitoring must be undertaken by a suitably qualified person.

(F2) If requested by the administering authority in relation to investigating a valid complaint, monitoring must be undertaken within 10 business days.

(F3) All laboratory analyses and tests must be undertaken by a laboratory that has NATA accreditation for such analyses and tests, except as otherwise authorised in writing by the administering authority.

(F4) Notwithstanding standard condition (F3), where there are no NATA accredited laboratories available to test for a specific analyte or substance, then duplicate samples must be sent to separate laboratories for independent testing or evaluation.

Sampling

(F5) The methods of surface water sampling must comply with that set out in the Queensland Government's *Monitoring and Sampling Manual 2009 – Environmental Protection (Water) Policy 2009*.

(F6) The methods of groundwater sampling must comply with the Australian Government's *Groundwater Sampling and Analysis – A Field Guide* (2009:27 GeoCat #6890.1).

(F7) Noise must be measured in accordance with the prescribed standards in the Environmental Protection Regulation 2008.

(F8) The method of measurement of ambient air quality or point source contaminant releases to air must comply with the *Queensland Air Quality Sampling Manual* and/or Australian Standard 4323.1:1995 *Stationary source emissions method 1: Selection of sampling positions*, whichever is appropriate for the relevant measurement.

Notification

(F9) In addition to the requirements under section 320A of the *Environmental Protection Act 1994*, the administering authority must be notified in writing within 5 business days of any event which has resulted in the contingency procedures required by conditions (C6) and (C7) being activated.

Reporting

(F10) The annual return must include an Update Report detailing activities during the annual return period, demonstrating:

a) significant disturbance during the period

b) rehabilitation undertaken

c) a list of all valid complaints relating to environmental issues made including the date, source, reason for the complaint and a description of investigations undertaken in resolving the complaint

d) the results of all monitoring undertaken.

SCHEDULE G – DEFINITIONS

Note: Where a term is not defined in this environmental authority the definition in the Environmental Protection Act 1994, its regulations and Environmental Protection Policies, or the Acts Interpretation Act 1954, or the Macquarie Dictionary or the Petroleum and Gas (Production and Safety) Act 2004 or its regulations must be used in that order.

Term	Definition
acceptable standards for release to land	is defined as: (a) electrical conductivity (EC) not exceeding 3,000µS/cm (b) sodium adsorption ratio (SAR) not exceeding 8 (c) and for hydrostatic testing water, water from low point drains and flush water, total heavy metals for each element listed meets the respective short term trigger value in Table 4.2.6. – Heavy metals and metalloids in Australian and New Zealand Guidelines for Fresh and Marine Water Quality (ANZECC) 2000.
accepted engineering standards	in relation to dams, means those standards of design, construction, operation and maintenance that are broadly accepted within the profession of engineering as being good practice for the purpose and application being considered. In the case of dams, the most relevant documents would be publications of the *Australian National Committee on Large Dams* (ANCOLD), guidelines published by Queensland government departments and relevant Australian and New Zealand Standards.
acid sulfate soil(s)	means a soil or soil horizon which contains sulfides or an acid soil horizon affected by oxidation of sulfides.
administering authority	has the meaning in Schedule 4 of the *Environmental Protection Act 1994*.
alternative arrangement	means a written agreement about the way in which a particular nuisance impact will be dealt with at a sensitive place, and may include an agreed period of time for which the arrangement is in place. An alternative arrangement may include, but is not limited to, a range of nuisance abatement measures to be installed at the sensitive place, or provision of alternative accommodation for the duration of the relevant nuisance impact.
analyte(s)	means a chemical parameter determined by either physical measurement in the field or by laboratory analysis.
annual return period	means the most current 12-month period between 2 anniversary dates.
aquifer	means an identifiable stratigraphic formation that has the potential to produce useful flows of water.
Australian Standard 2187	means Australian Standard 2187.0:1998 Explosives—Storage, transport and use, Part 0, Australian Standard 2187.1:1998 Explosives—Storage, transport and use Part 1 and Australian Standard 2187.2:2006 Explosives—Storage and use, Part 2 or any updated versions that becomes available from time to time.

