Permit

Environmental Protection Act 1994

Environmental authority EPPG00674013

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

Environmental authority number: EPPG00674013

Environmental authority takes effect on 12 February 2021

Environmental authority holder(s)

Name(s)	Registered address
CNOOC Infrastructure Company Pty Ltd	Level 34 123 Eagle Street BRISBANE CITY QLD 4000 Australia
QGC (Infrastructure) Pty Ltd	Level 30 275 George Street BRISBANE CITY QLD 4000 Australia
Tokyo Gas QCLNG Pty Ltd	Level 21 Exchange Plaza 2 The Esplanade PERTH WA 6000

Environmentally relevant activity and location details

Environmentally relevant activity/activities	Location(s)
Schedule 3 03: A petroleum activity that is likely to have a significant impact on a category A or B environmentally sensitive area	PPL195
Schedule 3 03: A petroleum activity that is likely to have a significant impact on a category A or B environmentally sensitive area	PPL179

Queensland Government

Environmentally relevant activity/activities	Location(s)
Schedule 3 03: A petroleum activity that is likely to have a significant impact on a category A or B environmentally sensitive area	PPL175
Schedule 3 03: A petroleum activity that is likely to have a significant impact on a category A or B environmentally sensitive area	PPL125
Schedule 3 03: A petroleum activity that is likely to have a significant impact on a category A or B environmentally sensitive area	PPL184
Non-scheduled Petroleum Activity Petroelum Pipeline Licence – PPL	PPL196
Non-scheduled Petroelum Activity Petroelum Pipeline Licence – PPL	PPL197

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.

Tristan Roberts
Department of Environment and Science
Delegate of the administering authority
Environmental Protection Act 1994

Date issued: 12 February 2021

Enquiries:
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Department of Environment and Science

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Obligations under the *Environmental Protection Act 1994*

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

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

This environmental authority incorporates the following schedules:

Schedule A – Authorised Activities

Schedule B – Protecting Environmental Values

Schedule C – General

Schedule D – Pipeline Planning

Schedule E – Construction

Schedule F – Post-construction Conditions including operations, maintenance and decommissioning

Schedule G – Monitoring and reporting

Schedule G – PPL125, PPL 184 and PPL 195 – Gas and Water Pipelines

Definitions

Schedule A – Authorised Activities

A1 This environmental authority authorises the carrying out of the following **resource activity(ies)**:

(a) the petroleum activities listed in *Table – Authorised Petroleum Activities*; and

(b) the petroleum activities listed in *Schedule H – PPL125, PPL 184 and PPL 195 – Gas and Water Pipelines*.

Table – Authorised Petroleum Activities

Petroleum Activity	PPL 175 and PPL 179		PPL 196 and PPL 197		PPL 125	PPL 184	PPL 195
	Maximum size	Coordinates/ Location	Scale (number of activities)	Intensity (Maximum Disturbance)	Length of Constructed Pipeline		
Installation and operation of pipeline within Gas Trunkline **Right of Way** (RoW)	81ha	Start Point: Polaris Field Compressor Station (Lot 46 on FT497) End Point: Woleebee CPP Trunkline (Lot 2 on FT394)	40km	480ha	-	-	-
Installation and operation of pipeline within Water Trunkline **RoW**		Start Point: Polaris Pump Station (Lot 46 on FT497) End Point: Woleebee Creek Raw Water Pond (Lot 10 FT87)			-	-	-
Fibre Optic Cable	-	-			-	-	-
132kV (kilovolt) power line and 33kV power line	-	-			-	-	-
Borrow pits outside of RoW	27.5ha	1 per block	-	30ha	-	-	-
T06 Pipeline	-	-	-	-	25km	-	-

E03 Pipeline	-	-	-	-	25km	-	-
T08 Pipeline	-	-	-	-	3km	-	-
McNulty FCS to Bellvue CPP gas pipeline	-	-	-	-	10.3km	-	-
McNulty RSP to Glen Eden RSP water pipeline	-	-	-	-	-	5.4km	-
E06 Gas Pipeline	-	-	-	-	-	-	2.3km
Laydowns/Workspaces outside of RoW	2.5ha	-	-	15ha	-	-	-
Sewage Treatment Plant(s) that discharge treated effluent to an infiltration trench or through an irrigation scheme, or to land for dust suppression, construction or operational purposes	-	-	-	<21 equivalent persons (EP)	**-**	**-**	**-**

A2 Only **low impact petroleum activities** can be undertaken within **Category A Environmentally Sensitive Areas (ESAs)**, or **Category B ESAs** or **Category C ESAs** (other than state forests or timber reserves), or within the ESAs' **primary protection zone (PPZ)**.

A3 **Non-linear infrastructure** is permitted within the **Secondary Protection Zone (SPZ)** of ESAs provided the location is justified given other constraints and can not be avoided and it can be demonstrated that there will be no negative impacts on the ESA.

A4 Condition (A2) does not apply to significant disturbance that occurred on PPL125, PPL184 and PPL195 prior to 1 March 2016.

A5 Despite conditions (A2) and (A3), the **infrastructure** (and associated activities necessary for construction, operational and maintenance purposes) specified in *Table – Authorised Petroleum Activities Disturbance* is permitted in the location specified in *Table – Authorised Petroleum Activities Disturbance*.

