

Permit

Environmental Protection Act 1994

Environmental authority EPPG00516313

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

Environmental authority number: EPPG00516313

Environmental authority takes effect on 03 December 2019

Environmental authority holder(s)

Name(s)	Registered address
BRIDGEPORT ENERGY (QLD) PTY LIMITED	Level 7 111 Pacific Highway NORTH SYDNEY NSW 2060 Australia

Environmentally relevant activity and location details

Environmentally relevant activity/activities	Location(s)
Non-Scheduled Petroleum Activity Authority to Prospect - ATP	ATP736, ATP737, ATP738
Non-Scheduled Petroleum Activity Authority to Prospect - ATP	ATP2025, ATP2026

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-on the day the authority is issued.

However, if the EA is authorising an activity that requires an additional authorisation (a relevant tenure for a resource activity, a development permit under the *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.

Clancy Mackaway
Department of Environment and Science
Delegate of the administering authority
Environmental Protection Act 1994

Enquiries:
Energy and Extractive Resources
Department of Environment and Science
Phone: 3330 5715
Email: energyandextractive@des.qld.gov.au

Date issued: 09 December 2019



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)



This environmental authority incorporates the following schedules:

PART 1– ATP2025 and ATP2026

Schedule A – Standard Conditions

Appendix A – Definitions

PART 2– ATP736, ATP737 and ATP738

Schedule B – Site Specific Conditions

Appendix A – Definitions

Appendix B – Locality Map

Appendix C – Map of Environmentally Sensitive Areas

Appendix D – Environmentally Sensitive Areas

Words and phrases which are **bold** or underlined are defined in the Schedules for each part.

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PART 1 – ATP2025 and ATP2026.

Environmentally relevant activity and location details

Environmentally relevant activity/activities	Location(s)
Resource Activity, Non-Scheduled, Petroleum Activity, Authority to Prospect - ATP	ATP2025
Resource Activity, Non-Scheduled, Petroleum Activity, Authority to Prospect - ATP	ATP2026

Schedule A – Standard Conditions

Condition Number	Condition
RSG042 (S)	All plant and equipment reasonably necessary to ensure compliance with the standard conditions must be installed.
RSG043 (S)	All measures reasonably necessary to ensure compliance with the standard conditions must be implemented.
RSG046 (S)	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.
RSG049 (S)	All <u>low hazard dams</u> must be monitored for early signs of loss of structural or hydraulic integrity as specified in the initial hazard assessment.
RSG057 (S)	All reasonable steps must be taken to ensure the petroleum activities comply with the <u>eligibility criteria</u> for the activity.
RSG058 (S)	The following types of petroleum activities are not authorised: (a) processing or storing petroleum or petroleum by-products that are not necessarily associated with well operations (b) extracting earthen materials (other than drilling waste rock) of more than 100,000t/year (c) extracting by dredging of more than 1000t/year of material from the <u>bed</u> of naturally occurring surface <u>waters</u> (d) drilling wells with fluids that are <u>oil-based</u> or <u>synthetic oil-based</u> (e) carrying out <u>stimulation</u> activities using <u>stimulation fluid</u> that contains chemical additives where polycyclic aromatic hydrocarbons are in concentrations above the <u>reporting limit</u> .
RSG059 (S)	Petroleum activities that cause <u>significant disturbance to land</u> must not be carried out until <u>financial assurance</u> has been given to the <u>administering authority</u> as security for compliance with the environmental authority and any costs or expenses, or likely costs or expenses, mentioned in section 298 of the <i>Environmental Protection Act 1994</i> .
RSG060 (S)	Contaminants must not be directly or indirectly <u>released</u> to land or air except for those releases authorised by standard conditions RSW033, RSL010, RSN049, RSN050, RSG068, RSL027, RSL012, RSL028, RSW036, RSL029, RSW037, RSL030, RSA003 or RSW038.
RSG061 (S)	All plans and procedures required to be developed must be implemented.
RSG062 (S)	All plant and equipment must be maintained and operated in their proper and effective condition.
RSG063 (S)	Petroleum activities involving <u>significant disturbance to land</u> or which have the potential to cause <u>environmental harm</u> can only commence after the development of written contingency procedures which address the risks of non-compliance with RSG059, RSS010, RSG060, RSL023, RSL024, RSL025 and RSL026 standard conditions.
RSG064 (S)	The contingency procedures must include, but not necessarily be limited to: (a) <u>environmental nuisance</u> and complaint management procedures including: i. a description of the petroleum activities that might result in non-compliance with RSG059, RSS010, RSG060, RSL023, RSL024, RSL025 and RSL026

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	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 <u>valid complaint</u> (b) management procedures including details of what actions will be taken to protect <u>environmental values</u> and minimise potential <u>environmental harm</u> 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 RSG059, RSS010, RSG060, RSL023, RSL024, RSL025 and RSL026 standard conditions.
RSG065 (S)	<u>Low hazard dams</u> must be: (a) Constructed, operated and maintained in accordance with <u>accepted engineering standards</u> currently appropriate for the purpose for which the <u>dam</u> is intended to be used; and (b) Designed with a floor and sides made of material that will contain the wetting from and any entrained contaminants within the bounds of the containment system during both its operational life and including any period of decommissioning and <u>rehabilitation</u>.
RSG066 (S)	When no longer required all <u>low hazard dams</u> must be decommissioned to no longer accept inflow from the petroleum activities and be either: (a) <u>rehabilitated</u>; or (b) agreed to in writing by the <u>administering authority</u> and the landholder to remain in situ following the cessation of the petroleum activity (ies) associated with the <u>dam</u>, with the contained water of a quality suitable for the intended ongoing uses(s) by that landholder.
RSG067 (S)	Measures must be implemented so that waste is managed in accordance with the <u>waste and resource management hierarchy</u> and the <u>waste and resource management principles</u>
RSG068 (S)	Waste, including waste fluids but excluding waste gas, must be transported off-site for lawful re-use, remediation, recycling or disposal unless the waste is specifically authorised by standard conditions RSL027, RSL012, RSL028, RSW036, RSL029, RSW037, RSL030 or RSA003 to be disposed of or used on-site.
RSG069 (S)	Prior to any changes in petroleum activities which would result in an increase to the maximum disturbance since the last financial assurance calculation was submitted, the holder of the environmental authority must submit, and the administering authority must have approved, an application to amend the financial assurance.
RSG070 (S)	All monitoring must be undertaken by a <u>suitably qualified person</u> .
RSG071 (S)	All laboratory analyses and tests must be undertaken by a laboratory that has <u>NATA accreditation</u> for such analyses and tests, except as otherwise authorised in writing by the administering authority.
RSG072 (S)	Notwithstanding standard condition RSG071, where there are no NATA accredited laboratories available to test for a specific <u>analyte</u> or substance, then duplicate samples must be sent to separate laboratories for independent testing or evaluation.
RSG073 (S)	In addition to the requirements under section 320A of the Environmental Protection Act 1994, the <u>administering authority</u> must be notified in writing within 5 <u>business days</u> of any event which has resulted in the contingency procedures required by standard conditions RSG063 and RSG064 being activated.
RSG074 (S)	The annual return must include an Update Report detailing activities during the <u>annual return period</u>, demonstrating: (a) <u>significant disturbance</u> during the period (b) <u>rehabilitation</u> undertaken a list of all <u>valid complaints</u> 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.

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RSG078 (S)	All plans, procedures and reports must: (a) be <u>certified</u> by a <u>suitably qualified person</u> (b) be kept on record for a minimum of 5 <u>years</u> .
RSG105 (S)	Other than for <u>flare pits</u> and sumps used to store <u>residual drilling material</u> and drilling fluids, the <u>hazard category</u> of any <u>dam</u> or <u>levee</u> 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
Acoustic	
RSN045 (S)	A Blast Management Plan must be developed for each blasting activity in accordance with Australian Standard 2187.
RSN047 (S)	Noise must be measured in accordance with the prescribed standards in the Environmental Protection Regulation 2008.
RSN049 (S)	Blasting operations must be designed to not exceed an airblast overpressure level of 120 dB (linear peak) at any time, when measured at or extrapolated to any <u>sensitive place</u> .
RSN050 (S)	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 <u>sensitive place</u> .
Air	
RSA003 (S)	Unless venting is authorised under section 72 of the Petroleum and Gas (Production and Safety) Act 2004 or section 74M of the Petroleum Act 1923, waste gas from <u>production testing</u> must be flared in a manner such that: (a) an automatic ignition system is used; and (b) a flame is visible at all times while the waste gas is being flared; and (c) there is no visible smoke emissions other than for a total period of no more than 5 minutes in any 2 hours; or (d) it uses an <u>enclosed flare</u> .
RSA004 (S)	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
Land	
RSL009 (S)	Measures to prevent fauna entrapment must be implemented during the construction and operation of <u>well infrastructure</u> and <u>dams</u> .
RSL010 (S)	Sediment and erosion control measures to prevent soil loss and deposition beyond <u>significantly disturbed land</u> must be implemented and maintained.
RSL012 (S)	<u>Green waste</u> may be used on-site for <u>rehabilitation</u> and/or sediment and erosion control purposes.
RSL020 (S)	Only <u>low impact petroleum activities</u> can be undertaken within <u>Category B Environmentally Sensitive Areas (ESAs)</u> or <u>Category C ESAs</u> other than state forests or timber reserves; or within the <u>primary protection zone</u> of <u>Category A ESAs</u> .
RSL021 (S)	Only <u>essential petroleum activities</u> can be undertaken in: (a) the <u>primary protection zone</u> of <u>Category B ESAs</u> or <u>Category C ESAs</u> other than state forests or timber reserves (b) the <u>secondary protection zone</u> of <u>Category A ESAs</u> or <u>Category B ESAs</u> (c) <u>Category C ESAs</u> that are state forests or timber reserves.
RSL022 (S)	<u>Essential petroleum activities</u> carried out in a <u>primary protection zone</u> must: (a) be located in areas of <u>pre-existing disturbance</u> ; and (b) not negatively impact the ESA.
RSL023 (S)	(a) Only <u>low impact petroleum activities</u> are permitted in a <u>designated precinct</u> of a <u>Strategic Environmental Area</u> . (b) Only <u>essential petroleum activities</u> are permitted within all other areas of a Strategic Environmental Area not identified in condition (a).
RSL024 (S)	Prior to carrying out petroleum activities, the location of petroleum activities must be selected to:

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	(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 isolation, fragmentation or dissection of tracts of vegetation that would lead to a reduction in the current level of <u>ecosystem functioning</u> or <u>ecological connectivity</u> (d) minimise <u>clearing</u> of mature or hollow bearing trees.
RSL025 (S)	Records must be kept to demonstrate compliance with standard condition RSL024.
RSL026 (S)	Prior to any <u>significant disturbance to land</u>: (a) an ecological assessment of areas with native vegetation that are to be significantly disturbed, must be conducted in accordance with the Queensland Government's Biocondition, a Condition Assessment Framework for Terrestrial Biodiversity in Queensland, Assessment Manual; and (b) an assessment of the impacts that will occur as a result of significant disturbance to land must be undertaken.
RSL027 (S)	Sumps may be used for residual drilling material and drilling fluids only for the duration of drilling activities
RSL028 (S)	Treated sewage effluent or <u>greywater</u> can be <u>released</u> to land provided it: (a) meets or exceeds <u>secondary treated class B standards</u> for a treatment system with a <u>daily peak design capacity</u> of between 150 EP and 1500 EP; or (b) meets or exceeds <u>secondary treated class C standards</u> for a treatment system with a daily peak design capacity of less than 150 EP; 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.
RSL029 (S)	<u>Produced water</u> may be used for dust suppression and construction activities provided that it does not result in adverse effects on the composition and structure of soil or subsoils and can be demonstrated to meet the following standards: (a) pH between 6-9 (b) electrical conductivity (EC) not exceeding 3000µS/cm (c) sodium adsorption ratio (SAR) not exceeding 8 (d) bicarbonate ion concentration not exceeding 100mg/L.
RSL030 (S)	<u>Residual drilling material</u> can only be disposed of on-site: (a) by <u>mix-bury-cover</u> method if the residual drilling material meets the <u>approved quality criteria</u>; or (b) if it is <u>certified</u> by a <u>suitably qualified third party</u> as being of acceptable quality for disposal to land by the proposed method and that <u>environmental harm</u> will not result from the proposed disposal.
RSL031 (S)	Records must be kept of drilling fluids and all additives used in drilling activities
RSL032 (S)	<u>Significantly disturbed</u> areas that are no longer required for the ongoing conduct of the petroleum activities must be progressively <u>rehabilitated</u> within 6 <u>months</u> (unless an exceptional circumstance in the area to be rehabilitated (e.g. a flood event) prevents this timeframe being met) so that: (a) the areas are reshaped to a <u>stable</u> landform (b) the areas are re-profiled to contours consistent with the surrounding landform (c) surface drainage lines are re-established (d) <u>top soil</u> is reinstated.
RSL033 (S)	All <u>significantly disturbed</u> land caused by the carrying out of the petroleum activity(ies) must be <u>rehabilitated</u> to meet standard condition RSL032 and the following final acceptance criteria: (a) any contaminated land (e.g. contaminated soils, decommissioned dams containing salt) is remediated and rehabilitated (b) rehabilitation is undertaken in a manner such that any actual or potential <u>acid sulfate soils</u> on the area of significant disturbance are treated to prevent or