Australian Standard 2885	means Australian Standard 2885.0:2008 Pipelines – Gas and Liquid Petroleum General Requirements, Australian Standard 2885.0- 2008/Amdt 1-2012 Pipelines - Gas and Liquid Petroleum General Requirements, Australian Standard 2885.1:2012 Pipelines – Gas and Liquid Petroleum Design and Construction and Australian Standard 2885.3:2012 Pipelines – Gas and Liquid Petroleum Operation and Maintenance, or any updated versions that become available from time to time.
bed	of any waters, has the meaning in Schedule 12 Part 2 of the Environmental Protection Regulation 2008.
brine	means saline water with a total dissolved solid concentration greater than 40,000 mg/l.
business day	has the meaning in section 36 of the *Acts Interpretation Act 1954*.
Category A ESA	means any area listed in Schedule 12, Section 1 of the Environmental Protection Regulation 2008.
Category B ESA	means any area listed in Schedule 12, Section 2 of the Environmental Protection Regulation 2008.
Category C ESA	means any of the following areas: • nature refuges as defined in the conservation agreement for that refuge under the *Nature Conservation Act 1992* • State forests or timber reserves as defined under the *Forestry Act 1959* • resources reserves under the *Nature Conservation Act 1992* • an area validated as 'essential habitat' or 'essential regrowth habitat' from ground-truthing surveys in accordance with the *Vegetation Management Act 1999* for a species of wildlife listed as endangered, vulnerable, rare or near threatened under the *Nature Conservation Act 1992* • 'of concern regional ecosystems' identified in the database called 'RE description database' containing regional ecosystem numbers and descriptions • threshold regional ecosystems as defined and listed in Appendix 6 of the *Queensland Biodiversity Offsets Policy* • critically limited regional ecosystems as defined and listed in Appendix 5 of the *Queensland Biodiversity Offsets Policy*.
certified	in relation to any matter other than a design plan, 'as constructed' drawings or an annual report regarding dams means, a Statutory Declaration by a suitably qualified person or suitably qualified third party accompanying the written document stating: • the person's qualifications and experience relevant to the function • that the person has not knowingly included false, misleading or incomplete information in the document

	• that the person has not knowingly failed to reveal any relevant information or document to the administering authority • that the document addresses the relevant matters for the function and is factually correct; and • that the opinions expressed in the document are honestly and reasonably held.
clearing	has the meaning in the dictionary of the *Vegetation Management Act 2000.*
coal seam gas water	means underground water brought to the surface of the earth, or otherwise interfered with, in connection with exploring for or producing coal seam gas. CSG water is a waste, as defined under s13 of the *Environmental Protection Act 1994.*
coastal waters	has the meaning in section 440ZH of the *Environmental Protection Act* 1994 and means the coastal waters of the state, and includes other waters within the limits of the state that are subject to the ebb and flow of the tide.
daily peak design capacity	for sewage treatment works, has the meaning in Schedule 2, section 63(4) of the Environmental Protection Regulation 2008 as the higher equivalent person (EP) for the works calculated using each of the formulae found in the definition for EP.
dam(s)	means a land-based structure or a void that is designed to contain, divert or control flowable substances, and includes any substances that are thereby contained, diverted or controlled by that land-based structure or void and associated works. A dam does not mean a fabricated or manufactured tank or container, designed and constructed to an Australian Standard that deals with strength and structural integrity of that tank or container.
declared pest species	has the meaning in the *Land Protection (Pest and Stock Route Management) Regulation 2003* and is a live animal or plant declared to be a declared pest under section 36 (Declaring Pests by Regulation) or section 37(2) (Declaring Pest under Emergency Pest Notice) of that Act and includes reproductive material of the animal or plant.
decommissioning	in relation to pipelines means the actions undertaken in accordance with the requirements of Australian Standard 2885, as amended from time to time, to prepare the pipeline and peripheral facilities for pending suspension or abandonment.
document	has the meaning in section 36 of the *Acts Interpretation Act 1954.*
ecological connectivity	is a measure of ecological condition and means the flow or connection of organisms and ecological processes across landscapes at multiple scales. Ecological connectivity has a positive relationship with landscape connectivity and habitat connectivity and effects vary between species. It includes connectivity by stepping stone or contiguous bioregional/local corridor networks.
ecosystem functioning	means the interactions between and within living and nonliving components of an ecosystem and generally correlates with the size, shape and location of the