Table – Authorised Petroleum Activities Disturbance

Tenure	Description of Infrastructure	Maximum disturbance	ESA Category	Location
PPL175 & PPL179	Petroleum Activities	-	Secondary Protection Zone of Category B ESAs that are Endangered Regional Ecosystems	-
		-	Primary Protection Zone of Category C ESAs that are State Forests, Timber Reserves	-
		-	Secondary Protection Zone of Category C ESAs	-
PPL175 & PPL179	Pipeline RoW 1-4	-	-	Entry Point: E780911, N7107210 Exit Point: E780499, N7106090
	Pipeline RoW 5-6	-	-	Entry Point: E774543, N7102260 Exit Point: 774442, N7101250
	Pipeline RoW 7-8	-	-	Entry Point: E774428, N7101100 Exit Point: E774394, N7101040
	Pipeline RoW 9-10	-	-	Entry Point: E774479, N7098900 Exit Point: E774386, N7098800
	Pipeline RoW 11-12	-	-	Entry Point: E774093, N7098710 Exit Point: E773978, N7098720
	Workspace Outside RoW	-	Primary protection zone of Category B ESA	Corner points:

				E780640, N7106582 E780690, N106575 E780683, N7106533 E780633, N7106533
PPL196 and PPL197	Gas trunkline and Water trunkline	4	Category C ESA and its PPZ and Secondary Protection Zone (SPZ).	Corner points: E764351 N7101611, E764484 N7101581, E764565 N7101012, E764503 N7100999

A6 Records demonstrating compliance with condition (A3) must be kept.

A7 Blasting is not authorised by this environmental authority.

Schedule B – Protecting Environmental Values

B1 Petroleum activities must:

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

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

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

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

B2 Where **significant disturbance to land** is to occur, records demonstrating compliance with condition (B1) must be kept.

B3 Other than as permitted by this environmental authority, the **release** of a contaminant into the environment must not occur.

B4 Petroleum activities must not cause environmental nuisance at a **sensitive place**, other than where an **alternative arrangement** is in place.

Schedule C – General

C1 The holder of the environmental authority must:

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

(b) maintain such measures , plant and equipment in their proper and effective condition; and

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

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

Documentation and Records Management

C4 All documents required by this environmental authority must be kept for a minimum of five (5) **years**.

Contingency Procedures for Emergency Environmental Incidents

C5 Contingency Procedures for emergency environmental incidents must be developed and implemented.

C6 The Contingency Procedures must include, but not necessarily be limited to:

(a) environmental nuisance and complaint management procedures including:

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

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

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

(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 the conditions in Schedule B.

Explanatory note: The contingency procedures may incorporate other documents by reference and may include the emergency response procedures required under the *Petroleum and Gas (Production and Safety) Act 2004*.

C7 Petroleum activities involving **significant disturbance to land** cannot commence until the development of written Contingency Procedures for emergency environmental incidents which include, but are not necessarily limited to:

(a) a clear definition of what constitutes an environmental emergency incident or near miss for the petroleum activity;

(b) consideration of the risks caused by the petroleum activity including the impact of flooding and other natural events on the petroleum activity;

(c) response procedures to be implemented to prevent or minimise the risks of environmental harm occurring;

(d) the practices and procedures to be employed to restore the environment or mitigate any environmental harm caused;

(e) procedures to investigate causes and impacts including impact monitoring programs for **releases** to **waters** and/or land;

(f) training of staff to enable them to effectively respond; and

(g) procedures to notify the administering authority, local government and any potentially impacted landholder.

Soil management

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

C9 Sediment and erosion control measures to prevent soil loss and deposition beyond **significantly disturbed land**.

C10 The measures required by conditions (C8) and (C9) must be in accordance, to the greatest practicable extent, with the International Erosion Control Association (IECA) Best Practice Erosion and Sediment Control (BPESC) document and/or the Australian Pipeline Industry Association (APIA) Code of Environmental Practice: Onshore Pipelines (2009).

Chemical Storage

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

Waste management

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

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

C14 Waste, including waste fluids, must be transported off-site for lawful re-use, remediation, recycling or disposal unless the waste is specifically authorised by conditions of this environmental authority to be disposed of or used on-site.

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

Treated sewage effluent

C16 Treated sewage effluent or **greywater** from a mobile and temporary treatment system with a **daily peak design capacity** of less than 21 **EP** may be **released** to land provided it:

(a) is to a fenced and signed contaminant **release** area(s);

(b) does not contain any properties nor contain any organisms or other contaminants in concentrations that are capable of causing environmental harm;

(c) does not result in pooling or run-off or aerosols or spray drift or vegetation die-off;

(d) minimises deep drainage below the root zone of any vegetation;

(e) does not adversely affect the quality of shallow **aquifer**s;

(f) does not adversely impact soil quality;

(g) is to a contaminant **release** area(s) that is kept vegetated with groundcover, that is:

i. not a **declared pest species**; and

ii. kept in a viable state for transpiration and nutrient uptake; and is only operated for less than six (6) months at any.

Infrastructure

C17 The following **infrastructure** must be clearly and permanently marked for the life of the petroleum activity(ies) with a unique reference name / number in such a way that it is clearly observable:

(a) sewage treatment facilities;

(b) authorised discharge points to air and **waters**;

(c) any chemical storage facility associated with the **environmentally relevant activity** of chemical storage;

(d) gas processing facilities; and

(e) pipeline compressor stations.