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	minimise <u>environmental harm</u> in accordance with the Instructions for the Treatment and Management of Acid Sulfate Soils (2001) (c) for land that is not being <u>cultivated</u> by the landholder: - groundcover, that is not a <u>declared pest species</u> is established and self-sustaining - vegetation of similar <u>species richness</u> and <u>species diversity</u> to preselected <u>analogue sites</u> is established and self-sustaining (d) for land that is to be cultivated by the landholder, cover crop is reinstated, unless the landholder will be preparing the site for cropping within 3 <u>months</u> of petroleum activities being completed.
RSL034 (S)	Monitoring of <u>performance indicators</u> must be carried out on <u>rehabilitation</u> activities until final acceptance criteria in standard condition RSL033 have been met for the rehabilitated area.
RSL035 (S)	Prior to relinquishing all or part of an authority to prospect area, a <u>rehabilitation</u> report must be prepared which specifically relates to the area to be relinquished and which: - reports on the condition of the area to be relinquished against the requirements of standard conditions RSL032 and RSL033; and - includes the results of all rehabilitation monitoring undertaken in the area to be relinquished in accordance with standard condition RSL034.
RSL036 (S)	The report required under standard condition RSL035 must be submitted to the <u>administering authority</u> at least 20 <u>business days</u> prior to the relinquishment notice being lodged with the administering authority for the <i>Petroleum and Gas (Production and Safety) Act 2004</i> .
Social	
RSS009 (S)	If requested by the <u>administering authority</u> in relation to investigating a <u>valid complaint</u> , monitoring must be undertaken within 10 <u>business days</u> .
RSS010 (S)	Petroleum activities must not cause <u>environmental nuisance</u> from dust, odour, light, smoke or noise at a <u>sensitive place</u> , other than where an <u>alternative arrangement</u> is in place.
Water	
RSW0022 (S)	Measures to minimise stormwater entry onto significantly disturbed land must be implemented and maintained
RSW029 (S)	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.
RSW031 (S)	Petroleum activities that require earthworks, vegetation <u>clearing</u> and/or placing fill, other than that associated with the construction of <u>linear infrastructure</u>, are not permitted in or within: 200 metres of any <u>wetland</u>, <u>lake</u> or <u>spring</u>; or 100 metres of the <u>outer bank</u> of any other <u>watercourse</u>.
RSW032 (S)	The construction and/or maintenance of <u>linear infrastructure</u> that will result in <u>significant disturbance</u> to a <u>wetland</u>, <u>lake</u>, <u>spring</u> or <u>watercourse</u> must be conducted in accordance with the following order of preference. Conducting works: - firstly, in times where there is no water present - secondly, in times of no flow - thirdly, in times of flow, but in a way that does not impede low flow.
RSW033 (S)	Petroleum activities must not result in water turbidity increases of more than 10% in <u>high ecological value waters</u> outside contained construction or maintenance areas
RSW034 (S)	The construction and/or maintenance of <u>linear infrastructure</u> that will result in <u>significant disturbance</u> to a <u>lake</u> , <u>spring</u> or <u>watercourse</u> must be designed and undertaken by a <u>suitably qualified person</u> in accordance with the guideline Activities in a watercourse, lake or spring associated with a resource activity or mining operations.
RSW035 (S)	The construction and/or maintenance of 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
RSW036 (S)	<u>Produced water</u> and stimulation flow-back water may be reused in:

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	(a) drilling and well hole activities; or (b) <u>stimulation</u> activities where its use will not result in negative effects on <u>waters</u> beyond the <u>stimulation impact zone</u>.
RSW037 (S)	Produced water used by an owner or occupier for domestic purposes or stock purposes in accordance with section 186 of the <i>Petroleum and Gas (Production and Safety) Act 2004</i> or section 86 of the <i>Petroleum Act 1923</i> must meet the irrigation or livestock watering criteria as relevant to those purposes in the Australian and New Zealand Guidelines for Fresh and Marine Water Quality (2000).
RSW038 (S)	The petroleum activities must not involve well stimulation activities at a well located within 2 kilometres laterally of a <u>landholder's active groundwater bore</u> and sourced from a formation within 200 metres vertically of the <u>stimulation impact zone</u>
RSW039 (S)	Prior to undertaking well stimulation activities, written <u>stimulation management procedures</u> must be developed.
RSW040 (S)	<u>Stimulation</u> activities must not result in: (a) negative impacts to groundwater quality beyond the <u>stimulation impact zone</u>; or (b) negative impacts to water quality in <u>landholder's active groundwater bore(s)</u> which tap into the target formation; or (c) interconnectivity between the target formation and another <u>aquifer</u>.
RSW041 (S)	The methods of groundwater sampling must comply with the Australian Government's Groundwater Sampling and Analysis - A Field Guide (2009:27 GeoCat #6890.1).

PART 1 – Appendix A DEFINITIONS

- RD004 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.
- RD006 Acid sulfate soil(s) means a soil or soil horizon which contains sulfides or an acid soil horizon affected by oxidation of sulfides.
- RD009 Administering authority has the meaning in Schedule 4 of the Environmental Protection Act 1994.
- RD013 Alternative arrangement means a written agreement about the way in which a particular environmental 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.
- RD014 Analogue site(s) means an area of land which contains values and characteristics representative of an area to be rehabilitated prior to disturbance. Such values must encompass land use, topographic, soil, vegetation, vegetation community attributes and other ecological characteristics. Analogue sites can be the pre-disturbed site of interest where significant surveying effort has been undertaken to establish benchmark parameters.
- RD015 Analyte(s) means a chemical parameter determined by either physical measurement in the field or by laboratory analysis.
- RD018 Annual return period means the most current 12-month period between two anniversary dates.
- RD023 Approved quality criteria for the purposes of residual drilling materials, means the residual drilling material meet the following quality standards:

Part A In all cases:

Parameter	Maximum concentration
pH	6-10.5 (range)
Electrical Conductivity	20dS/m (20,000µS/cm)
Chloride*	8000mg/L

*Chloride analysis is only required if an additive containing chloride was used in the drilling process
The limits in Part A must be measured in the clarified filtrate of oversaturated solids prior to mixing.

Part B If any of the following metals are a component of the drilling fluids, then for that metal: The limits in Part B refer to the post soil/by-product mix.

Chromium (total)	400mg/kg
Copper	100mg/kg
Lead	600mg/kg
Nickel	60mg/kg
Zinc	200mg/kg
Mercury	1mg/kg

Part C If a hydrocarbon sheen is visible, the following hydrocarbon fractions:

TPH	Maximum concentration
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C6-C10	170mg/kg
C10-C16	150mg/kg
C16-C34	1300mg/kg
C34-C40	5600mg/kg
Total Polycyclic Aromatic Hydrocarbons (PAHs)	20mg/kg
Phenols (halogenated)	1mg/kg
Phenols (non-halogenated)	60mg/kg
Monocyclic aromatic hydrocarbons (Total sum of benzene, toluene, ethyl benzene, xylenes (includes ortho, para and meta xylenes) and styrene)	7mg/kg
Benzene	1mg/kg

The limits in Part C refer to the post soil/by-product mix.

RD024 Aquifer means an identifiable stratigraphic formation that has the potential to produce useful flows of water.

RD025 Areas of pre-existing disturbance means areas where environmental values have been negatively impacted as a result of anthropogenic activity and these impacts are still evident. Areas of pre-disturbance may include areas where legal clearing, logging, timber harvesting, or grazing activities have previously occurred, where high densities of weed or pest species are present which have inhibited re-colonisation of native regrowth, or where there is existing infrastructure (regardless of whether the infrastructure is associated with the authorised petroleum activities). The term 'areas of pre-disturbance' does not include areas that have been impacted by wildfire/s, controlled burning, flood or natural vegetation die-back

RD037 Bed of any waters, has the meaning in Schedule 12 Part 2 of the *Environmental Protection Regulation 2008*.

RD043 Business day has the meaning in section 36 of the *Acts Interpretation Act 1954*.

RD044 Category A Environmentally Sensitive Area means any area listed in Schedule 12, Section 1 of the *Environmental Protection Regulation 2008*.

RD045 Category B Environmentally Sensitive Area means any area listed in Schedule 12, Section 2 of the *Environmental Protection Regulation 2008*.

RD047 Category C ESA means any of the following areas:

- (a) nature refuges as defined in the conservation agreement for that refuge under the *Nature Conservation Act 1992*;
- (b) State forests or timber reserves as defined under the *Forestry Act 1959*;
- (c) resources reserves under the *Nature Conservation Act 1992*;
- (d) 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*;
- (e) 'of concern regional ecosystems' identified in the database called 'RE description database' containing regional ecosystem numbers and descriptions;

- (f) threshold regional ecosystems as defined and listed in Appendix 6 of the Queensland Biodiversity Offsets Policy;
- (g) critically limited regional ecosystems as defined and listed in Appendix 5 of the Queensland Biodiversity Offsets Policy.
- RD050 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:
- (a) the person's qualifications and experience relevant to the function
 - (b) that the person has not knowingly included false, misleading or incomplete information in the document
 - (c) that the person has not knowingly failed to reveal any relevant information or document to the administering authority
 - (d) that the document addresses the relevant matters for the function and is factually correct; and
 - (e) that the opinions expressed in the document are honestly and reasonably held.
- RD056 Clearing has the meaning in the dictionary of the Vegetation Management Act 2000.
- RD068 Cultivated means used for cropping or gardening.
- RD069 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.
- RD072 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.
- RD073 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.
- RD080 Designated precinct has the meaning in Part 5 section 15(3) of the *Regional Planning Interests Regulation 2014*:
- (a) for a strategic environmental area mentioned in section 4(1)-the area identified as a designated precinct on the strategic environmental area map for the strategic environmental area; or
 - (b) if a strategic environmental area is shown on a map in a regional plan - the area identified on the map as a designated precinct for the strategic environmental area.
- RD086 Documents has the meaning in section 36 of the *Acts Interpretation Act 1954*.
- RD088 Domestic purposes has the meaning in Schedule 2 of the *Petroleum and Gas (Production and Safety) Act 2004* and section 86 of the *Petroleum Act 1923*.
- RD090 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.
- RD093 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.
- RD095 Eligibility criteria for an environmentally relevant activity, has the meaning in section 112 of the *Environmental Protection Act 1994*.