	vegetation community.
eligibility criteria	for an environmentally relevant activity, has the meaning in section 112 of the *Environmental Protection Act 1994*.
environmental harm	has the meaning in section 14 of the *Environmental Protection Act 1994*.
environmental nuisance	has the meaning in section 15 of the *Environmental Protection Act 1994*.
environmental value(s)	has the meaning in section 9 of the *Environmental Protection Act 1994*.
equivalent person or EP	has the meaning under section 3 of the Planning Guidelines For Water Supply and Sewerage, 2005, published by the Queensland Government. It is calculated in accordance with Schedule 2, Section 63(4) of the Environmental Protection Regulation 2008 where: • EP = V/200 where V is the volume, in litres, of the average dry weather flow of sewage that can be treated at the works in a day; or • EP = M/2.5 where M is the mass, in grams, of phosphorus in the influent that the works are designed to treat as the inlet load in a day.
environmentally relevant activity or ERA	has the meaning in section 18 of the *Environmental Protection Act 1994*.
financial assurance	for an environmental authority, means financial assurance given for the authority under Chapter 5, part 12, division 2 of the *Environmental Protection Act 1994*.
green waste	means waste that is grass cuttings, trees, bushes, shrubs, material lopped from trees, untreated timber or other waste that is similar in nature but does not include declared pest species.
greywater. r	means wastewater generated from domestic activities such as laundry, dishwashing, and bathing. Greywater does not include sewage.
hazard category	means a category, either low, significant or high, into which a dam is assessed as a result of the application of tables and other criteria in *Manual for Assessing Hazard Categories and Hydraulic Performance of Dams*, published by the Queensland Government, as amended from time to time.
high ecological value waters	means Queensland waters that are scheduled waters under the *Environmental Protection (Water) Policy 2009* as high value ecological waters.
lake	means: • a lagoon, swamp or other natural collection of water, whether permanent or intermittent; and • the bed and banks and any other element confining or containing the water.
levee	means an embankment that only provides for the containment and diversion of stormwater or flood flows from a contributing catchment, or containment and

	diversion of flowable materials resulting from releases from other works, during the progress of those stormwater or flood flows or those releases; and does not store any significant volume of water or flowable substances at any other times.
linear infrastructure	means powerlines, pipelines, roads and access tracks.
low hazard dam	low hazard dam means any dam that is not classified as high or significant as assessed using the *Manual for Assessing Hazard Categories and Hydraulic Performance of Dams*, published by the Queensland Government and which contains contaminants in concentrations which exceed or will exceed, during the dam's operational life, the values or range shown in Table 3 of the manual.
low impact petroleum activities	means petroleum activities which do not result in the clearing of native vegetation, cause disruption to soil profiles through earthworks or excavation or result in significant disturbance to land which cannot be rehabilitated immediately using hand tools after the activity is completed. Examples of such activities include but are not necessarily limited to soil surveys (excluding test pits), topographic surveys, cadastral surveys and ecological surveys, may include installation of monitoring equipment provided that it is within the meaning of low impact and traversing land by car or foot via existing access tracks or routes or in such a way that does not result in permanent damage to vegetation.
month	has the meaning in section 36 of the *Acts Interpretation Act 1954.*
NATA accreditation	means accreditation by the National Association of Testing Authorities Australia.
non-linear infrastructure	means infrastructure that is other than a powerline, a pipeline, a road, an access track and includes only the following: • workers camps • maintenance facilities • no-release sewage treatment plants • laydown areas • structures (i.e. dams or levees) • tanks • sediment and erosion control measures • above ground containers and chemical / fuel storages • water pumps and generators • stockpiles.
outer bank	has the meaning in section 5A of the *Water Act* 2000.
performance indicator(s)	means a quantitative measure against which success can be assessed and audited in a consistent, objective and repeatable manner.