Schedule D – Biodiversity

Biodiversity

D1 Prior to undertaking activities that result in **significant disturbance to land** in areas of native vegetation, confirmation of on-the-ground **biodiversity values** of the native vegetation communities at that location must be undertaken by a **suitably qualified person**.

D2 A **suitably qualified person** must develop and certify a methodology so that condition (D1) can be complied with and which is appropriate to confirm on-the-ground **biodiversity values**.

D3 Where mapped **biodiversity values** differ from those confirmed under conditions (D1) and (D2), petroleum activities may proceed in accordance with the conditions of the environmental authority based on the confirmed on-the-ground biodiversity value.

Impacts to prescribed environmental matters - PPL125, PPL184, PPL195 PPL196 and PPL197

Conditions D4-D6 apply only to PPL125, PPL184, PPL195 PPL196 and PPL197

D4 **Significant residual impacts** to **prescribed environmental matters**, other than if the impacts were authorised by an **existing authority** issued before the commencement of the *Environmental Offsets Act 2014*, are not authorised under this environmental authority unless the impact(s) is specified in *Table – Significant residual impacts authorised to prescribed environmental matters*.

Table – Significant residual impacts authorised to prescribed environmental matters

Prescribed environmental matter	**Location of impact**				**Maximum extent of impact (ha)**
	NW corner	**NE corner**	**SE corner**	**SW corner**	
Regulated Vegetation					
Regional ecosystems (not within an urban area) within 25m from the defining banks of a relevant watercourse on the vegetation management watercourse map – **Ground-truthed as RE 11.3.4 (BVG1M: 16c)**	E764397 N7101401	E764454 N7101379	E764433 N7101240	E764376 N7101263	0.83

D5 An environmental offset made in accordance with the *Environmental Offsets Act 2014* and the Queensland Environmental Offsets Policy, as amended from time to time, must be undertaken for the **maximum extent of impact** to each **prescribed environmental matter** authorised in *Table – Significant residual impacts authorised to prescribed environmental matters*, unless a lesser extent of the impact has been approved by the administering authority.

D6 The **notice of election** for the environmental offset required by condition (D5) must be provided to the **administering authority** no less than 20 **business days** before the proposed commencement of the **significant residual impacts** for which the environmental offset is required.

Offsets - PPL175 and PPL179

Conditions D7-D9 apply only to PPL175 and PPL179

D7 The environmental authority holder must enter in to an environmental offset agreement with the **administering authority** where disturbance to land caused by the carrying out of the petroleum activities will have a remaining adverse environmental impact on an environmental value.

D8 The environmental offset agreement must be entered in to within six (6) **months** after submitting the annual return for the **year** that the disturbance occurred, unless otherwise agreed to by the administering authority.

D9 The environmental authority holder must implement any environmental offset agreement entered in to in accordance with conditions (D7) and (D8) as soon as practicable after finalisation.

Schedule E – Water

Activities in watercourses, wetlands, lakes and springs

E1 Petroleum activities that require earthworks, vegetation **clearing** and/or placing fill, other than that associated with the construction of **linear infrastructure**, are not permitted in or within:

(a) 200 metres of any **wetland**, **lake** or **spring**; or

(b) 100 metres of the **outer bank** of any other **watercourse**.

E2 The construction and/or maintenance for **linear infrastructure** that will result in significant disturbance to a **wetland**, **lake**, **spring** or **watercourse** must be conducted in accordance with the following order of preference. Conducting works:

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

(b) secondly, in times of no flow.

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

E3 Petroleum activities must not result in water turbidity increases of more than 10% in **high ecological value waters** outside contained construction or maintenance areas.

E4 The construction and/or maintenance for **linear infrastructure** that will result in significant disturbance to a **lake**, **spring** or **watercourse** must be designed and undertaken by a **suitably qualified person** in accordance with the guideline *Activities in a watercourse, lake or spring associated with a resource activity or mining operations*.

E5 The construction and/or maintenance for **linear infrastructure** that will result in significant disturbance to a **wetland** must be designed and undertaken by a **suitably qualified person** taking into consideration sections 5 and 6 of the guideline *Activities in a watercourse, lake or spring associated with a resource activity or mining operations*.

Waste

E6 **Pipeline waste water** may be **released** to land provided that it:

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

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

E7 If hydrostatic testing water quality does not or can not be treated to meet the requirements of condition (E6), it must be managed in accordance with conditions (C13) or (C14).

Schedule F – Pipeline conditions including operations, maintenance and decommissioning

F1 Pipeline construction must be in accordance, to the greatest practicable extent, with the relevant section of the APIA Code of Environmental Practice: Onshore Pipelines (2009) and/or AS 2885.1:2012.

F2 Notwithstanding condition (F1), pipeline construction corridors must:

(a) be minimised in width to the greatest practicable extent

(b) not exceed 40m in width

(c) not include turn around and work areas associated with pipeline construction that exceed 50m in width

(d) be preferentially located alongside existing **linear infrastructure**.

F3 Pipeline operation and maintenance must be in accordance, to the greatest practicable extent, with the relevant section of the APIA *Code of Environmental Practice: Onshore Pipelines (2009)* and/or AS2885.3:2012.