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- RD097 Enclosed flare means a device where the residual gas is burned in a cylindrical or rectilinear enclosure that includes a burning system and a damper where air for the combustion reaction is admitted.
- RD099 Environmental attribute has the meaning in section 11(2) of the *Regional Planning Interests Act 2014*.
- RD101 Environmental harm has the meaning in section 14 of the *Environmental Protection Act 1994*.
- RD104 Environmental nuisance has the meaning in section 15 of the *Environmental Protection Act 1994*.
- RD106 Environmental value(s) has the meaning in section 9 of the *Environmental Protection Act 1994*.
- RD108 Environmentally relevant activity or ERA has the meaning in section 18 of the *Environmental Protection Act 1994*.
- RD112 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:
- (a) $EP = V/200$ 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
 - (b) $EP = M/2.5$ 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.
- RD115 Essential petroleum activities means activities that are essential to bringing the resource to the surface and are only the following:
- (a) low impact petroleum activities
 - (b) single well sites not exceeding 1 hectare disturbance and multi-well sites not exceeding 1.5 hectare disturbance
 - (c) associated infrastructure located on a well site necessary for the construction and operations of wells:
 - i. water pumps and generators
 - ii. flare pits
 - iii. above ground containers and chemical / fuel storages
 - iv. sumps for residual drilling material and drilling fluids
 - v. dams to contain stimulation flow back waters that are not significant or high hazard dams
 - vi. erosion and sediment and control structures
 - vii. pipe laydown and vegetation stockpile areas
 - viii. a temporary camp associated with a drilling rig that may involve sewage treatment works that are no release works
 - (d) communication and power lines that are necessary for the undertaking of petroleum activities and that are located within well sites, well pads and pipeline right of ways without increasing the disturbance area of petroleum activities
 - (e) ecological surveys, geophysical surveys, topographic or cadastral surveys or geological surveys (including seismic and geotechnical petroleum activities) (f) gathering / flow pipelines from a well head to the initial compression facility (g) supporting access tracks.
- RD121 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*.
- RD123 Flare pit means a containment area where any hydrocarbon that is discovered in an over pressured reservoir during the drilling operation is diverted to, and combusted. The flare pit is only used during the drilling and workover process.
- RD133 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.
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- RD134 Greywater means wastewater generated from domestic activities such as laundry, dishwashing, and bathing. Greywater does not include sewage.
- RD137 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.
- RD139 High ecological value waters means Queensland waters that are scheduled waters under the *Environmental Protection (Water) Policy 2009* as high value ecological waters.
- RD151 Lake means:
 (a) a lagoon, swamp or other natural collection of water, whether permanent or intermittent; and
 (b) the bed and banks and any other element confining or containing the water.
- RD155 Landholder's active groundwater bore means bores that are able to continue to provide a reasonable yield of water in terms of quantity for the bores authorised purpose or use. This term does not include monitoring bores owned by the administering authority of the *Water Act 2000*.
- RD157 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.
- RD160 Linear infrastructure means powerlines, pipelines, roads and access tracks.
- RD165 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.
- RD167 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.
- RD181 Mix-bury-cover means the stabilisation of residual drilling solids in the bottom of a sump by mixing with subsoil and which occurs in accordance with the following methodology:
 (a) the base of the subsoil and residual solid mixture must be separated from the groundwater table by at least one metre of a continuous layer of impermeable subsoil material ($k_w=10^{-8}$ m/s) or subsoil with a clay content of >20%; and
 (b) the residual solids is mixed with subsoil in the sump and cover; and
 (c) the subsoil and residual solids is mixed at least three parts subsoil to one part waste (v/v); and
 (d) a minimum of one metre of clean subsoil must be placed over the subsoil and residual solids mixture; and (e) topsoil is replaced.
- RD184 Month is defined in s36 of the *Acts Interpretation Act 1954*.
- RD185 NATA accreditation means accreditation by the National Association of Testing Authorities Australia.
- RD191 Oil-based in relation to a fluid, means where the base fluid is a petroleum product such as diesel fuel.
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RD193	<u>Outer bank</u> has the meaning in section 5A of the Water Act 2000.
RD195	<u>Performance indicator(s)</u> means a quantitative measure against which success can be assessed and audited in a consistent, objective and repeatable manner.
RD203	<u>Primary protection zone</u> means an area within 200m from the boundary of any Category A, B or C ESA.
RD204	<u>Produced water</u> has the meaning in section 15A of the Petroleum and Gas (Production and Safety) Act 2004.
RD207	<u>Production testing</u> has the meaning in section 73 of the Petroleum and Gas (Production and Safety) Act 2004.
RD215	<u>Regulated dam(s)</u> means any dam in the significant or high hazard category as assessed using the Manual for Assessing Hazard Categories and Hydraulic Performance of Dams, published by the Queensland Government, as amended from time to time.
RD218	<u>Rehabilitation or rehabilitated</u> 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.
RD223	<u>Release, releases, released</u> has the meaning in Schedule 4 of the Environmental Protection Act 1994.
RD225	<u>Reporting limit</u> means the lowest concentration that can be reliably measured within specified limits of precision and accuracy during routine laboratory operating conditions. For many analytes, the reporting limit is selected as the lowest non-zero standard in the calibration curve. Results that fall below the reporting limit will be reported as 'less than' the value of the reporting limit. The reporting limit is also referred to as the practical quantitation limit or the limit of quantitation. For polycyclic aromatic hydrocarbons, the reporting limit must be based on super-ultra trace methods and, depending on the specific polycyclic aromatic hydrocarbon, will range between 0.005µg/L - 0.02µg/L.
RD228	<u>Residual drilling material</u> means waste drilling materials including muds and cuttings returned from well holes and which have been left behind after the drilling fluids are pumped out.
RD236	<u>Secondary protection zone</u> in relation to a Category A or Category B ESA means an area within 100 metres from the boundary of the primary protection zone.
RD238	<u>Secondary treated class B standards</u> means treated sewage effluent or greywater which meets the following standards: (a) total phosphorous as P, maximum 20mg/L (b) total nitrogen as N, maximum 30mg/L (c) 5-day biochemical oxygen demand (inhibited) (e.g. release pipe from sewage treatment plant), maximum 20mg/L (d) suspended solids, maximum 30mg/L (e) pH, range 6.0 to 8.5 (f) e-coli, 80th percentile based on at least 5 samples with not less than 30 minutes between samples, 1000cfu per 100mL, maximum 10 000cfu per 100mL.
RD239	<u>Secondary treated class C standards</u> means treated sewage effluent or greywater which meets the following standards: (a) total phosphorous as P, maximum 20mg/L (b) total nitrogen as N, maximum 30mg/L (c) 5-day biochemical oxygen demand (inhibited) (e.g. Release pipe from sewage treatment plant), maximum 20mg/L (d) suspended solids, maximum 30mg/L (e) pH, range 6.0 to 8.5

- (f) 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.

RD241	<u>Sensitive place</u> means: (a) a dwelling (including residential allotment, mobile home or caravan park, residential marina or other residential premises, motel, hotel or hostel) (b) a library, childcare centre, kindergarten, school, university or other educational institution (c) a medical centre, surgery or hospital (d) a protected area (e) 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 (f) 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 (g) for noise, a place defined as a sensitive receptor for the purposes of the <i>Environmental Protection (Noise) Policy 2008</i>.
RD248	<u>Significantly disturbed or significant disturbance or significant disturbance to land or areas</u> means disturbance to land as defined in Schedule 12, section 4 of the <i>Environmental Protection Regulation 2008</i>.
RD249	<u>Species diversity</u> means the diversity within an ecological community that incorporates both species richness and the evenness of species' abundances.
RD250	<u>Species richness</u> means the number of different species in a given area.
RD252	<u>Spring(s)</u> has the meaning in Schedule 4 of the <i>Water Act 2000</i>.
RD254	<u>Stable</u> 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.
RD259	<u>Stimulation</u> means a technique used to increase the permeability of a natural underground reservoir that is undertaken above the formation pressure and involves the addition of chemicals. It includes hydraulic fracturing/hydrofracking, fracture acidizing and the use of proppant treatments. Explanatory note: This definition is restricted from that in the <i>Petroleum and Gas (Production and Safety) Act 2004</i> in order to only capture the types of stimulation activities that pose a risk to the environmental values of water quality in aquifers.
RD260	<u>Stimulation fluid</u> means the fluid injected underground to increase permeability. For clarity, the term stimulation fluid only applies to fluid injected down well post-perforation.
RD261	<u>Stimulation impact zone</u> means a 100m maximum radial distance from the stimulation target location within a gas producing formation.

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- RD262 Stimulation management procedures means procedures for the management of stimulation activities that include, but is not necessarily limited to information on:
- (a) the local stratigraphy including aquifers, faults, linear features, hydraulic conductivity, porosity, seismic risk and groundwater dependent assets
 - (b) the impacts of applied stresses including aquifer drawdown, on connectivity to aquifers above and below the fractured zone subsequent to the stimulation activity
 - (c) the extent to which there are vertically impermeable formations between the fractured zone and other aquifers
 - (d) methods to ensure isolation of hydrocarbon bearing formations from aquifers and internal and external mechanical integrity of well(s)
 - (e) process control techniques incorporating real-time analysis, fracture modelling and formation understanding utilising techniques such as micro-seismic measurements
 - (f) quantity and quality monitoring of flow back water.
- RD264 Stock purposes has the meaning in Schedule 2 of the *Petroleum and Gas (Production and Safety) Act 2004* and section 86 of the *Petroleum Act 1923*.
- RD265 Strategic environmental area has the meaning in section 11(1) of the *Regional Planning Interests Act 2014*.
- RD267 Structure means dam or levee.
- RD272 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.
- RD273 Suitably qualified third party means a person who:
- (a) has qualifications and experience relevant to performing the function including but not limited to:
 - i. a bachelor's degree in science or engineering; and
 - ii. 3 years' experience in undertaking soil contamination assessments; and
 - (b) is a member of at least one organisation prescribed in Schedule 8 of the *Environmental Protection Regulation 2008*; and
 - (c) not be an employee of, nor have a financial interest or any involvement which would lead to a conflict of interest with the holder(s) of the environmental authority.
- RD276 Synthetic oil-based means for a mud or drilling fluid, the base fluid being a synthetic oil, consisting of chemical compounds which are artificially made or synthesised by chemically modifying petroleum components or other raw materials rather than the whole crude oil.
- RD281 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.
- RD286 Valid complaint means a complaint that is not considered by the administering authority or the holder of the environmental authority to be frivolous, vexatious or based on mistaken belief.
- RD289 Waste and resource management hierarchy is defined in section 9 of the *Waste Reduction and Recycling Act 2011*.
- RD291 Waste and resource management principles is defined in section 4(2)(b) of the *Waste Reduction and Recycling Act 2011*.
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- RD298 Watercourse is defined in Schedule 4 of the *Environmental Protection Act 1994*.
- RD301 Waters refers to 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.
- RD303 Well infrastructure means infrastructure required for the construction, completion and operation of a well including but not limited to cellar pits, dams and drill sumps.
- RD305 Well site means a maximum area of land disturbance for the purposes of constructing, installing and operating an exploration well or such wells as part of a multi-well arrangement and includes well lease infrastructure.
- RD309 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:
- (a) 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
 - (b) the substratum is predominantly undrained soils that are saturated, flooded or ponded long enough to develop anaerobic conditions in the upper layers; or
 - (c) 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:
- (a) H2M1 Riverine or ex-riverine (lacustrine) water bodies associated with dams and weirs located in a channel
 - (b) H2M3p Ponded pastures
 - (c) H2M5 Palustrine/lacustrine water bodies where ecological character has changed due to gross mechanical disturbance (e.g. cropping)
 - (d) H2M6 Palustrine/lacustrine water bodies that have been converted, completely or mostly, to a ring tank or other controlled storage
 - (e) H2M7 Riverine water bodies that have been converted mostly to canals or irrigation channels
 - (f) H3C1 Artificial stand-alone water storages not within a natural water body or channel; or
 - (g) 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.
- RD313 Year(s) is defined in section 36 of the *Acts Interpretation Act 1954*.

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Schedule B – ATP736, ATP737 and ATP738.
Environmentally relevant activity and location details

Environmentally relevant activity/activities	Location(s)
Resource Activity, Non-Scheduled, Petroleum Activity, Authority to Prospect – ATP (Formerly EPPG00516213)	ATP736
Resource Activity, Non-Scheduled, Petroleum Activity, Authority to Prospect - ATP (Formerly EPPG00516113)	ATP737
Resource Activity, Non-Scheduled, Petroleum Activity, Authority to Prospect – ATP (Formerly EPPG0051313)	ATP738

Schedule B – Conditions

Condition Number	Condition
B1	The holder of this environmental authority must ensure that: (a) Petroleum activities do not cause more than 0.1% of the total land area on the relevant petroleum authorities (excluding pipeline licences) that constitute the petroleum project to be significantly disturbed at any one time; (b) Prior to conducting petroleum activity(ies) that involve significant disturbance to land, an assessment must be undertaken of the condition, type and ecological value of any vegetation in such areas where the activity is proposed to take place. The assessment must be submitted to the administering authority at any time upon request; (c) The assessment required by Condition 1 (b) must be undertaken by a suitably qualified person and include the carrying out of field validation surveys, observations and mapping of any category A, B or C Environmentally Sensitive Areas (ESA's) and the presence of species classed as endangered, vulnerable, rare or near threatened under the <i>Nature Conservation Act 1992</i>; and (d) A record of the assessment required by Conditions B1 (b) and B1 (c) must be kept and submitted to the administering authority upon request.
B2	Work program and development plan The holder of this environmental authority must submit to the administering authority: (a) a copy of the initial work program, later work programs and any amendments to work programs when submitted to the Department of Employment, Economic Development and Innovation (DEEDI) under the <i>Petroleum and Gas (Production and Safety) Act 2004</i> (P&G Act) for authorities to prospect; or (b) a copy of the initial development plan, later development plans and any amendments to development plans when submitted to the DEEDI under the P&G Act for petroleum leases.
B3	Financial assurance The holder or proposed holder of this environmental authority must: (a) calculate a financial assurance as required by the administering authority; and (b) attach a completed Schedule of Disturbance to the original and any amended work program or development plan; and (c) provide to the administering authority the financial assurance in the amount and form required by the administering authority at the time of submission of any original, later or amended work program or development plan; and

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	(d) maintain the financial assurance until the administering authority is satisfied that no claim is likely to be made on the assurance.
B4	Category A, B and C Environmentally Sensitive Areas (ESA) The holder of this environmental authority must ensure that petroleum activities: (a) are not conducted in any. Category A, B or C ESA; (b) are not conducted within 200m of any category A, B or C ESAs (protection zone); and (c) do not involve activities other than limited petroleum activities within 1km of a category A ESA, or within 500m of a listed category B or C ESA (buffer zone). <i>Note: Indicative ESA mapping is available on the Department of Environment and Resource Management website at http://www.derm.qld.gov.au/ecoaccess/maps_of_environmentally_sensitive_areas.php</i>
B5	Limited petroleum activities carried out in accordance with Condition B4 (c) must be preferentially located in pre-existing areas of clearing or significant disturbance to the greatest practicable extent.
B6	Despite Condition B4, limited petroleum activities may be undertaken within 200m of, or in the following specified Category C ESAs: (a) 'Of Concern' regional ecosystem (RE); (b) State Forests; (c) Timber Reserves; provided that they do not overlap with any other Category A, B or C ESA or their associated protection zone.
B7	Where limited petroleum activities are proposed to be undertaken within 200m of, or in the Category C ESAs specified in Condition B7, the holder of this environmental authority must: (a) be able to demonstrate that no reasonable or feasible alternative exists; and (b) where the ESA is a State Forest or Timber Reserve: i. obtain written approval from the authority responsible for the administration of the <i>Forestry Act 1959</i>; ii. comply with all restrictions and conditions contained within the approval required under Condition B7, subsection (b)(i); iii. where the conditions of the approval required under Condition B7, subsection (b)(i) conflict with the conditions of this environmental authority, comply with the conditions of this environmental authority; and iv. provide a copy of the written approval required under Condition B7, subsection (b) (i) to the administering authority upon request
B8	Where limited petroleum activities are undertaken within 200m of, or in the Category C ESAs specified in Condition B6, disturbance to land must only be located and carried out in areas according to the following order of preference: (a) pre-existing cleared areas or significantly disturbed areas less than 200m from a Category C ESA; (b) undisturbed areas less than 200m from a Category C ESA; (c) pre-existing areas of significant disturbance within a Category C ESA (e.g. areas where significant clearing or thinning has been undertaken within a RE, and/or areas containing high densities of weed or pest species which has inhibited re-colonisation of native regrowth); (d) areas where clearing of a Category C ESA is unavoidable.
B9	Notwithstanding Condition B6 to B8, where limited petroleum activities are undertaken within 200m of, or in a Category C ESAs specified in Condition B6, any vegetation clearing must not exceed any of the following areas: (a) if the disturbance relates to an 'Of Concern' RE, 5% of the remnant unit of 'Of Concern' RE as ground truthed and mapped before any activity commences as per Condition A1 (b) and A1 of this environmental authority for the life of the project; and

