Permit

Environmental Protection Act 1994

Environmental authority EPPG00652013

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

Environmental authority number: EPPG00652013

Environmental authority takes effect on 14 May 2025.

The anniversary date of this environmental authority is **24 March**.

Environmental authority holder(s)

Name(s)	Registered address
JEMENA QUEENSLAND GAS PIPELINE (1) PTY LTD	Level 16 567 Collins St MELBOURNE VIC 3000
JEMENA QUEENSLAND GAS PIPELINE (2) PTY LTD	Level 16 567 Collins St MELBOURNE VIC 3000

Environmentally relevant activity and location details

Environmentally relevant activity/activities	Location(s)
Schedule 3 - 08 - A petroleum or GHG storage activity, other than items 1 to 7, that includes an activity from Schedule 2 with an AES	PPL30
Ancillary 15 - Fuel burning - Using fuel burning equipment that is capable of burning at least 500kg of fuel in an hour	PPL30
Ancillary 63 - Sewage Treatment - 1(a-i) - Operating sewage treatment works, other than no-release works, with a total daily peak design capacity of 21 to 100EP - if treated effluent is discharged from the works to an infiltration trench or through an irrigation scheme	PPL30

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

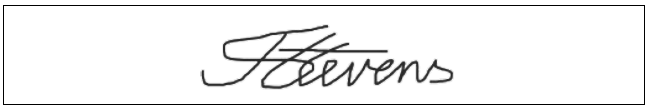
c) otherwise - on the day the authority is issued.

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 *Planning Act 2016* 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.

The anniversary day of this environmental authority is the same day each year as the effective date. The payment of the annual fee will be due each year on this day. An annual return will be due each year on 01 April.

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



Signature

14 May 2025

Date

Hannah Stevens
Department of the Environment, Tourism, Science and Innovation
Delegate of the administering authority
Environmental Protection Act 1994

Enquiries:
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Obligations under the *Environmental Protection Act 1994*

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

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

Other permits required

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

The environmental authority consists of the following schedules:

Schedule A	General
Schedule B	Air
Schedule C	Water
Schedule D	Noise
Schedule E	Waste
Schedule F	Land
Schedule G	Sewage Treatment and Disposal
Schedule H	Storage and Handling of Chemicals, Flammable and Combustible Liquids
Schedule I	Nature Conservation
Schedule J	Declared Wild River Areas
Schedule K	Petroleum Infastructure
Schedule L	Compressor Stations
Schedule M	Monitoring Programs
Schedule N	Community Issues
Schedule O	Notification Proceedures
Schedule P	Definitions
Appendix 1	Plans

SCHEDULE A - GENERAL

PREVENT AND/OR MINIMISE LIKELIHOOD OF ENVIRONMENTAL HARM

(A1) This authority does not authorise environmental harm unless a condition contained within this authority explicitly authorises that harm. Where there is no condition or the authority is silent on a matter, the lack of a condition or silence shall not be construed as authorising harm.

(A2) In carrying out petroleum activities the holder of this authority must prevent and/or minimise the likelihood of environmental harm being caused.

MAINTENANCE OF MEASURES, PLANT AND EQUIPMENT

(A3) The holder of this authority must:

a) install all measures, plant and equipment necessary to ensure compliance with the conditions of this authority; and
b) maintain such measures, plant and equipment in a proper and efficient condition; and
c) operate such measures, plant and equipment in a proper and efficient manner.

(A4) All instruments, equipment and measuring devices used for measuring or monitoring in accordance with any condition of this authority must be calibrated, appropriately operated and maintained.

(A5) No change, replacement or alteration of any plant or equipment is permitted if the change, replacement or alteration increases the environmental harm caused by the petroleum activities unless such change, replacement or alteration is approved by the administering authority.

(A6) The holder of this authority must ensure that daily operation and maintenance of all plant and equipment relating to the authorized petroleum activities are carried out by suitability qualified, competent and experienced person(s).

(A7) All analyses and tests required to be conducted under this authority must be carried out by a laboratory that has NATA certification for such analyses and tests, except as otherwise authorised by the administering authority.

DEFINITIONS

(A8) Words and phrases used in this authority are defined in Schedule P - Definitions. Where a definition for a term used in this authority is sought and the term is not defined within this authority, the definitions in the *Environmental Protection Act 1994*, its Regulation and Environmental Protection Policies must be used.

SCHEDULE B - AIR

DUST AND PARTICULATE MANAGEMENT

(B1) The release of any dust and particulate matter resulting from the petroleum activities must not cause an environmental nuisance at any sensitive or commercial place.