F4 Written procedures must be developed to ensure operations and maintenance of the pipeline complies with the conditions of the environmental authority.

F5 **Pipeline waste water** may be **released** to land provided that it meets the requirements of condition (E6).

Pipeline reinstatement and revegetation

F6 Pipeline trenches must be backfilled, and topsoils **reinstated** within 3 **months** after completion of works involving trench excavation.

F7 **Reinstatement** and **revegetation** of the pipeline **right of way** must commence within 6 **months** after completion of works involving trench excavation.

F8 Backfilled, **reinstated** and **revegetated** pipeline trenches and **right of way** must be:

(a) a **stable** landform.

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

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

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

Rehabilitation planning

F9 A Rehabilitation Plan must be developed by a **suitably qualified person** and must include the:

(a) **rehabilitation** goals; and

(b) procedures to be undertaken for **rehabilitation** that will:

i. achieve the requirements of conditions (F10) to (F12), inclusive; and

ii. provide for appropriate monitoring and maintenance.

Transitional rehabilitation

F10 **Significantly disturbed areas** that are no longer required for the on-going petroleum activities, must be **rehabilitated** within 12 **months** (unless an exceptional circumstance in the area to be **rehabilitated** (e.g. a flood event) prevents this timeframe being met) and be maintained to meet the following acceptance criteria:

(a) contaminated land resulting from petroleum activities is remediated and **rehabilitated**;

(b) the areas are:

i. non-polluting;

ii. a **stable** landform; and

iii. re-profiled to contours consistent with the surrounding landform;

(c) surface drainage lines are re-established;

(d) **top soil** is **reinstated**; and

(e) either:

i. groundcover, that is not a **declared pest species**, is growing; or

ii. an alternative soil stabilisation methodology that achieves effective stabilisation is implemented and maintained.

Final rehabilitation acceptance criteria

F11 All **significantly disturbed areas** caused by petroleum activities which are not **being or intended to be utilised by the landholder or overlapping tenure holder**, must be **rehabilitated** to meet the following final acceptance criteria measured either against the highest ecological value **adjacent land use** or the **pre-disturbed land use**:

(a) greater than or equal to 70% of native ground cover **species richness**;

(b) greater than or equal to the total per cent of ground cover;

(c) less than or equal to the per cent **species richness** of **declared plant pest species**; and

(d) where the **adjacent land use** contains, or the pre-clearing land use contained, one or more **regional ecosystem**(s), then at least one **regional ecosystem**(s) from the same broad vegetation group, and with the equivalent biodiversity status or a biodiversity status with a higher conservation value as any of the **regional ecosystem**(s) in either the adjacent land or pre-disturbed land, must be present.

Final rehabilitation acceptance criteria in environmentally sensitive areas

F12 Where **significant disturbance to land** has occurred in an environmentally sensitive area, the following final **rehabilitation** criteria as measured against the pre-disturbance **biodiversity values** assessment (required by conditions (D1) and (D2)) must be met:

(a) greater than or equal to 70% of native ground cover **species richness**;

(b) greater than or equal to the total per cent ground cover;

(c) less than or equal to the per cent **species richness** of **declared plant pest species**;

(d) greater than or equal to 50% of organic litter cover;

(e) greater than or equal to 50% of **total density of coarse woody material**; and

(f) all **predominant species** in the **ecologically dominant layer**, that define the pre-disturbance **regional ecosystem**(s) are present.

Continuing conditions

F13 Conditions (F10), (F11) and (F12) continue to apply after this environmental authority has ended or ceased to have effect.

Remaining dams

F14 Where there is a **dam** (including a **low consequence dam**) that is **being or intended to be utilised by the landholder or overlapping tenure holder**, the **dam** must be decommissioned to no longer accept

inflow from the petroleum activity(ies) and the contained water must be of a quality suitable for the intended on-going uses(s) by the landholder or overlapping tenure holder.

Schedule G – Monitoring and reporting

Monitoring

G1 All monitoring must be undertaken by a **suitably qualified person**.

G2 If requested by the **administering authority** in relation to investigating a **valid complaint**, monitoring must be undertaken within 10 **business days**.

G3 All laboratory analyses and tests must be undertaken by a laboratory that has **NATA accreditation** for such analyses and tests, except as otherwise authorised in writing by the administering authority.

G4 Notwithstanding condition (G3), where there are no **NATA accredited** laboratories available to test for a specific **analyte** or substance, then duplicate samples must be sent to separate laboratories for independent testing or evaluation.

G5 Monitoring and sampling must be carried out in accordance with the requirements of the following **documents** (as relevant to the sampling being undertaken), as amended from time to time:

(a) for **waters** and aquatic environments, the Queensland Government's Monitoring and Sampling Manual 2009 – Environmental Protection (Water) Policy 2009;

(b) for groundwater, Groundwater Sampling and Analysis – A Field Guide (2009:27 GeoCat #6890.1);

(c) for noise, the Environmental Protection Regulation 2008;

(d) for air, the Queensland Air Quality Sampling Manual and/or Australian Standard 4323.1:1995 Stationary source emissions method 1: Selection of sampling positions, as appropriate for the relevant measurement; and

(e) for soil, the Guidelines for Surveying Soil and Land Resources, 2nd edition (McKenzie et al. 2008), and/or the Australian Soil and Land Survey Handbook, 3rd edition (National Committee on Soil and Terrain, 2009)

(f) for dust, Australian Standard AS3580.