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	(b) more than 30m² for the construction of a sump; or (c) six (6) metres in width for tracks; or (d) twelve (12) metres in width for pipeline construction purposes.
B10	For each well site within 200m of, or in a Category C ESA specified in Condition B6, all reasonable and practical measures must be taken to minimise the area cleared, which must include but not be limited to, for each well site, a risk assessment to determine the minimum amount of disturbance possible.
B11	Details of any significant disturbance to land undertaken within 200m of, or in a Category C ESA specified in Condition B6 must be kept and submitted to the administering authority upon request.
B12	If the assessment required by Conditions B1(b) and B1(c) indicates that an ecosystem mapped as 'Endangered' or 'Of Concern' RE by the Queensland Herbarium should be in a lower conservation value classification and the holder of this environmental authority wishes to undertake activities as if the ecosystem is of the lower conservation value they must notify the administering authority in writing before any significant disturbance to land takes place.
B13	If, within the 20 business days following the lodgement of the notification under Condition B12 the administering authority notifies the holder of this environmental authority, in writing, that the RE mapping requires further validation, then significant disturbance to land in the mapped RE are prohibited until the administering authority provides written advice that significant disturbance to land may proceed.
B14	<i>Disturbance to Land - Offsets</i> When requested by the administering authority the holder of this environmental authority must: (a) enter into an agreement with the administering authority to provide an environmental offset to counterbalance the impacts of the activity on an 'Of Concern' RE. (b) comply with any environmental offset agreement made in accordance with the conditions of this environmental authority.
B15	<i>River Improvement Areas</i> Petroleum Activities must not be carried out in "River Improvement Trust Asset Area" without the written permission of the administering authority.
B16	<i>Heritage places and archaeological artefacts</i> The holder of this environmental authority must take all reasonable and practicable measures to avoid impacting upon places of known or potential cultural heritage significance whilst carrying out petroleum activities.
B17	<i>Wild river areas</i> The holder of this environmental authority must ensure that any petroleum activities carried out within a wild river area comply with the conditions in the relevant wild river declaration for the area that states they are for petroleum activities.
B18	<i>Clearing vegetation</i> The holder of this environmental authority, when carrying out (a) petroleum activity(ies) must avoid, minimise or mitigate (in order of preference) any impacts on areas of vegetation or other areas of ecological value and avoid clearing mature trees. <i>Note: This environmental authority does not authorise the taking of protected animals or the tampering with an animal breeding place as defined under the Nature Conservation Act 1992 and Regulations.</i>
B19	In the carrying out of the petroleum activity the holder of this environmental authority must not clear vegetation or place fill, in or within: (a) 200 metres from any natural significant wetland; (b) 100 metres from any natural wetland, lakes or springs; or (c) 100 metres of the high bank of any other watercourse.
B20	The holder of this environmental authority must not excavate or place fill in a way that interferes with the flow of water in a watercourse, wetland, or spring, including works that divert the course of flow of the water or works that impound the water.

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B21	Despite conditions B19 and B20, pipeline and road construction works may be undertaken in watercourses, wetlands or springs where there is no reasonable and practicable alternative (such as the use of . horizontal directional drilling methods) for a maximum period of 10 days, provided that the works are conducted in accordance with the following order of preference: (a) conducting work in times of no flow; and (b) using all reasonable and practicable measures to reduce impacts in times of flow.
B22	Activities or works resulting in significant disturbance to the bed or banks of a watercourse or wetland, or a spring must: (a) only be undertaken where-necessary for the construction and/or maintenance of roads, tracks and pipelines that are essential for carrying out the authorised petroleum activities and no reasonable or practicable alternative location exists; (b) be no greater than the minimum area necessary for the purpose of the significant disturbance; (c) be designed and undertaken by a suitably qualified person taking into account the matters listed in Section 5 - Planning Activities and Section 6 - Impact Management During Activities of the Department of Environment and Resource Managements "Guideline —Activities in a watercourse, lake or spring associated with mining operations", dated April 2008, or more recent editions as such become available; and (d) upon cessation of the activities or works, commence rehabilitation immediately such that .the final rehabilitation.is to a condition that will ensure the ongoing physical integrity and the natural ecosystem values of the site.
B23	The holder of this environmental authority, must ensure that clearing of remnant vegetation shall not exceed ten (10) metres in width for the purpose of establishing tracks and 20 metres in width for dual carriageway roads unless otherwise approved by the administering authority in writing.
B24	The holder of this environmental authority must not clear vegetation or place fill: (a) in a way which significantly isolates, fragments or dissects tracts of vegetation resulting in a reduction in the current level of ecosystem functioning, ecological connectivity (i.e. stepping stone or contiguous bioregional/local corridor networks) and/or results in an increase in threatening processes (e.g. potential impacts associated with edge effects or introduced species); (b) on dispersible soils or highly erodible soils; (c) on slopes greater than 10% for activities other than pipelines and wells; or d) in discharge areas.
B25	Cleared vegetation must be stockpiled in a manner that facilitates resspreading or salvaging and does not impede vehicle, stock or wildlife movements.
B26	Acid Sulfate Soils The holder of this environmental authority must prepare an acid sulfate soil environmental management plan meeting the content requirements of Appendix 4 of the State Planning Policy 2/02 Guideline Acid Sulfate Soils prior to undertaking any of the following activities in add sulfate soils: (a) any excavation or otherwise removing 100m³ or more of soil or sediment; or (b) filling of land involving 500m³ or more of material with an average depth of 0.5m or greater.
B27	Any acid sulfate soil environmental management plan required by condition B26 must be prepared and implemented by a suitably qualified person.
B28	Any acid sulfate soil environmental management plan required by condition B26 must be prepared and implemented by a suitably qualified person. The holder of this environmental authority must comply with the acid sulphate soil environmental management plan required by condition B26 and B27. <i>Note: Conditions B26 to B28 are only applicable in areas of acid sulfate soils or potential acid sulfate soils.</i>

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B29	Topsoil Management Except in areas of highly erodible soils, topsoil must be: (a) removed from an area prior to other significant disturbance commencing in the area; (b) stockpiled in a manner that will minimise erosion and preserve its biological and chemical integrity; and (c) used only for on-site rehabilitation purposes.
B30	Drilling operations All waste fluids and muds resulting from drilling and exploration activities must be contained in an appropriately constructed dam or containment structure for disposal, remediation or reuse where applicable.
B31	Oil and synthetic based drilling muds are not authorised to be used under this environmental authority.
B32	Pipeline Construction Outside of an ESA, the pipeline construction corridor must not exceed 30 metres in width. Turn arounds and work areas must not exceed 50 metres in width.
B33	During construction, pipe must be strung with gaps to allow for fauna movement across the line of the pipe.
B34	Measures must be employed to prevent fauna entrapment in pipe sections or within the pipeline trench.
B35	Open trenches and pipes must be checked for fauna prior to backfill and any trapped animals removed.
B36	Hydrostatic test water must be contained in dams on site, tested and either: (a) directly reused where appropriate for petroleum activities; (b) treated so that it meets water quality criteria for the intended reuse; or (c) disposed of via evaporation.
B37	The pipeline construction corridor must be rehabilitated on completion of laying the pipe, with the exception of the width of an access track, if necessary, to enable vehicular movement along the corridor for pipeline inspection and maintenance.
B38	Spill response A spill response plan must be developed for all pipelines and other plant or equipment under this environmental authority carrying liquids that have the potential to cause environmental harm. The plan must address the following: (a) monitoring and detection systems; (b) notification and reporting procedures (internal and external); (c) call-out procedures and contact lists; (d) measures required to halt the spill (i.e. control of pumps, valves etc.); (e) spill containment procedures; (f) procedures to safely recover the spilt material; (g) clean up and rehabilitation procedures; (h) requirements for the remediation or disposal of contaminated soil; (i) personnel responsibilities; (j) equipment requirements, location, storage, maintenance and transport (k) communications and logistics; and (l) incident investigation procedures.
B39	Workforce training must be conducted in spill response and recovery procedures within one month of an employee commencing on the job and annually thereafter and records of this training must be kept and submitted to the administering authority upon request
B40	Contaminant release Workforce training must be conducted in spill response and recovery procedures within one month of an employee commencing on the job and annually thereafter and records of this training must be kept and submitted to the administering authority upon request

Environmental authority

B41	As soon as the holder of this environmental authority becomes aware of any release not in accordance with this environmental authority, the release must be stopped, promptly rectified using appropriate equipment and remediation methods and all reasonable actions must be taken to prevent a recurrence of the release. The holder of the environmental authority must report in writing to the administering authority any findings and actions taken within 20 business days of the release
B42	Bundling Any container such as a tank or drum that contains material that has the potential to cause material or serious environmental harm if released to the environment must be appropriately labelled and be contained in a bunded area. Volumes of liquid less than 1000L may be stored without bunding if: (a) recovery of any spilt material is possible; (b) containers or drums are stored undercover on an impervious base; (c) the storage is occurring at least 50m from any waters; and (d) absorbent material is readily available for clean up if necessary. Individual drums may be temporarily stored on spill containment pallets.
B43	The net capacity of a bunded compound in a storage facility must be at least 110% of a single storage tank or 100% of the largest storage tank plus 10% of the second largest storage tank in multiple storage areas.
B44	If an automatic fire sprinkler system is installed in or over any bunded tank or drum storage compound, the capacity of the on-site containment must be increased to include the output from the sprinkler system over a 20 minute period.
B45	If the material to be bunded is contained in drums (or other small containers) the bunded area must contain at least 25% of the total volume of the stored product.
B46	The bund floor and wall must be built of materials impervious to the contents of any tank or container within the bund and be capable of preventing the migration of any spillage or leakage outside the bund wall to the environment.
B47	Wall type bunds at tank storage facilities must be at least 0.5 metres high and not exceed 1.5 metres high. The distance between a tank and the bund wall must be at least 1 metre.
B48	A collection sump must be provided in the bund floor and the floor must be graded in such a way that liquids collect in the sump. The sump must not be connected to a sewer drainage system or any waters.
B49	The bund must be designed to minimise rainwater collection. Removal of accumulated rainwater must be done with a manually operated pump, baling from the sump or via a locked valve. Rainwater from the bund must meet water quality criteria for the intended use or receiving environment prior to release.
B50	All pipework must be sited above ground and go over the bund walls where possible. Pumps must still be able to operate when the bund is full of liquid.
B51	Piping and pumping facilities must be arranged so that the potential for, leaks to escape the confines of the bund is minimised.
B52	Flammable and combustible liquids Flammable and combustible liquids, including petroleum products, must be stored and handled in accordance with the latest edition of Australian Standard 1940 — The storage and handling of flammable and combustible liquids.
B53	The holder of this environmental authority must: (a) telephone DERM's Pollution Hotline (1300 130 372) and affected landholders or their nominated representatives as soon as practicable, but within 24 hours, after becoming aware of any release of contaminants not in accordance with the conditions of this environmental authority or any event where environmental harm has been caused or threatened; and (b) notify the administering authority in writing within 14 days of the initial.
B54	Erosion and Sediment Control Erosion protection and sediment control measures must be designed, implemented and maintained to minimise erosion and the release of sediment resulting from carrying out the petroleum activities.