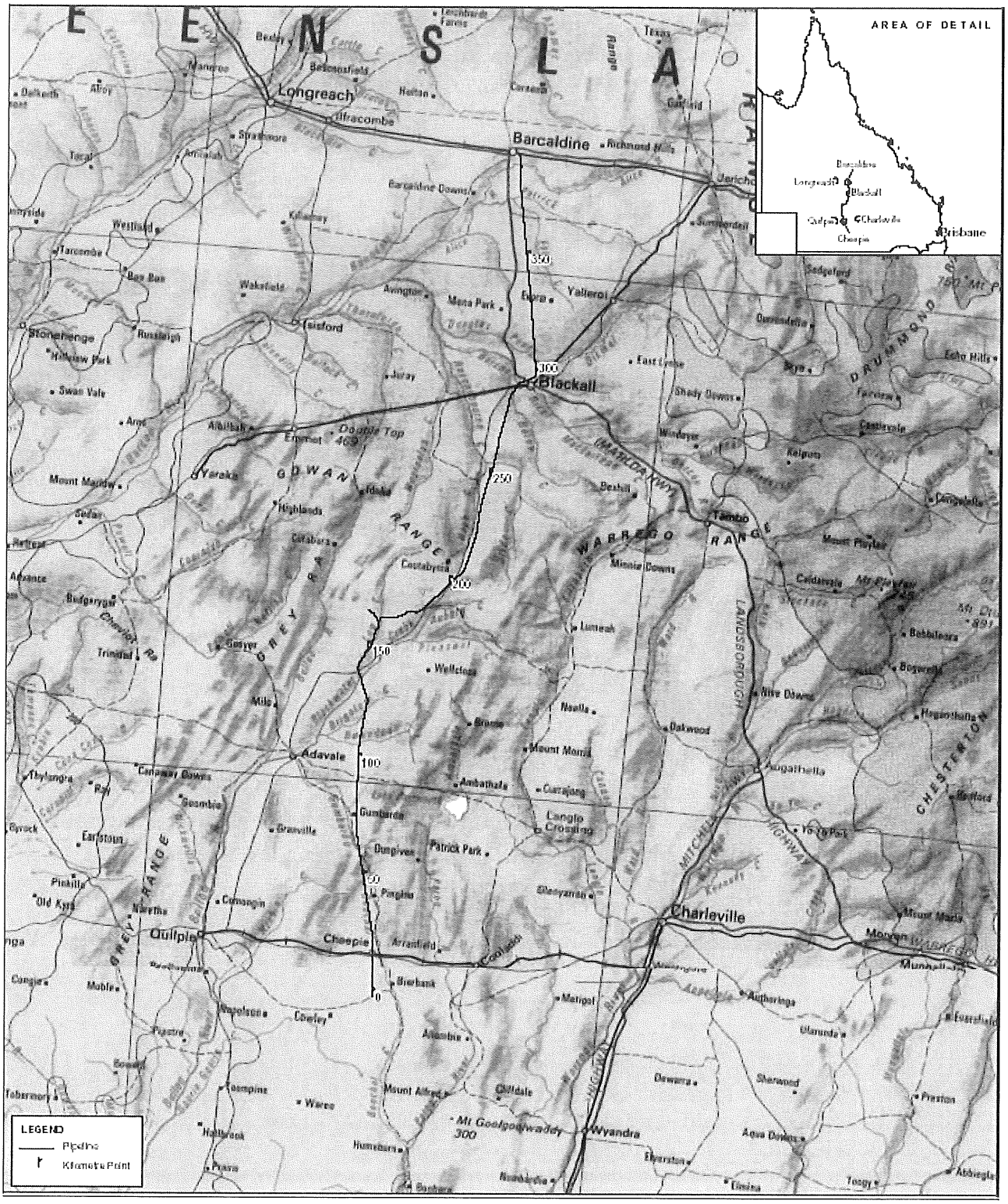
primary protection zone	primary protection zone means an area within 200 metres from the boundary of any Category A, B or C environmentally sensitive area.
rehabilitation or rehabilitated	means the process of reshaping and revegetating land to restore it to a stable landform and in accordance with acceptance criteria and, where relevant, includes remediation of contaminated land. For the purposes of pipeline rehabilitation, rehabilitation includes reinstatement, revegetation and restoration.
reinstated or reinstatement	means the process of bulk earth works and structural replacement of preexisting conditions of a site (i.e. soil surface typography, watercourses, culverts, fences and gates and other landscape(d) features) and is detailed in the APIA *Code of Environmental Practice: Onshore Pipelines* (2013).
release, releases, released	has the meaning in Schedule 4 of the *Environmental Protection Act 1994.*
revegetation or revegetating or revegetate/d	means to actively re-establish vegetation through seeding or planting techniques in accordance with site specific management plans.
right of way	means the linear construction footprint required to install pipelines.
secondary protection zone	in relation to a Category A or Category B environmentally sensitive area means an area within 100 metres from the boundary of the primary protection zone.
secondary treated class B standards	means treated sewage effluent or greywater which meets the following standards: • total phosphorous as P, maximum 20mg/L • total nitrogen as N, maximum 30mg/L • 5-day biochemical oxygen demand (inhibited) (e.g. release pipe from sewage treatment plant), maximum 20mg/L • suspended solids, maximum 30mg/L • pH, range 6.0 to 8.5 • e-coli, 80th percentile based on at least 5 samples with not less than 30 minutes between samples, 1,000cfu per 100mL, maximum 10,000cfu per 100mL.
secondary treated class C standards	means treated sewage effluent or greywater which meets the following standards: • total Phosphorous as P, maximum 20mg/L • total Nitrogen as N, maximum 30mg/L • 5-day Biochemical oxygen demand (inhibited) (e.g. Release pipe from sewage treatment plant), maximum 20mg/L