G6 All plans and monitoring programs required by this environmental authority must be **certified** by a **suitably qualified person**.

Notification

G7 In addition to the requirements under Chapter 7, Part 1, Division 2 of the *Environmental Protection Act 1994*, the **administering authority** must be notified through the Pollution Hotline and in writing, as soon as possible, but within 48 hours of becoming aware of any of the following events:

(a) any unauthorised **significant disturbance to land**.

(b) potential or actual loss of structural or **hydraulic integrity** of a **dam**.

(c) unauthorised **releases** of any volume of **prescribed contaminants** to **waters**.

(d) unauthorised **releases** of volumes of contaminants, in any mixture, to land greater than:

i. 200 L of hydrocarbons; or

ii. 5 000 L of untreated coal seam gas water; or

iii. 5 000 L of raw sewage; or

iv. 10 000 L of treated sewage effluent.

(e) monitoring results where two out of any five consecutive samples do not comply with the relevant limits in the environmental authority.

Reporting

G8 The annual return must include an Update Report detailing activities during the **annual return period**, demonstrating:

(a) significant disturbance during the period;

(b) **rehabilitation** undertaken;

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

(d) the results of all monitoring undertaken.

Schedule H – PPL125, PPL 184 and PPL 195 – Gas and Water Pipelines

H1 The relevant pipeline facilities for the pipelines authorised under this authority are to be located in accordance with

(a) *Table – T06 Pipeline*

(b) *Table – E03 Pipeline*

(c) *Table – T08 Pipeline*

(d) *Table – McNulty gas pipeline*

(e) *Table – McNulty RSP to Glen Eden RSP Water Pipeline*

(f) *Table – E06 Gas Pipeline.*

Table – T06 Pipeline

Pipeline Facilities	Description	Location (KP)
Pig Launchers and Receivers	Spherical launchers and receivers	Launcher KP 0 Receiver KP 25
Pipeline Pump Stations	Nil	
Supervisory Control and Data Acquisition (SCADA)	Part of QGC's overall SCADA system	Berwyndale South Field Compressor Station and Condamine Power Station
Pipeline markers	Buried High Pressure Gas warning signs.	At changes of direction, road, river and creek crossings, fence lines, third party services and to maintain line of sight between markers.
Main Line Valves	Nil	
Meter Station	Ultrasonic meter	Condamine Power Station – KP 25
Cathodic Protection	Impressed current system	Condamine Power Station – KP 25
Leak Detection and line break	Monitored via the SCADA system	

Table – E03 Pipeline

Pipeline Facilities	Description	Location (KP)
Pig Launchers and Receivers	Conventional launchers and receivers	Launcher KP 0 Receiver KP 25
Pipeline Pump Stations	Nil	
Supervisory Control and Data Acquisition (SCADA)	Part of QGC's overall SCADA system	Berwyndale South Processing Plant and Condamine Power Station
Pipeline markers	Buried High Pressure Gas warning signs.	At changes of direction, road, river and creek crossings, fence lines,

		third party services and to maintain line of sight between markers.
Main Line Valves	Nil	
Meter Station	Ultrasonic meter	WPPL/QGC interface – KP 25
Cathodic Protection	Impressed current system	Condamine Power Station – KP 25
Leak Detection and line break	Monitored via the SCADA system	

Table – T08 Pipeline

Pipeline Facilities	Description	Location (KP)
Pig Launchers and Receivers	Spherical launchers and receivers	Launcher KP 0 Receiver KP 3
Pipeline Pump Stations	Nil	
Supervisory Control and Data Acquisition (SCADA)	Part of QGC's overall SCADA system	Bellevue Field Compressor Station and Condamine Power Station
Pipeline markers	Buried High Pressure Gas warning signs.	At changes of direction, road, river and creek crossings, fence lines, third party services and to maintain line of sight between markers.
Main Line Valves	Nil	
Meter Station	Ultrasonic meter	Condamine Power Station – KP 3
Cathodic Protection	Impressed current system	Condamine Power Station – KP 3
Leak Detection and Line Break	Monitored via the SCADA system	

Table – McNulty gas pipeline

Pipeline Facilities	Description	Location (KP)
Pig Launchers and Receivers	Conventional launchers and receivers	Launcher McNulty Field Compressor Station Receiver Bellevue Central Processing Plant
Pipeline Pump Stations	Nil	
Supervisory Control and Data Acquisition (SCADA)	Part of QGC's overall SCADA system	Sales Point No.4 and BOC mLNG facility
Pipeline markers	Buried High Pressure Gas warning signs.	At changes of direction, road, river and creek crossings, fence lines, third party services and to maintain line of sight between markers.