(B2) In relation to a complaint received in Condition (B1), dust and particulate matter must not exceed the following levels at any sensitive or commercial place:

a) dust deposition of 120 milligrams per square metre per day, averaged over one month, when monitored in accordance with AS 3580.10.1 Methods for sampling and analysis of ambient air- Determination of particulates - Deposited matter- Gravimetric *method of 1991;* or
b) a concentration of particulate matter with an aerodynamic diameter of less than 10 micrometre (µm) (PM10) suspended in the atmosphere of 150 micrograms per cubic metre over a 24 hour averaging time, at a nuisance sensitive or commercial place downwind of the site, when monitored in accordance with AS3580.9.6 'Ambient air - Particulate matter - Determination of suspended particulate PM10 high-volume sampler with size-selective inlet Gravimetric *method'.*

ODOUR MANAGEMENT

(B3) The release of noxious and/or offensive odour(s) or any other noxious or offensive airborne contaminant(s) resulting from the petroleum activity must not cause an environmental nuisance at any sensitive or commercial place.

ALTERNATIVE ARRANGEMENTS AVAILABLE WHEN AIR EMISSIONS MAY CAUSE NUISANCE

(B4) Where the holder of this authority has, at their cost, made alternative arrangements to the satisfaction of and with the written agreement of each person affected by nuisance air emissions at a sensitive or commercial place, then the requirements specified in conditions (B1) - (B3) will not apply at that sensitive or commercial place for the period of the alternative arrangements.

(B5) As a minimum each written agreement of an alternative arrangement must state:
a) the location of the sensitive or commercial place;
b) the names of the affected persons;
c) the nature of the alternative arrangement(s) (e.g. provision of alternative accommodation); and
d) the period of the alternative arrangements.

SCHEDULE C - WATER

RELEASE TO WATERS

(C1) The holder of this authority must ensure that the petroleum activities do not result in the release of contaminants to waters unless specifically authorised under this authority.

RELEASE TO LAND

(C2) The holder of this authority may allow pipeline trench water to be released to land for disposal provided that the water does not have any properties nor contain any organisms or other contaminants in concentrations that are capable of causing environmental harm.

(C3) Subject to Condition (C2), the holder of this authority must ensure that the release of trench water to land must be carried out in a manner that ensures that:
a) vegetation is not damaged;
b) soil erosion and soil structure damage is avoided;
c) the quality of groundwater is not adversely affected; and
d) there are no releases to any surface waters.

MANAGEMENT OF HYDRO-TEST WATER

(C4) The holder of this authority must ensure that:
a) hydrotest waters containing chemical additives are not released to land or waters without the prior written approval of the administering authority; and
b) water used for the purpose of hydro-testing the relevant pipeline may only be released to land when water quality limits are in accordance with Schedule C - Table 1.

Schedule C - Table 1 - Limits for the Disposal of Hydrostatic Test Water to Land

Parameter	Value
pH	6.5-8.5 (Range)
Arsenic (mg/L)	2.0 (Maximum)
Cadmium (mg/L)	0.05 (Maximum)
Chromium (mg/L)	1 (Maximum)
Copper (mg/L)	5 (Maximum)
Iron (mg/L)	10 (Maximum)
Lead (mg/L)	5 (Maximum)
Manganese (mg/L)	10 (Maximum)
Zinc (mg/L)	5 (Maximum)
Nitrogen (mg/L)	25 (Maximum)
Phosphorus (mg/L)	0.08 (Maximum)
Electrical Conductivity (uS/cm)	2000(Maximum)

(C5) Subject to Condition (C4)(b), discharge areas must be located more than 100m from the nearest water course.

(C6) The holder of this authority must ensure that the release of hydrotest water authorised by Condition (C4)(b) is carried out in a manner that ensures that:
a) vegetation is not damaged;
b) soil erosion and soil structure damage is avoided;
c) the quality of groundwater is not adversely affected;
d) discharge of hydrotest water is controlled to prevent water runoff from the nominated discharge areas; and
e) there are no releases of trench water or hydrotest waters to any surface waters.

(C7) Subject to Condition (C4)(b), the holder of this authority must develop and submit to the administering authority a Discharge Management Plan for disposing of hydrotest water that demonstrates the method of disposal will meet the objectives of Condition (C6). The Discharge Management Plan must be submitted 4 weeks prior to any discharge event.

(C8) Not withstanding any other condition of this authority, the holder of this authority must ensure that pipeline trench water or hydrotest water, to be released to land for disposal, does not have any properties nor contain any organisms or other contaminants in concentrations that are capable of causing environmental harm. If the water quality is not suitable for release, then it must be collected and disposed of at appropriate facility.