	• suspended solids, maximum 30mg/L • pH, range 6.0 to 8.5 • e-Coli, 80th percentile based on at least 5 samples with not less than 30 minutes between samples, 10,000cfu per 100mL, maximum 100,000cfu per 100mL.
sensitive place	means: • a dwelling (including residential allotment, mobile home or caravan park, residential marina or other residential premises, motel, hotel or hostel) • a library, childcare centre, kindergarten, school, university or other educational institution • a medical centre, surgery or hospital • a protected area • a public 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 • a work place used as an office or for business or commercial purposes, which is not part of the petroleum activity(ies) and does not include employees accommodation or public roads • for noise, a place defined as a sensitive receptor for the purposes of the *Environmental Protection (Noise) Policy 2008*.
sensitive receptor	means an area or place where noise (including low frequency, vibration and blasting) is measured to investigate whether nuisance impacts are occurring and includes: • a dwelling (including residential allotment, mobile home or caravan park, residential marina or other residential premises, motel, hotel or hostel; or • a library, childcare centre, kindergarten, school, university or other educational institution; • a medical centre, surgery or hospital; or • a protected area; or • a public 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; or • a work place used as an office or for business or commercial purposes, which is not part of the petroleum activities and does not include employees accommodation or public roads.
significantly disturbed or significant disturbance or significant disturbance to land or	means disturbance to land as defined in Schedule 12, section 4 of the Environmental Protection Regulation 2008.

areas	
spring(s)	has the meaning in Schedule 4 of the *Water Act 2000*
stable	in relation to land, means landform dimensions are or will be stable within tolerable limits now and in the foreseeable future. Stability includes consideration of geotechnical stability, settlement and consolidation allowances, bearing capacity (trafficability), erosion resistance and geochemical stability with respect to seepage, leachate and related contaminant generation.
structure	means a dam or levee.
suitably qualified person	means a person who has qualifications, training, skills and experience relevant to the nominated subject matter and can give authoritative assessment, advice and analysis to performance relative to the subject matter using the relevant protocols, standards, methods or literature.
top soil	Means the surface (top) layer of a soil profile, which is 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 the natural surface.
trench spoil	means soil from the pipeline trench.
valid complaint	means a complaint that is not considered by the administering authority or holder of the environmental authority to be frivolous, vexatious or based on mistaken belief.
waste and resource management hierarchy	has the meaning provided in section 9 of the *Waste Reduction and Recycling Act 2011.*
waste and resource management principles	has the meaning provided in section 4(2)(b) of the *Waste Reduction and Recycling Act 2011.*
waters	means all or any part of a creek, river, stream, lake, lagoon, swamp, wetland, spring, unconfined surface water, unconfined water in natural or artificial watercourses, bed and bank of any waters, non-tidal or tidal waters (including the sea), stormwater channel, stormwater drain, roadside gutter, stormwater run-off, and underground water.
watercourse	has the meaning provided in Schedule 4 of the *Environmental Protection Act 1994.*
wetland	means a wetland as defined under the Queensland Wetlands Program and are areas of permanent or periodic/intermittent inundation, with water that is static or flowing fresh, brackish or salt, including areas of marine water, the depth of which at low tide does not exceed 6 metres. To be classified as a wetland, the area must have one or more of the following attributes:

	• at least periodically, the land supports plants or animals that are adapted to and dependent on living in wet conditions for at least part of their life cycle; or • the substratum is predominantly undrained soils that are saturated, flooded or ponded long enough to develop anaerobic conditions in the upper layers; or • the substratum is not soil and is saturated with water, or covered by water at some time. For the purposes of petroleum activities, wetlands do not include springs and watercourses and those wetlands that are defined in the *Wetland Mapping and Classification Methodology* (2005) published by the Queensland Government as: • H2M1 Riverine or ex-riverine (lacustrine) water bodies associated with dams and weirs located in a channel • H2M3p Ponded pastures • H2M5 Palustrine/lacustrine water bodies where ecological character has changed due to gross mechanical disturbance (e.g. cropping) • H2M6 Palustrine/lacustrine water bodies that have been converted, completely or mostly, to a ring tank or other controlled storage • H2M7 Riverine water bodies that have been converted mostly to canals or irrigation channels • H3C1 Artificial stand-alone water storages not within a natural water body or channel; or • H3C2 Artificial Channel drain/canal – bore drains, swales, bores and irrigation channel overflows/ponding. ***Explanatory note:*** *This definition has been amended from the Queensland Wetlands Program definition so that low value wetlands and man-made water bodies are excluded*
year(s)	has the meaning in s36 of the *Acts Interpretation Act 1954.*

APPENDIX 1 – LOCATION OF PETROLEUM PIPELINE LICENCE (PPL) 15



End of Environmental Authority