Environmental authority

B55	Sediment control measures must be implemented to minimise any increase in water turbidity due to carrying out petroleum activities in the bed or banks of a watercourse or wetland or in a spring.
B56	Routine visual monitoring must be undertaken while carrying out petroleum activities in a watercourse, wetland or spring. If, due to the petroleum activities, water turbidity increases in the watercourse, wetland or spring outside contained areas, works must cease and the sediment control measures must be rectified before activities recommence.
B57	Management of dams Only low hazard dams are authorised under this environmental authority.
B58	All dams must be designed, constructed, operated and maintained in accordance with accepted engineering standards currently appropriate for the purpose for which they are intended.
B59	The hazard category of each dam must be determined by a suitably qualified and experienced person prior to its construction and at least once per year, based on documented evidence sufficient to define or confirm the current nature and, extent of environmental consequences from potential failure of that dam.
B60	Where the hazard category of a dam is for the first time assessed as significant or high, the holder of this environmental authority must: (a) as soon as reasonably possible, advise the administering authority of the current details of that dam, including: i. the assessed hazard category of that dam, ii. sufficient points of latitude and longitude in the current Australian geodetic datum to form a perimeter around that dam and its associated works, iii. the maximum surface area, maximum volume, maximum depth of that dam; and (b) apply to amend this environmental authority to a level 1 environmental authority; and ' (c) ensure that the dam meets the hydraulic performance required of the assessed hazard category within 12 months of that assessment.
B61	The condition of all dams must be monitored for early signs of loss of structural or hydraulic integrity, based on the advice of a suitably qualified and experienced person. The methods of monitoring and frequency of monitoring shall be as assessed by the person who conducts the hazard assessment based on the particular circumstances of each dam.
B62	In the event of early signs of loss of structural or hydraulic integrity, the holder of this environmental authority must immediately take action to prevent or minimise any actual or potential environmental harm, and report in writing any findings and actions taken to the administering authority within 20 business days of that event.
B63	Decommissioning dams Each dam must be decommissioned such that it either: (a) becomes a stable landform that no longer contains flowable substances; or (b) is approved or authorised under relevant legislation for a beneficial use; or (c) becomes a void authorised by the administering authority to remain after decommissioning, or (d) is compliant with the rehabilitation requirements of the authority; and (e) is agreed by the post petroleum authority landowner/holder to remain after surrender of the environmental authority and meets water quality criteria for the intended use.
B64	Access to dams Any dam constructed as part of the petroleum activities must be managed so that either: (a) where the quality of the water is likely to result in adverse health affects if contacted or consumed, adequate barriers are provided to limit access to the water by humans, livestock and native fauna; or (b) where the quality of the water will not result in any adverse health affects if contacted or consumed, safe access to the water is provided for livestock and native fauna
B65	CSG water

Environmental authority

	CSG water may be temporarily contained in a dam or other containment vessel on site prior to: (a) reuse on site for petroleum activities; or (b) use under the provisions of the <i>Petroleum and Gas (Production and Safety) Act 2004</i>; or (c) use for an approved beneficial use; or (d) removal from the site for treatment or disposal at an appropriately authorised facility.																																																																																		
B66	If the use of CSG water for a purpose other than a petroleum activity has been authorised by grant of a Notice of decision to approve a resource for beneficial use under Part 6A of the <i>Environmental Protection (Waste Management) Regulation 2000</i> it can be used in accordance with the Notice for the stated type of use(s).																																																																																		
B67	Release of contaminants to the atmosphere The release of noxious or offensive odour, dust, particulate matter or any other airborne contaminant resulting from the petroleum activities must not cause environmental nuisance at any sensitive place or commercial place.																																																																																		
B68	If the holder of this environmental authority receives a complaint as defined in Condition B79 about noise from the petroleum activities at a sensitive place or commercial place, the holder of this environmental authority must conduct an appropriate investigation and must implement remedial action if the noise from the petroleum activities exceeds the noise limits at the sensitive place or, commercial place in Table 1 —Noise Limits. Table 1 – Noise limits <table><tr><th colspan="7">Sensitive Place</th></tr><tr><th rowspan="2">Noise level dB(A) measured as:</th><th colspan="3">Monday to Saturday</th><th colspan="3">Sundays and public holidays</th></tr><tr><th>7am to 6pm</th><th>6pm to 10pm</th><th>10pm to 7am</th><th>9am to 8pm</th><th>6pm to 10pm</th><th>10pm to 9am</th></tr><tr><td>LA90, adj, 15 mins</td><td>Lesser of bg+3 or 48</td><td>bg+0</td><td>bg+0</td><td>bg+0</td><td>bg+0</td><td>bg+0</td></tr><tr><td>LA10, adj, 15 mins</td><td>Lesser of bg+5 or 50</td><td>Lesser of bg+5 or 45</td><td>bg+0</td><td>Lesser of bg+5 or 45</td><td>Lesser of bg+5 or 40</td><td>bg+0</td></tr><tr><td>LA1, adj, 15 mins</td><td>Lesser of bg+10 or 55</td><td>Lesser of bg+10 or 50</td><td>Lesser of bg+5 or 45</td><td>Lesser of bg+10 or 50</td><td>Lesser of bg+10 or 45</td><td>Lesser of bg+5 or 40</td></tr></table> <table><tr><th colspan="7">Commercial place</th></tr><tr><th rowspan="2">Noise level dB(A) measured as:</th><th colspan="3">Monday to Saturday</th><th colspan="3">Sundays and public holidays</th></tr><tr><th>7am to 6pm</th><th>6pm to 10pm</th><th>10pm to 7am</th><th>9am to 8pm</th><th>6pm to 10pm</th><th>10pm to 9am</th></tr><tr><td>LA90, adj, 15 mins</td><td>Lesser of bg+5 or 50</td><td>bg+0</td><td>bg+0</td><td>Lesser of bg+3 or 48</td><td>bg+0</td><td>bg+0</td></tr><tr><td>LA10, adj, 15 mins</td><td>Lesser of bg+10 or 55</td><td>Lesser of bg+10 or 50</td><td>Lesser of bg+5 or 45</td><td>Lesser of bg+10 or 50</td><td>Lesser of bg+10 or 45</td><td>Lesser of bg+5 or 40</td></tr><tr><td>LA1, adj, 15 mins</td><td>Lesser of bg+15 or 60</td><td>Lesser of bg+15 or 55</td><td>Lesser of bg+10 or 50</td><td>Lesser of bg+15 or 55</td><td>Lesser of bg+15 or 50</td><td>Lesser of bg+10 or 45</td></tr></table> • bg = background noise level	Sensitive Place							Noise level dB(A) measured as:	Monday to Saturday			Sundays and public holidays			7am to 6pm	6pm to 10pm	10pm to 7am	9am to 8pm	6pm to 10pm	10pm to 9am	LA90, adj, 15 mins	Lesser of bg+3 or 48	bg+0	bg+0	bg+0	bg+0	bg+0	LA10, adj, 15 mins	Lesser of bg+5 or 50	Lesser of bg+5 or 45	bg+0	Lesser of bg+5 or 45	Lesser of bg+5 or 40	bg+0	LA1, adj, 15 mins	Lesser of bg+10 or 55	Lesser of bg+10 or 50	Lesser of bg+5 or 45	Lesser of bg+10 or 50	Lesser of bg+10 or 45	Lesser of bg+5 or 40	Commercial place							Noise level dB(A) measured as:	Monday to Saturday			Sundays and public holidays			7am to 6pm	6pm to 10pm	10pm to 7am	9am to 8pm	6pm to 10pm	10pm to 9am	LA90, adj, 15 mins	Lesser of bg+5 or 50	bg+0	bg+0	Lesser of bg+3 or 48	bg+0	bg+0	LA10, adj, 15 mins	Lesser of bg+10 or 55	Lesser of bg+10 or 50	Lesser of bg+5 or 45	Lesser of bg+10 or 50	Lesser of bg+10 or 45	Lesser of bg+5 or 40	LA1, adj, 15 mins	Lesser of bg+15 or 60	Lesser of bg+15 or 55	Lesser of bg+10 or 50	Lesser of bg+15 or 55	Lesser of bg+15 or 50	Lesser of bg+10 or 45
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Environmental authority

	- In the event that measured bg is less than 25 dB(A), then 25 dB(A) is to be substituted for the measured level. - If the background is higher than the number shown on the second line in any box, the limit is to be background plus 0.
B69	The method of measurement and reporting of noise levels must comply with the latest edition of the Department of Environment and Resource Management's (Environmental Protection Agency's) Noise Measurement Manual or the most recent version of AS1055 Acoustics — Description and measurement of environmental noise.
B70	General waste management Where practicable, general waste generated in carrying out the petroleum activities must be reused, recycled or removed to a facility that can lawfully accept the waste under the <i>Environmental Protection Act 1994</i> .
B71	If no viable alternative exists, solid general waste may be disposed of on site at a facility designed to receive waste at a rate of less than 50t per year only if it is: - disposed of into a waste disposal trench; - consolidated, compacted and covered with a layer of inert material following placement of the waste into the trench; - managed in a way that prevents scavenging and access by vermin; - managed in a way that prevents or contains wind blown litter; and - managed in a way that prevents or controls leachate generated from the activity.
B72	Waste, including vegetation, must not be burnt.
B73	Regulated waste Regulated waste must be removed and transported from the site by a person who holds a current authority to transport such wastes to a facility that is lawfully able to accept the waste under the <i>Environmental Protection Act 1994</i> .
B74	Regulated Waste generated in carrying out the petroleum activities can be temporarily stored on site awaiting removal provided: - it is stored in a place and circumstance in which there is minimal risk of causing contamination to land or waters or a fire hazard; and - each container of regulated Waste stored awaiting movement off site is clearly marked to identify the contents.
B75	A record of all regulated waste (excluding trackable waste) must be kept detailing the following information: - date of pickup of waste; - description of waste; - quantity of waste; - origin of waste; and - destination of waste
B76	Sewage Disposal of sewage effluent must not cause environmental nuisance or material or serious environmental harm.
B77	Sewage treatment works on the site must not exceed a combined peak design capacity to treat sewage of more than 21 equivalent persons.
B78	Monitoring The holder of this environmental authority must: - develop a monitoring program that will demonstrate compliance with the conditions of the environmental authority; - document monitoring and inspections carried out under the monitoring program -and any actions taken; and - record, compile and keep for a minimum of seven (7) years all monitoring results and data.
B79	Complaints

Environmental authority

	The holder of this environmental authority must: (a) when the administering authority advises the holder of a complaint that the administering authority does not consider to be frivolous, vexatious or based on a mistaken belief alleging nuisance (e.g. caused by dust or noise), investigate the complaint and advise the administering authority of the action proposed or undertaken in relation to the complaint; (b) if the administering authority is not satisfied with the proposed or completed action, undertake monitoring or other action requested by the administering authority; and (c) maintain a record of complaints and incidents causing environmental harm and actions taken in response to the complaints or incidents for a minimum of seven (7) years.
B80	Rehabilitation As soon as practicable after the end of petroleum activities, that have caused significant disturbance to, land, the holder of this environmental authority must: (a) remediate contaminated land caused by petroleum activities in accordance with EP Act requirements and this authority; and (b) undertake works to establish a safe, stable, non-polluting landform similar to that of surrounding undisturbed areas, including where relevant: i. backfilling any voids and trenches; ii. neutralising and /or encapsulating any acid producing or potentially acid producing material; iii. removing or encapsulating in low permeability material saline residues from evaporation ponds; iv. re-establishing surface drainage lines; v. minimising the potential for slumping, subsidence or erosion; vi. reinstating the top layer of the soil profile; vii. respreading any cleared vegetation; and viii. promoting establishment of vegetation of similar species composition and density of cover to the surrounding undisturbed land; unless the holder of this environmental authority has the written consent of the landowner/holder and the administering authority.
B81	Maintenance of land rehabilitation Monitoring and maintenance of rehabilitated areas must take place to ensure and demonstrate: (a) the stability of landforms; (b) that erosion control measures remain effective; (c) that stormwater runoff and seepage from rehabilitated areas does not negatively affect the environmental values of any waters; (d) that plants show healthy growth and recruitment is occurring; and (e) that rehabilitated areas are free of any declared pest plants
B82	Rehabilitation success Rehabilitation can be considered successful when the site can be managed for its designated land use (either similar to that of surrounding undisturbed areas or as otherwise agreed in a written document with the landowner/holder and the administering authority) without any greater management input than for other land in the area being used for a similar purpose and there is evidence that the rehabilitation has been successful for at least three (3) years.
B83	Decommissioning pipelines The holder of this environmental authority must decommission inactive buried pipelines by in-situ decommissioning (abandonment in place).
B84	Prior to pipelines and equipment being disconnected they must be drained or vented and cleaned via purging or flushing.
B85	Any water used for purging or flushing the pipelines must be contained in dams on site, tested and either: (a) directly reused where suitable for petroleum activities;

Environmental authority

	(b) treated so that it meets water quality criteria for the intended reuse; or (c) removed from the site for disposal or treatment at-an appropriately authorised facility; or (d) disposed of via evaporation in a suitably lined pond.
B86	Infrastructure All above ground infrastructure used for the petroleum activities must be removed prior to surrender of this environmental authority, except where it is to remain under a resource authority pursuant to <i>Petroleum and Gas (Production and Safety) Act 2004</i>, or with the written agreement of the administering authority and the post petroleum authority landowner/holder.
B87	Transition of petroleum activity The holder of this environmental authority must take responsibility for the rehabilitation of any disturbance to land undertaken as part of a petroleum activity on a petroleum authority that has been transitioned (all or in part) due to the grant of a new resource authority over that land Which now forms part of the current project.
B88	Environmental Management Plan The holder of this environmental authority must develop an Environmental Management Plan to manage environmental impacts caused by the undertaking of petroleum activities and limited petroleum activities authorised under this environmental authority prior to the commencement of the relevant petroleum activities and limited petroleum activities. The holder of this environmental authority must comply with the relevant control strategies and standards detailed in the Environmental Management Plan. To the extent of any inconsistency between the conditions of this environmental authority and the Environmental 'Management Plan, the conditions of this environmental authority prevail.
B89	The holder of this environmental authority must ensure that records containing construction dates of existing and future petroleum infrastructure are available to the administering authority upon request.

END OF CONDITIONS

Part 2 - Appendix A**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 *Petroleum and Gas (Production and Safety) Act 2004* and its regulations must be used in that order.

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 soils means soil or sediment containing highly acidic soil horizons or layers affected by the oxidation of iron sulfides (actual acid sulfate soils) and/or soil or sediment containing iron sulfides or other sulfidic material that has not been exposed to air and oxidised (potential acid sulfate soils).

Note: The term acid sulfate soil generally includes both actual and potential acid sulfate soils. Actual and potential acid sulfate soils are often found in the same soil profile, with actual acid sulfate soils generally overlying potential acid sulfate soil horizons.

Administering authority means:

- 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— the local government; or
- b) for all other matters — the Chief Executive of the Department of Environment and Resource Management; or
- c) another State Government Department, Authority, Storage Operator, Board or Trust, whose role is to administer provisions under other enacted legislation.

Appropriately qualified person means a person who has professional qualifications, training, skills or 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.