Main Line Valves	Nil	
Meter Station	Nil	
Cathodic Protection	Impressed current system	Bellevue Central Processing Plant
Leak Detection and Line Break	Nil	

Table – McNulty RSP to Glen Eden RSP Water Pipeline

Pipeline Facilities	Description	Location (KP)
Pig Launchers and Receivers	Nil	
Pipeline Pump Stations	Centrifugal pump	McNulty RSP
Supervisory Control and Data Acquisition (SCADA)	Part of QGC's overall SCADA system	McNulty FCS
Pipeline markers	Pipe Posts	At changes of direction, road, river and creek crossings, fence lines, third party services and to maintain line of sight between markers.
Main Line Valves	Nil	
Meter Station	Yes	McNulty RSP and Glen Eden RSP
Cathodic Protection	Impressed current system	McNulty RSP
Leak Detection and Line Break	Detection by flow meter between upstream and downstream flow differential	Control Room

Table – E06 Gas Pipeline

Pipeline Facilities	Description	Location (KP)
Pig Launchers and Receivers	Yes	KP 0, KP 2.9
Pipeline Pump Stations	Nil	
Supervisory Control and Data Acquisition (SCADA)	Part of QGC's overall SCADA system	S04
Pipeline markers	Pipe Posts	At changes of direction, road, river and creek crossings, fence lines, third party services and to maintain line of sight between markers.
Main Line Valves	BIVs	KP 0, KP 2.9

Meter Station	Nil	Metered at S04
Cathodic Protection	Sacrificial anode system	Various locations along the alignment as per approved design
Leak Detection and Line Break	Nil	

Note: *KP – kilometres along the pipeline route from start point.*

Definitions

Words and phrases used throughout this environmental authority are defined below. Where a term is not defined in this the environmental authority in the *Environmental Protection Act 1994*, its regulations and environmental protection policies, then the Acts Interpretation Act 1954 then the Macquarie Dictionary should be used in that order.

acceptable standards for release to land means wastewater of the following quality as determined by monitoring results or by characterisation:

(a) electrical conductivity (EC) not exceeding 3000µS/cm

(b) sodium adsorption ratio (SAR) not exceeding 8

(c) pH between 6.0 and 9.0

(d) heavy metals (measured as total) meets the respective short term trigger value in section 4.2.6, Table 4.2.10—Heavy metals and metalloids in Australian and New Zealand Guidelines for Fresh and Marine Water Quality

(e) does not contain biocides.

adjacent land use(s) means the ecosystem function adjacent to an area of significant disturbance, or where there is no ecosystem function, the use of the land. An adjacent land use does not include an adjacent area that shows evidence of edge effect.

administering authority has the meaning in Schedule 4 of the *Environmental Protection Act 1994*.

alternative arrangement means a written agreement about the way in which a particular nuisance impact will be dealt with at a sensitive place, and may include an agreed period of time for which the arrangement is in place. An alternative arrangement may include, but is not limited to, a range of nuisance abatement measures to be installed at the sensitive place, or provision of alternative accommodation for the duration of the relevant nuisance impact.

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 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.

analyte(s) means a chemical parameter determined by either physical measurement in the field or by laboratory analysis.

annual return period means the most current 12-month period between 2 anniversary dates

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

Australian Standard 2885 means Australian Standard 2885.0:2008 Pipelines – Gas and Liquid

Petroleum General Requirements, Australian Standard 2885.0-2008/Amdt 1-2012 Pipelines - Gas and Liquid Petroleum General Requirements, Australian Standard 2885.1:2012 Pipelines – Gas and Liquid Petroleum Design and Construction and Australian Standard 2885.3:2012 Pipelines – Gas and Liquid Petroleum Operation and Maintenance, or any updated versions that become available from time to time.

being or intended to be utilised by the landholder or overlapping tenure holder for significantly disturbed land, means there is a written agreement (e.g. land and compensation agreement) between the landholder or the overlapping tenure holder and the holder of the environmental authority identifying that the landholder or the overlapping tenure holder has a preferred use of the land such that rehabilitation standards for revegetation by the holder of the environmental authority are not required.

For dams, means there is a written agreement (e.g. land and compensation agreement) between the landholder or the overlapping tenure holder and the holder of the environmental authority identifying that the landholder or

the overlapping tenure holder has a preferred use for the dam such that rehabilitation standards for revegetation by the holder of the environmental authority are not required.

biodiversity values for the purposes of this environmental authority, means environmentally sensitive areas, areas of State significant biodiversity value and wetlands.

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

Category A ESA means any area listed in Schedule 12, section 1 of the Environmental Protection Regulation 2008.

Category B ESA means any area listed in Schedule 12, section 2 of the Environmental Protection Regulation 2008.

Category C ESA means any of the following areas:

- nature refuges as defined in the conservation agreement for that refuge under the *Nature Conservation Act 1992*
- koala habitat areas as defined under the Nature Conservation (Koala) Conservation Plan 2006
- State forests or timber reserves as defined under the *Forestry Act 1959*
- regional parks (previously known as resource reserves) under the *Nature Conservation Act 1992*
- an area validated as 'essential habitat' or 'essential regrowth habitat' from ground-truthing surveys in accordance with the *Vegetation Management Act 1999* for a species of wildlife listed as endangered or vulnerable under the *Nature Conservation Act 1992*
- 'of concern regional ecosystems' that are remnant vegetation and identified in the database called 'RE description database' containing regional ecosystem numbers and descriptions.

certified in relation to any matter other than a design plan, 'as constructed' drawings or an annual report regarding dams means, a Statutory Declaration by a suitably qualified person or suitably qualified third party accompanying the written **document** stating:

- the person's qualifications and experience relevant to the function
- that the person has not knowingly included false, misleading or incomplete information in the **document**
- that the person has not knowingly failed to reveal any relevant information or **document** to the administering authority
- that the **document** addresses the relevant matters for the function and is factually correct; and
- that the opinions expressed in the **document** are honestly and reasonably held.