Archaeological artefact means:

- a) any artefact that is evidence of an aspect of Queensland's history, whether it is located in, on or below the surface of land, and not
- b) a thing that is Aboriginal cultural heritage under the *Aboriginal Cultural Heritage Act 2003* or Torres Strait Islander cultural heritage under the *Torres Strait Islander Cultural Heritage Act 2003*.

Archaeological investigation means a physical investigation of the place carried out by a person or persons with recognised qualifications, experience or standing in historical archaeology, mining history, cultural heritage management, or related discipline for the purpose of investigating, recording or conserving archaeological artefacts on the place.

Archaeological place means a place entered in the Queensland heritage register under Part 5 of the *Queensland Heritage Act 1992*.

Assessed or assess by a suitably qualified and experienced person in relation to a hazard assessment of a dam means that a statutory declaration has been made by that person and, when taken together

with any attached or appended documents referenced in that declaration, all of the following aspects are addressed and are sufficient to allow an independent audit at any time:

- (a) what has been assessed and the precise nature of that assessment;
- (b) the relevant legislative, regulatory and technical criteria on which the assessment has been based;
- (c) the relevant data and facts on which the assessment has been based, the source of that material, and the efforts made to obtain all relevant data and facts; and
- (d) the reasoning on which the assessment has been based using the relevant data and facts, and the relevant criteria.

Associated works in relation to a dam means:

- a) operations of any kind and all things constructed, erected or installed for that dam; and
- b) any land used for those operations.

Background noise level means the sound pressure level, measured in the absence of the noise under investigation, as the $L_{A90,T}$ being the A-weighted sound pressure level exceeded for 90 percent of the measurement time period T of not less than 15 minutes, using Fast response.

Bed and banks for a watercourse or wetland means land over which the water of the watercourse or wetland normally flows or that is normally covered by the water, whether permanently or intermittently; but does not include land adjoining or adjacent to the bed or banks that is from time to time covered by floodwater.

Beneficial use means:

- (a) with respect to dams, that the current or proposed owner of the land on which a dam stands, has found a use for that dam that is:
 - i. of benefit to that owner in that it adds real value to their business or to the general community,
 - ii. in accordance with relevant provisions of the Environmental Protection Act 1994,
 - iii. sustainable by virtue of written undertakings given by that owner to maintain that dam, and
 - iv. the transfer and use have been approved or authorised under any relevant legislation; or
- (b) with respect to associated-water, see DERM's Coal Seam Gas Water Management Policy and Notice of decision to approve a resource for beneficial use — associated water which can be accessed on Department of Environment and Resource Managements website at www.derm.qld.gov.au

Bund or banded in relation to spill containment systems for fabricated or manufactured tanks or containers designed to a recognised standard means an embankment or wall of brick, stone, concrete or other impervious material which may form part or all of the perimeter of a compound and provides a barrier to retain liquid. Since the bund is the main part of a spill containment system, the whole system (or banded area) is sometimes colloquially referred to within industry as the bund. The bund is designed to contain spillages and leaks from liquids used, stored or processed above ground and to facilitate clean-up operations. As well as being used to prevent pollution of the receiving environment, bunds are also used for fire protection, product recovery and process isolation.

Certification or certified by a suitably qualified and experienced person in relation to a design plan or an annual report regarding dams, means that a statutory declaration has been made by that person and, when taken together with any attached or appended documents referenced in that declaration, all of the following aspects are addressed and are sufficient to allow an independent audit at any time:

- (a) exactly what is being certified and the precise nature of that certification;
- (b) the relevant legislative, regulatory and technical criteria on which the certification has been based;

- (c) the relevant data and facts on which the certification has been based, the source of that material, and the efforts made to obtain all relevant data and facts; and
- (d) the reasoning on which the certification has been based using the relevant data and facts, and the relevant criteria.

Clearing means:

- (a) in relation to grass, scrub or bush - the removal of vegetation by disturbing root systems and exposing underlying soil (including burning), but does not include—
 - i. the flattening or compaction of-vegetation by vehicles if the vegetation remains living; or
 - ii. the slashing or mowing of vegetation to facilitate access tracks; or
 - iii. the clearing of noxious or introduced plant species; and
- (b) in relation to trees - cutting down, ringbarking, pushing over, poisoning or destroying in any way.

Commercial place means 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.

Construction in relation to a dam includes building a new dam and modifying or lifting an existing darn.

CSG water means groundwater that is necessarily or unavoidably brought to the surface in the process of coal sewn gas exploration or production. CSG water typically contains significant concentrations of salts, has a high sodium adsorption ratio (SAR) and may contain other contaminants that have the potential to cause environmental harm released to land or waters through inappropriate management. CSG water is a waste, as defined under section 13 of the *Environmental Protection Act 1994*.

Cultural heritage significance means aesthetic, architectural, historical, scientific, social or other significance, to the present generation or past or future generations, as assessed against the following criteria:

- (a) the place is important in demonstrating the evolution or pattern of Queensland's history;
- (b) the place demonstrates rare, uncommon or endangered aspects of Queensland's cultural heritage;
- (c) the place has potential to yield information that will contribute to an understanding of
 - a. Queensland's history;
- (d) the place is important in demonstrating the principal characteristics of a particular class of cultural places;
- (e) the place is important because of its aesthetic significance;
- (f) the place is important in demonstrating a high degree of creative or technical achievement at a particular period;
- (g) the place has a strong or special association with a particular community or cultural group for social, cultural or spiritual reasons;
- (h) the place has a special association with the life or work of a particular person, group or organisation of importance in Queensland's history

Dam means a land-based structure (including a levee, dyke or bund) or a void that is intended or used to contain, divert or control flowable substances, and includes any substances that are thereby contained or controlled by that land-based structure or void and associated works. However; a dam *does not* mean a fabricated or manufactured tank or container designed to a recognised standard, nor

does a dam mean a land-based structure where that structure is designed to an Australian Standard such as a bund designed for spill containment to AS1940.

Declared pest plants are listed in Schedule 2 of the *Land Protection (Pest and Stock Route Management) Regulation 2003*.

DERM means Queensland Department of Environment and Resource Management.

Design plan is the documentation required to describe the physical dimensions of the dam, the materials and standards to be used for construction of the dam, and the criteria to be used for operating the dam. The documents must include design and investigation reports, specifications and certifications, together with the planned decommissioning and rehabilitation works and outcomes. A design plan may include 'as constructed' drawings.

Discharge area is an area in the landscape where the net movement of groundwater is out of the aquifer. This may be expressed by waterlogging where groundwater discharges at the soil surface because of seepage or salting because of evaporation.

Dispersible soils are structurally unstable soils that readily break down into their constituent particles in water (e.g. the clay material disintegrates into particles less-than 2 microns across within 24 hours when soil crumbs are submerged in distilled water). These soils are also known as sodic soils and have a high percentage of sodium ions (in soluble or exchangeable form).

Ecosystem functioning means the interactions between and within living and non-living components of an ecosystem and generally correlates with the size, shape and location of an area of vegetation.

End means the stopping of the particular activity that has caused a significant disturbance in a particular area. It refers to, among other things, the end of a seismic survey or the end of a drilling operation. It does not refer to the end of all related activities-such as rehabilitation. In other words, it does not refer to the 'completion' of the petroleum activity; the time at which the petroleum authority ends or the time that the land in question ceases-to be part of an authority.

Equivalent person means an equivalent person as defined in item 63 of Schedule 2 in the *Environmental Protection Regulation 2008*.

Evaporation pond means a dam specifically designed for the purpose of disposing of a liquid via evaporation.

Fill means any kind of material in solid form. (whether or not naturally occurring) capable of being deposited at a place but does not include material that forms a part of, or is associated with, a structure constructed in a watercourse, wetland or spring including a bridge, road, causeway, pipeline, rock revetment, drain outlet works, erosion prevention structure or fence.

Financial assurance means a security deposit, either cash or a bank guarantee, held by the administering authority to cover the potential costs of preventing or minimising environmental harm from, or rehabilitating areas significantly disturbed by, the petroleum activities.

Flowable substance means matter or a mixture of materials which can flow under conditions potentially affecting that substance. Constituents of a flowable substance can include water, other fluids or solids, or a mixture that includes water and any other fluids or solids either in solution or suspension.

Foreseeable future is the period used for assessing the total probability of an event occurring. Permanent structures and ecological sustainability should be expected to still exist at the end of a 150 year foreseeable future with an acceptably low probability of failure before that time.

Hazard in relation to a dam as defined means the potential for environmental harm resulting from the collapse or failure of the dam to perform its primary purpose of containing, diverting or controlling flowable substances.

Hazard category means the level of hazard (low, significant or high) assigned to a dam as a result of an assessment against tables and other criteria in the latest version of the Manual for Assessing Hazard Categories and Hydraulic Performance of Dams published by DERM.

Heritage place means any place that may be of cultural heritage significance, or any place with potential to contain archaeological artefacts that are an important source of information about Queensland's history.

High bank means the defining terrace or bank or, if no bank is present, the point on the active floodplain, which confines the average-annual peak flows in a watercourse.

Highly erodible soils means very unstable soils that are generally described as Sodosols with hard-setting, fine sandy barn to silty clay loam surfaces (solodics, solodised solonetz and solonetz) or soils with a dispersible layer located less than 25cm deep or soils less than 25cm deep.

Hydraulic performance means the capacity of a regulated dam to contain or safely pass flowable substances based on a probability (AEP) of performance failure specified for the relevant hazard category in the Manual for Assessing Hazard Categories and Hydraulic Performance of Dams' (Version 1.0, 2008) published on DERM's website under www.derm.qld.gov.au

Infrastructure means water storage dams, roads and tracks, equipment, buildings and other structures built for the purpose and duration of the conduct of the petroleum activities, but does not include other facilities required for the long-term management of the impact of those activities or the protection of potential resources. Such other facilities include dams other than water storage dams (e.g. evaporation ponds), pipelines and assets that have been decommissioned, rehabilitated and lawfully recognised as being subject to subsequent transfer with ownership of the land.

L_{A90,adj, 15 mins} means the A-weighted sound pressure level exceeded for 90 percent of the measurement time period of 15 minutes, adjusted for noise characteristics including tonality and impulsiveness and measured in the presence of the noise under investigation, using Fast Response.

L_{A10, adj, 15 mins} means the A-weighted sound pressure level exceeded for 10 percent of the measurement time period of 15 minutes, adjusted for noise character including tonality and impulsiveness and measured in the presence of the noise under investigation, using Fast Response.

L_{A1, adj, 15 mins} means the A-weighted sound pressure level exceeded for 1 percent of the measurement time period of 15 minutes, adjusted for noise character including tonality and impulsiveness and measured in the presence of the noise under investigation, using Fast Response.

Level 1 environmental authority means an environmental authority (chapter 5A activities) for a level 1 chapter 5A activity pursuant to section 23 of the Environmental Protection Regulation 2008.

Leachate means a liquid that contains soluble, suspended or miscible contaminants likely to have been derived from material which is stored, processed or disposed of on site and which the liquid has passed through or emerged from, or is likely to have passed through or emerged from.

Levee means a dyke or bund that is designed only to provide for the containment and diversion of stormwater or flood flows from a contributing catchment, or containment and diversion of flowable materials resulting from unplanned releases from other works of infrastructure, during the progress of those stormwater or flood flows or those unplanned releases; and does not store any significant volume of water or flowable substances at any other times.

Limited petroleum activities mean activities including geophysical surveys (including seismic activities), well sites, well pads, sumps, flare pits, flow lines and supporting access tracks. Limited petroleum activities do not include the construction of production infrastructure for processing or storing petroleum or by-products, dams, compressor stations, campsites/workforce accommodation, power supplies, waste disposal or other supporting infrastructure for the project.

Limited regulated waste means any of the following regulated wastes, asbestos, clinical waste or quarantine waste that has been rendered non-infectious, fish processing waste, food processing waste, poultry processing waste, tyres or treatment tank sludge or residue produced in the carrying out of an activity in relation to sewage treatment and water supply activities.

Noxious means harmful or injurious to health or physical well being.

'Of concern' regional ecosystem means an 'of concern' regional ecosystem identified in the database maintained by the Department of Environment and Resource Management called 'Regional ecosystem description database' containing regional ecosystem numbers and descriptions. The database is available for inspection on the Department of Environment and Resource Management's website at www.epa.qld.gov.au/nature_conservation/biodiversity/regional_ecosystems/

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

Overland flow water means water, including floodwater, flowing over land, other than in a watercourse or lake:

- (a) after having fallen as rain or in any other way; or
- (b) after rising to the surface naturally from underground.

Permanent infrastructure includes any infrastructure (roads, tracks, bridges, culverts, dams, bores, buildings, fixed machinery, hardstand areas, airstrips, helipads, pipelines etc) which is to be left by agreement with the landowner.

Petroleum authority is:

- (a) a 1923 Act petroleum tenure granted under the *Petroleum Act 1923*; or
- (b) a resource authority granted under the *Petroleum and Gas (Production and Safety) Act 2004*; or
- (c) a licence, permit, pipeline licence, primary licence, secondary licence or special prospecting authority granted under the *Petroleum (Submerged Lands) Act 1982*.

Regulated dam means any dam in the significant or high hazard category as assessed using the *Manual for Assessing Hazard Categories and Hydraulic Performance of Dams (Version 1.0, 2008)* published by DERM on its website under www.derm.qld.gov.au.

Regulated waste means non-domestic waste mentioned in Schedule 7 of the *Environmental Protection Regulation 2008* (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.

Release of a contaminant into the environment includes:

- (a) to deposit, discharge, emit or disturb the contaminant; and
- (b) to cause or allow the contaminant to be deposited, discharged, emitted or disturbed; and
- (c) to allow the contaminant to escape; and
- (d) to fail to prevent the contaminant from escaping.

River Improvement Trust Asset Area means an area within a River Improvement Area declared under the *River Improvement Trust Act 1940* that is or has been subject to restoration or flood mitigation works. The locations and details of these areas can be obtained from the relevant River Improvement Trust.

Sensitive place means:

- (a) a dwelling (including residential allotment, mobile home or caravan park, residential marina or other residential premises, motel, hotel or hostel;
- (b) a library, childcare centre, kindergarten, school, university or other educational institution;
- (c) a medical centre, surgery or hospital;
- (d) a protected area;
- (e) 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.

Significantly disturbed land or significant disturbance to land means land that is:

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

Examples of a significant disturbance to land:

- (a) areas where soil has been compacted, removed, covered, exposed or stockpiled;
- (b) areas where vegetation has been removed or destroyed to an extent where the land has been made susceptible to erosion;
- (c) areas where land use suitability or capability has been diminished;
- (d) areas within a watercourse, wetland, or spring where petroleum activities have occurred causing the loss of habitat or a decline in ecological processes and requiring human intervention to restore or stabilise the disturbed area and/or protect the quality of the water downstream of the disturbance;
- (e) areas submerged by waste or water;
- (f) 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 petroleum activities have ceased; or
- (g) areas where land has become contaminated land and a suitability statement has not been issued.

However, for the purpose of this environmental authority the following areas are not significantly disturbed:

- (a) areas off the petroleum authority (e.g. roads or tracks which provide access to the petroleum authority);
- (b) areas previously significantly disturbed which have been rehabilitated to the administering authority's satisfaction;
- (c) areas under permanent infrastructure (e.g. roads, bridges, buildings) as agreed by the administering authority and landholder;
- (d) areas that were significantly disturbed prior to the grant of the petroleum authority, unless those areas are re-disturbed by the petroleum authority holder during the course of carrying out the petroleum activities or were conducted on a petroleum authority that was replaced by the current authority (e.g. through conditional surrender or the transition from an authority to prospect to a petroleum lease).

Site means the area within the petroleum authority or authorities to which this environmental authority relates.

Spring means the land to which water rises naturally from below the ground and the land over which the water then flows.

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.

State heritage place means a place entered in the Queensland heritage register under Part 4 of the *Queensland Heritage Act 1992*.

Suitably qualified and experienced person in relation to dams means a person who is a Registered Professional Engineer of Queensland (RPEQ) under the provisions of the Professional Engineers Act 2002, or at the relevant time holds a 'deemed registration' within the meaning of the *Mutual Recognition (Queensland) Act 1992*; and has knowledge, suitable experience and demonstrated expertise in relevant fields, as set out below:

- (a) knowledge of engineering principles related to the structures, geomechanics, hydrology, hydraulics, chemistry and environmental impact of dams; and
- (b) a total of five years of suitable experience and demonstrated expertise in the geomechanics of dams with particular emphasis on stability, geology and geochemistry, and
- (c) a total of five years of suitable experience and demonstrated expertise each, in three of the following categories:
 - investigation and design of dams.
 - Construction, operation and maintenance of dams.
 - hydrology with particular reference to flooding, estimation of extreme storms, water management or meteorology.
 - hydraulics with particular reference to sediment transport and deposition, erosion control, beach processes.
 - hydrogeology with particular reference to seepage, groundwater.
 - solute transport processes and monitoring thereof.
 - dam safety.

Suitably qualified person means a person who has professional qualifications, training, skills or 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.

Thing means a material object without life or consciousness or some entity, object or creature which is not or cannot be specifically designated or precisely described.

Threatening processes are processes, features and actions that can have a detrimental effect upon the health and viability of an area of vegetation. For example, altered hydrology, land use practices, invasion by pest and weed species, land degradation, edge effects and fragmentation.

Tolerable limits means a range of parameters regarded as being sufficient to meet the objective of protecting relevant environmental values. For example, a range of settlement for a tailings capping, rather than a single value, could still meet the objective of draining the cap quickly, preventing pondage and limiting infiltration and percolation.

Topsoil 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.

Void means any man-made, open excavation in the ground (includes borrow pits, drill sumps, frac pits, flare pits, cavitation pits and trenches).

Waters includes all or any part of a creek, river, stream, lake, lagoon, pond, swamp, wetland, spring, unconfined surface water, unconfined water in natural or artificial watercourses, bed and bank of any waters, dams, non-tidal or tidal waters (including the sea), stormwater channel, stormwater drain, roadside gutter, stormwater run-off, and underground water.

Watercourse is a creek, river or stream

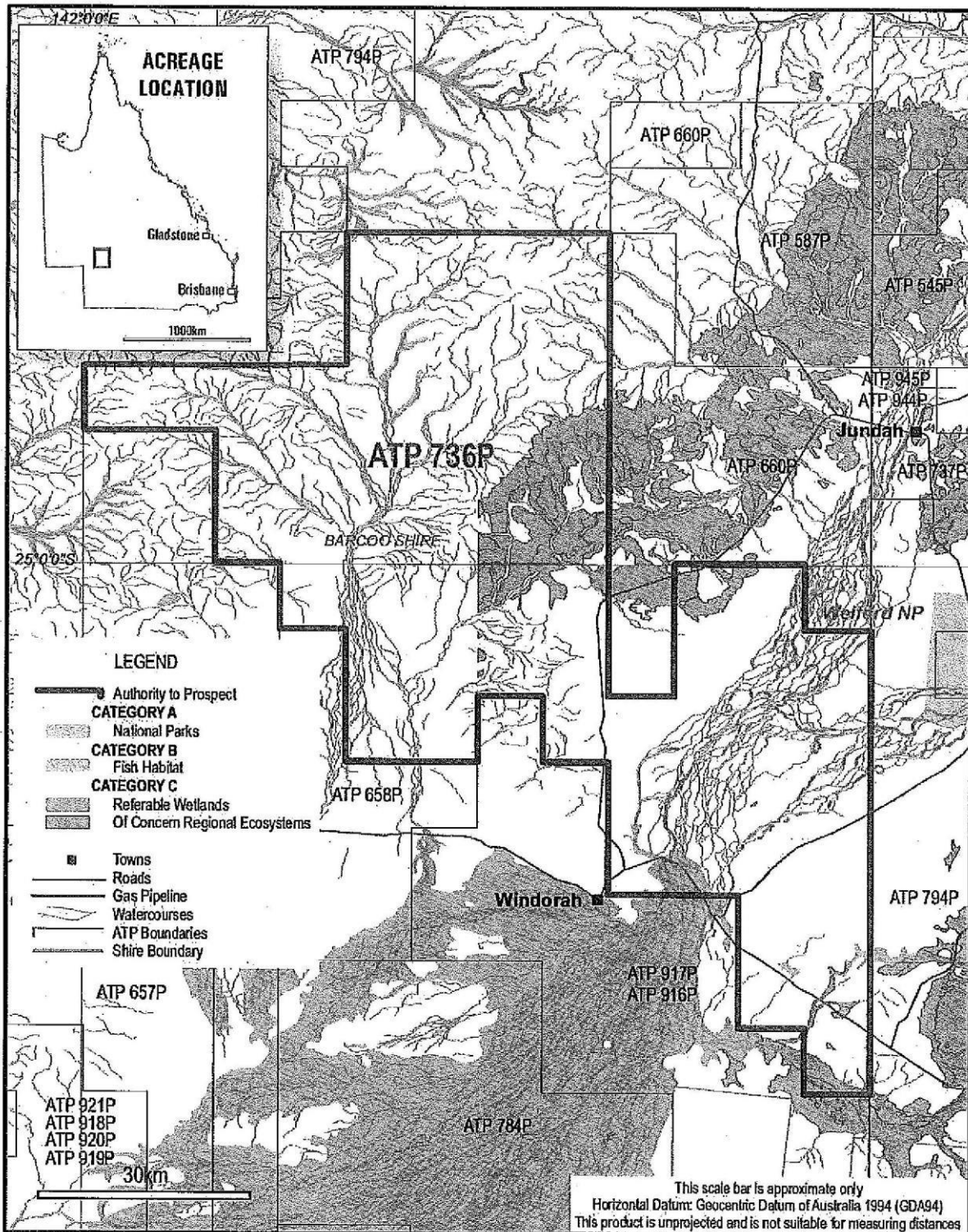
- (a) in which water flows intermittently or permanently in a visibly defined channel, whether artificial, artificially improved or natural; and
- (b) that has evidence of biological dependence on any water that flows in the creek, river or stream or on the banks or bed.

Wetland means an area shown as a wetland on a 'Map of referable wetlands', a document approved by the chief executive (environment). A map of referable wetlands can be viewed at www.derm.qld.gov.au.

Wild river declaration is a statutory instrument under the *Wild Rivers Act 2005*. A declaration lists the relevant natural values to be preserved and delineates certain parts of the wild river area and the different constraints that may apply in these areas. With reference to environmental authorities for petroleum, each declaration also specifies conditions to be included in a new [environmental] authority if the activity is to be located within the wild river area.