clearing has the meaning in the dictionary of the *Vegetation Management Act 2000*.

daily peak design capacity for sewage treatment works, has the meaning in Schedule 2, section 63(4) of the Environmental Protection Regulation 2008 as the higher equivalent person (EP) for the works calculated using each of the formulae found in the definition for EP.

dam(s) means a land-based structure or a void that is designed to contain, divert or control flowable substances, and includes any substances that are thereby contained, diverted or controlled by that land-based structure or void and associated works. A dam does not mean a fabricated or manufactured tank or container, designed and constructed to an Australian Standard that deals with strength and structural integrity of that tank or container.

declared pest species has the meaning in the Land Protection (Pest and Stock Route Management) Regulation 2003 and is a live animal or plant declared to be a declared pest under section 36 (Declaring Pests by Regulation) or section 37(2) (Declaring Pest under Emergency Pest Notice) of that Act and includes reproductive material of the animal or plant.

declared plant pest species has the meaning in the Land Protection (Pest and Stock Route Management) Regulation 2003 and is a 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 plant.

documents has the meaning in section 36 of the *Acts Interpretation Act 1954*.

ecological connectivity is a measure of ecological condition and means the flow or connection of organisms and ecological processes across landscapes at multiple scales. Ecological connectivity has a positive relationship with landscape connectivity and habitat connectivity and effects vary between species. It includes connectivity by stepping stone or contiguous bioregional/local corridor networks.

ecologically dominant layer has the meaning in the Methodology for Surveying and Mapping of Regional Ecosystems and Vegetation Communities in Queensland (Version 3.2 August 2012) and means the layer making the greatest contribution to the overall biomass of the site and the vegetation community (NLWRA 2001). This is also referred to as the ecologically dominant stratum or the predominant canopy in woody ecosystems.

ecosystem function 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.

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.

environmentally relevant activity or ERA has the meaning in section 18 of the *Environmental Protection Act 1994*.

equivalent person or EP has the meaning under section 3 of the Planning Guidelines For Water Supply and Sewerage, 2005, published by the Queensland Government. It is calculated in accordance with Schedule 2, section 63(4) of the Environmental Protection Regulation 2008 where:

- EP = V/200 where V is the volume, in litres, of the average dry weather flow of sewage that can be treated at the works in a day; or
- EP = M/2.5 where M is the mass, in grams, of phosphorus in the influent that the works are designed to treat as the inlet load in a day.

existing authority has the meaning in section 94 of the *Environmental Offsets Act 2014*.

green waste means waste that is grass cuttings, trees, bushes, shrubs, material lopped from trees, untreated timber or other waste that is similar in nature but does not include declared pest species.

greywater means wastewater generated from domestic activities such as laundry, dishwashing, and bathing. Greywater does not include sewage.

high ecological value waters means Queensland waters that are scheduled waters under the Environmental Protection (Water) Policy 2009 as high value ecological waters.

infrastructure means plant or works including for example, communication systems, compressors, powerlines, pumping stations, reservoirs, roads and tracks, water storage dams, evaporation or storage ponds and tanks, equipment, buildings and other structures built for the purpose and duration of the conduct of the petroleum activity(ies) including temporary structures or structures of an industrial or technical nature, including, for example, mobile and temporary camps.

Infrastructure does not include other facilities required for the long term management of the impact of those petroleum activities or the protection of potential resources. Such other facilities include dams other than water storage dams, pipelines and assets, that have been decommissioned, rehabilitated, and lawfully recognised as being subject to subsequent transfer with ownership of the land.

lake means:

- a lagoon, swamp or other natural collection of water, whether permanent or intermittent; and
- the bed and banks and any other element confining or containing the water.

levee means an embankment that only provides for the containment and diversion of stormwater or flood flows from a contributing catchment, or containment and diversion of flowable materials resulting from releases from other works, during the progress of those stormwater or flood flows or those releases; and does not store any significant volume of water or flowable substances at any other times.

linear infrastructure means powerlines, pipelines, roads and access tracks.

low consequence dam means any dam that is not classified as high or significant as assessed using the *Manual for Assessing Consequence Categories and Hydraulic Performance of Structures*, published by the administering authority, as amended from time to time.

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.

maximum extent of impact means the total, cumulative, residual extent and duration of impact to a prescribed environmental matter that will occur over a project's life after all reasonable avoidance and reasonable on-site mitigation measures have been, or will be, undertaken.

month has the meaning in section 36 of the *Acts Interpretation Act 1954*.