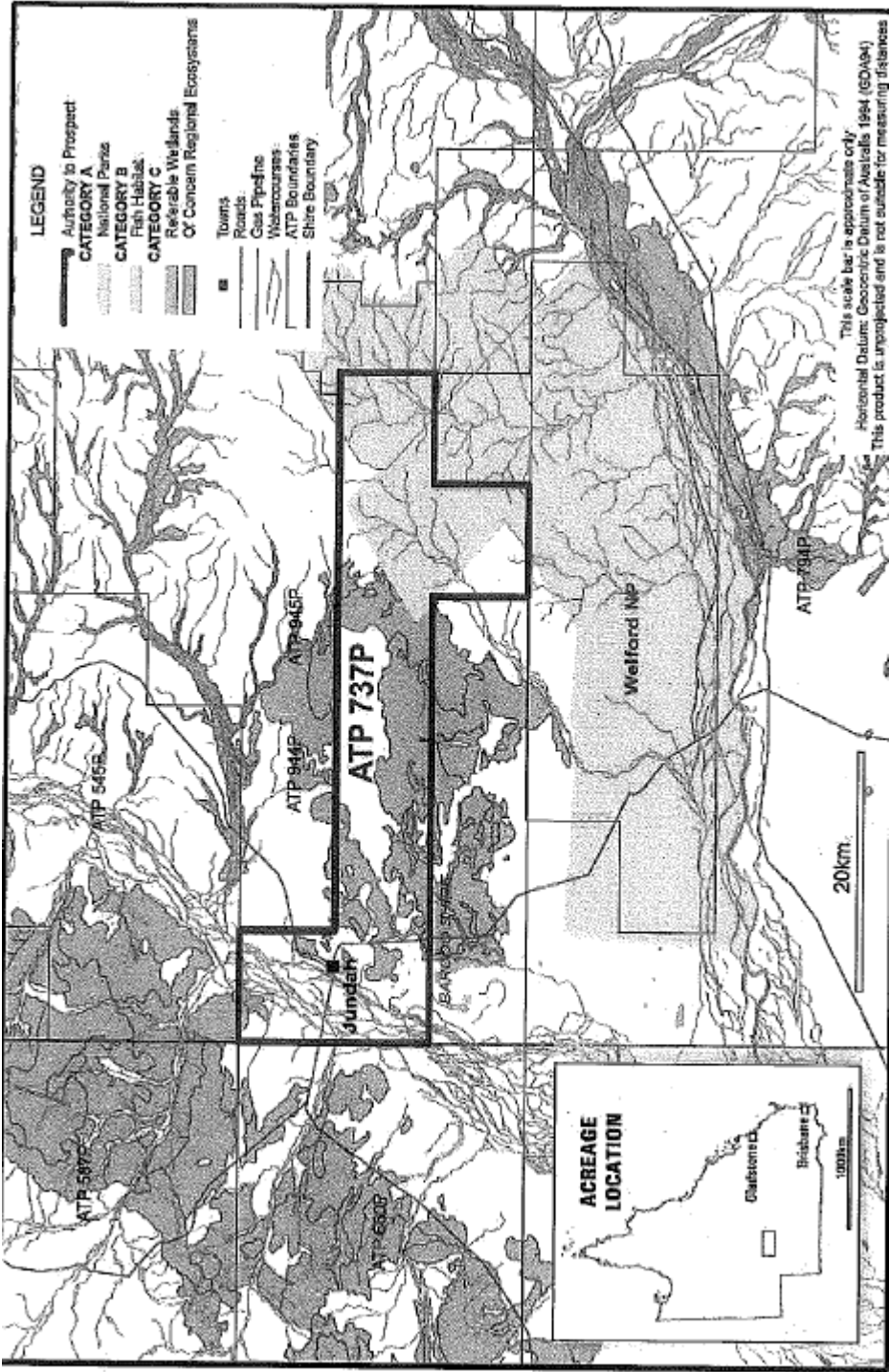
PART 2 - APPENDIX B

LOCALITY MAP OF ATP736



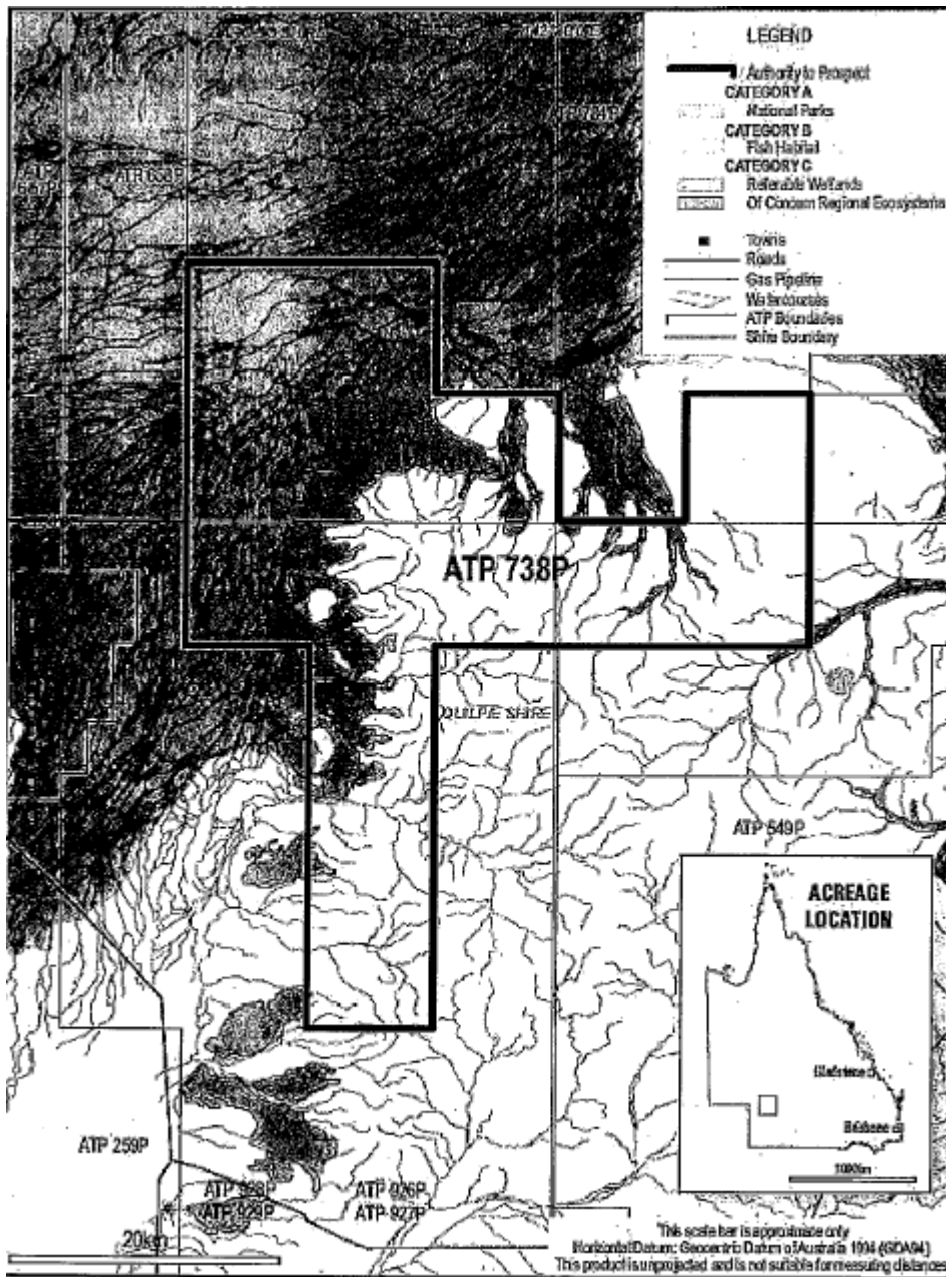
PART 2 - APPENDIX B

LOCALITY MAP OF ATP737



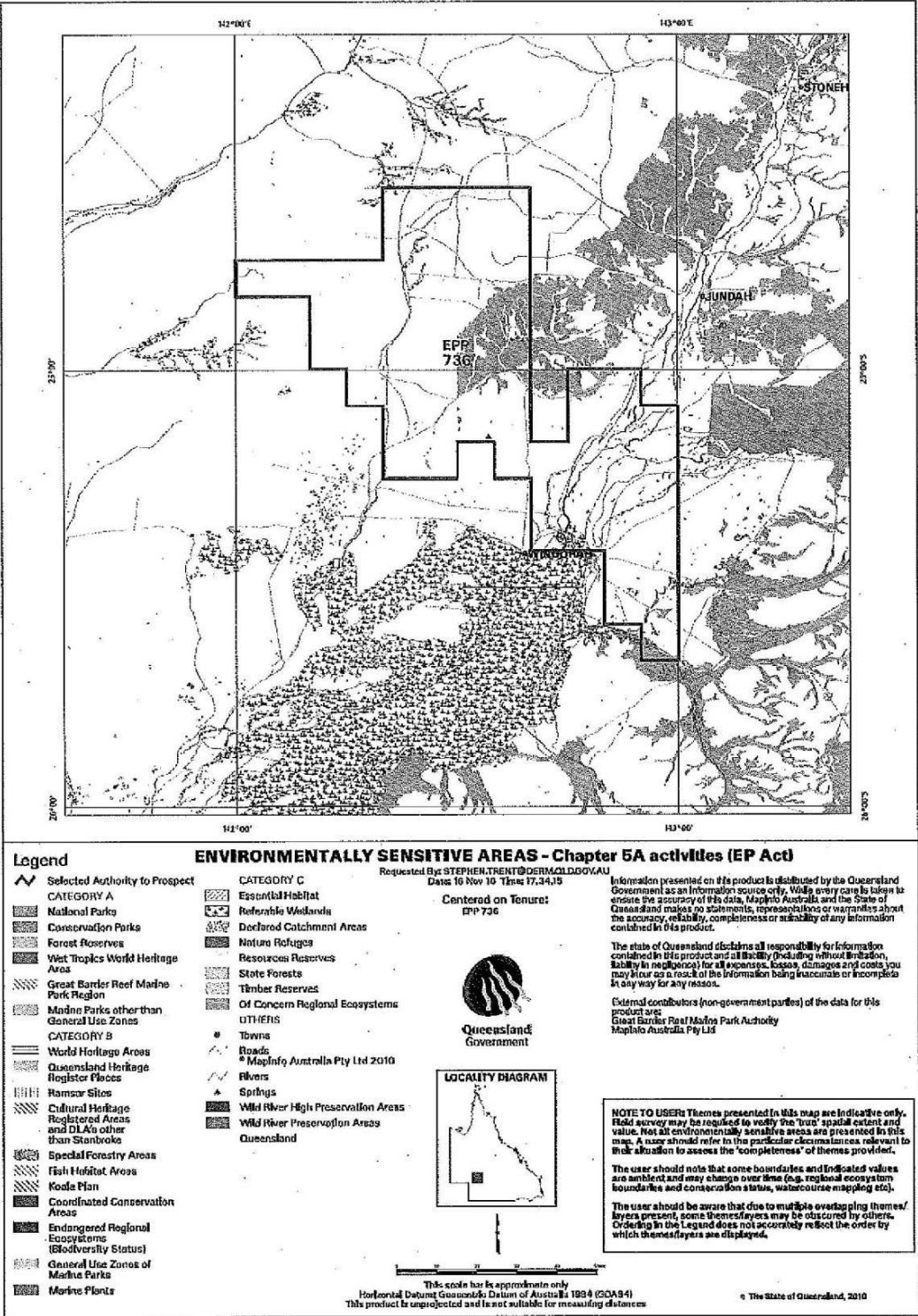
PART 2 - APPENDIX B

LOCALITY MAP OF ATP738



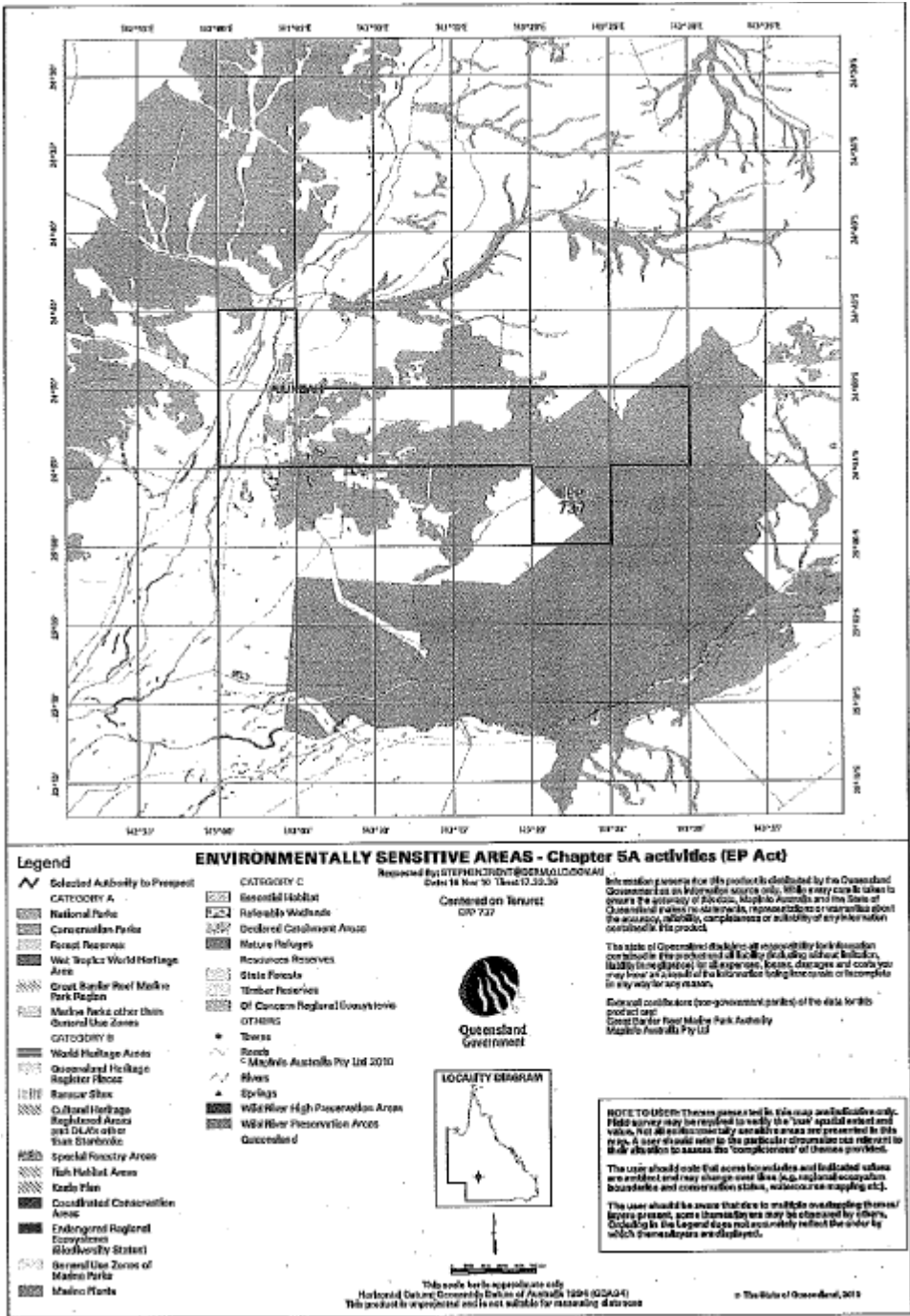
PART 2 - APPENDIX C

MAP OF ENVIRONMENTALLY SENSITIVE AREAS ATP736



PART 2 - APPENDIX C

MAP OF ENVIRONMENTALLY SENSITIVE AREAS ATP737



MAP OF ENVIRONMENTALLY SENSITIVE AREAS ATP737



Environmental authority

PART 2 - APPENDIX D**ENVIRONMENTALLY SENSITIVE AREAS Category A and Category B environmentally sensitive areas**

Category A and Category B environmentally sensitive areas are listed in Section 25 and 26 respectively of the *Environmental Protection Regulation 2008*.

Category C environmentally sensitive areas

LAND AREA CLASSIFICATION	ADMINISTERING LEGISLATION	ADMINISTERING AUTHORITY
Nature Refuges	<i>Nature Conservation Act 1992</i>	Department of Environment and Resource Management
Koala Habitat Area	<i>Nature Conservation (Koala) Conservation Plan 2006</i>	Department of Environment and Resource Management
An area identified as essential habitat by the DERM for a species of wildlife listed as endangered, vulnerable, near threatened or rare under the <i>Nature Conservation Act 1992</i>	<i>Nature Conservation Act 1992</i> '	Department of Environment and Resource Management
Declared Catchment Areas	<i>Water Act 2000</i>	Department of Environment and Resource Management and/or Relevant Storage Operator or Board
State Forest or Timber Reserves	<i>Forestry Act 1959</i>	Department of Environment and Resource Management
Resources reserves	<i>Nature Conservation Act 1992</i>	Department of Environment and Resource Management
Any wetland shown on the Map of Referable Wetlands available from DERM's website	<i>Environmental Protection Act 1994</i>	Department of Environment and Resource Management
"Of concern" regional ecosystems identified in the database maintained by DERM called 'Regional ecosystem description database' containing regional ecosystem numbers and descriptions.	<i>Nil</i>	Department of Environment and Resource Management

Important note: Regional ecosystem classification is determined according to the Queensland Herbarium *Biodiversity Status Classification*. Information on ERE's is maintained by the DERM on the Regional Ecosystem Description Database.