NATA accreditation means accreditation by the National Association of Testing Authorities Australia.

non-linear infrastructure means infrastructure that is other than a powerline, a pipeline, a road, an access track and includes only the following:

- workers camps
- maintenance facilities
- no-release sewage treatment plants
- laydown areas
- structures (i.e. dams or levees)
- tanks
- sediment and erosion control measures
- above ground containers and chemical / fuel storages
- water pumps and generators
- stockpiles.

notice of election has the meaning in section 18(2) of the *Environmental Offsets Act 2014*.

outer bank has the meaning in section 5A of the *Water Act 2000*.

pipeline waste water means hydrostatic testing water, flush water or water from low point drains.

pre-disturbed land use means the function or use of the land as documented prior to significant disturbance occurring at that location.

predominant species has the meaning in the Methodology for Surveying and Mapping of Regional Ecosystems and Vegetation Communities in Queensland (Version 3.2 August 2012) and means a species that contributes most to the overall above-ground biomass of a particular stratum.

prescribed contaminants has the meaning in the *Environmental Protection Act 1994*.

prescribed environmental matters has the meaning in section 10 of the *Environmental Offsets Act 2014*, limited to the matters of State environmental significance listed in Schedule 2 of the Environmental Offsets Regulation 2014.

primary protection zone (PPZ) means an area within 200 metres from the boundary of any Category A, B or C environmentally sensitive area.

regional ecosystem has the meaning in the Methodology for Surveying and Mapping of Regional Ecosystems and Vegetation Communities in Queensland (Version 3.2 August 2012) and means a vegetation community in a bioregion that is consistently associated with a particular combination of geology, landform and soil. Regional ecosystems of Queensland were originally described in Sattler and Williams (1999). The Regional Ecosystem Description Database (Queensland Herbarium 2013) is maintained by Queensland Herbarium and contains the current descriptions of regional ecosystems.

rehabilitation or **rehabilitated** means the process of reshaping and revegetating land to restore it to a stable landform and in accordance with acceptance criteria and, where relevant, includes remediation of contaminated land. For the purposes of pipeline rehabilitation, rehabilitation includes reinstatement, revegetation and restoration.

reinstated or **reinstatement** means the process of bulk earth works and structural replacement of pre-existing conditions of a site (i.e. soil surface typography, watercourses, culverts, fences and gates and other landscape(d) features) and is detailed in the APIA Code of Environmental Practice: Onshore Pipelines (2009).

release, releases, released has the meaning in Schedule 4 of the *Environmental Protection Act 1994*.

resource activity(ies) has the meaning in section 107(d) of the *Environmental Protection Act 1994.*

restoration means the replacement of structural habitat complexity, ecosystem processes, services and function from a disturbed or degraded site to that of a pre-determined or analogue state. For the purposes of

pipelines, restoration applies to final rehabilitation after pipeline decommissioning.

revegetation or revegetating or revegetate means to actively re-establish vegetation through seeding or planting techniques in accordance with site specific management plans.

right of way means the linear construction footprint required to install pipelines.

secondary protection zone in relation to a Category A or Category B environmentally sensitive area means an area within 100 metres from the boundary of the primary protection zone.

sensitive place means:

- a dwelling (including residential allotment, mobile home or caravan park, residential marina or other residential premises, motel, hotel or hostel)
- a library, childcare centre, kindergarten, school, university or other educational institution
- a medical centre, surgery or hospital
- a protected area
- a public park or garden that is open to the public (whether or not on payment of money) for use other than for sport or organised entertainment

- a work place used as an office or for business or commercial purposes, which is not part of the petroleum activity(ies) and does not include employees accommodation or public roads

significant residual impact has the meaning in section 8 of the *Environmental Offsets Act 2014*.

significantly disturbed or **significant disturbance** or **significant disturbance to land** or **areas** has the meaning in Schedule 12, section 4 of the Environmental Protection Regulation 2008.

species richness means the number of different species in a given area.

spring(s) has the meaning in Schedule 4 of the *Water Act 2000*

stable has the meaning in Schedule 5 of the Environmental Protection Regulation 2008 and, for a site, means the rehabilitation and restoration of the site is enduring or permanent so that the site is unlikely to collapse, erode or subside.

structure means a dam or levee.

suitably qualified person means a person who has qualifications, training, skills and experience relevant to the nominated subject matter and can give authoritative assessment, advice and analysis to performance relative to the subject matter using the relevant protocols, standards, methods or literature.

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

total density of coarse woody material means the total length of logs on the ground greater than or equal to 10cm diameter per hectare and number of logs on the ground greater than or equal to 10cm diameter per hectare.

valid complaint means a complaint that is not considered by the administering authority or holder of the environmental authority to be frivolous, vexatious or based on mistaken belief.

waste and resource management hierarchy has the meaning provided in section 9 of the *Waste Reduction and Recycling Act 2011*.

waste and resource management principles has the meaning provided in section 4(2)(b) of the *Waste Reduction and Recycling Act 2011*.

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

watercourse has the meaning provided in Schedule 4 of the *Environmental Protection Act 1994*.

wetland means areas shown on the Map of referable wetlands which is a document approved by the chief executive on 4 November 2011 and published by the department, as amended from time to time by the chief executive under section 144D of the Environmental Protection Regulation 2008; and must also be

- areas defined under the Queensland Wetlands Program as 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 six (6) metres, and possess one or more of the following attributes:
  - at least periodically, the land supports plants or animals that are adapted to and dependent on living in wet conditions for at least part of their life cycle, or
  - the substratum is predominantly undrained soils that are saturated, flooded or ponded long enough to develop anaerobic conditions in the upper layers, or

- the substratum is not soil and is saturated with water, or covered by water at some time.

The term wetland includes riverine, lacustrine, estuarine, marine and palustrine wetlands; and it does not include a Great Artesian Basin Spring or a subterranean wetland that is a cave or aquifer.

year(s) has the meaning in section 36 of the *Acts Interpretation Act 1954*.