STORMWATER MANAGEMENT

(C9) Except as otherwise provided by the conditions of this authority, petroleum activities must be carried out by such reasonable and practicable means necessary to prevent the contact of incident rainfall and stormwater runoff with waste or other contaminants.

(C10) All stormwater treatment devices must be maintained in proper and efficient working condition.

(C11) The maintenance and cleaning of vehicles and other equipment or plant must be carried out in purpose built facilities or areas where the resultant contaminants will not be released to any waters.

(C12) A stormwater management system must be designed, implemented and maintained so that:
a) in areas with the potential for significant erosion, contour banks and diversion drains are constructed to minimise the potential for overland flow to enter areas disturbed by petroleum activities;
b) erosion and sediment control structures are placed to minimise erosion of disturbed areas and prevent the contamination of any waters; and
c) contaminated stormwater runoff, incident rainfall and leachate is collected; and treated, reused, or released in accordance with the conditions of this authority.

DETERMINING WATER QUALITY CONTAMINANTS

(C13) All determinations of the quality of contaminants released must be made in accordance with methods prescribed in the latest edition of the Environmental Protection Agency Water Quality Sampling Manual, and carried out on samples that are representative.

SCHEDULE D - NOISE

NOISE MANAGEMENT

(D1) Prior to undertaking petroleum activities that are likely to impact upon a sensitive or commercial place, the holder of this authority must investigate potential noise emissions from the proposed petroleum activities and determine if noise emissions are likely to exceed the limits set in Condition (D3).

(D2) If noise emissions are likely to exceed the limits specified under Condition (D3), then the holder must take appropriate measures to either relocate the petroleum activity or incorporate noise abatement and / attenuation measures to mitigate those impacts. These measures must be in place prior to undertaking the proposed petroleum activity.

(D3) Noise emitted from any aspect of petroleum activities must not exceed the noise levels, specified in the table below, at any sensitive place or commercial place, other than those owned by the holder of this authority.

Schedule D - Table 1 - Noise limits

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 6pm**	**6pm to 10pm**	**10pm to 9am**
LA90, adj, 15 mins	lesser of bg+3 or 48	lesser of bg+0 or40	lesser of bg+0 or40	lesser of bg+0 or40	lesser of bg+0 or40	lesser of bg+0 or 40
LA10, adj, 15 mins	lesser of bg+5 or50	lesser of bg+5 or45	lesser of bg+0 or40	lesser of bg+5 or45	lesser of bg+5 or40	lesser of bg+0 or 35
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 or45	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 6pm**	**6pm to 10pm**	**10pm to 9am**
LA90, adj, 15 mins	lesser of bg+5 or50	lesser of bg+0 or45	lesser of bg+0 or40	lesser of bg+3 or 43	lesser of bg+0 or40	lesser of bg+0 or40
LA10, ad.!, 15 mins	lesser of bg+10 or 55	lesser of bg+10 or 50	lesser of bg+5 or45	lesser of bg+10 or 50	lesser of bg+10 or 45	lesser of bg+5 or40
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 or45

[1] bg = **background noise level**

[2] In the event that measured bg is less than 25 dB(A), then 25 dB(A) can be substituted for the measured level.

(D4) In the event of a complaint regarding noise from the petroleum activities at a sensitive place or commercial place, the holder of this 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 Schedule D - Table 1.

(D5) The method of measurement and reporting of noise levels must comply with the latest edition of the Environmental Protection Agency's Noise Measurement Manual or the most recent version of

AS1055 Acoustics - Description and measurement of environmental noise and the EPA Guidelines - Assessment of Low Frequency Noise and Planning for Noise Control.

ALTERNATIVE ARRANGEMENTS AVAILABLE WHEN NOISE EMISSIONS MAY CAUSE NUISANCE FOR LIMITED PERIODS

(D6) Where the holder of this authority has, at their cost, made alternative arrangements to the satisfaction of and with the written agreement of each person affected by nuisance noise emissions at a sensitive or commercial place, then the requirements specified in Schedule D - Table 1 will not apply at that sensitive or commercial place for the period of the alternative arrangements.

(D7) As a minimum each written agreement of an alternative arrangement must state:
a) the location of the sensitive or commercial place;
b) the names of the affected persons;
c) the nature of the alternative arrangement(s) (e.g. provision of alternative accommodation); and
d) the period of the alternative arrangements.

SCHEDULE E - WASTE

(E1) The holder of this authority must ensure that petroleum activities do not result in the release or likely release of a hazardous contaminant to land or waters.

(E2) The holder of this authority must ensure that all general waste produced by the petroleum activities is removed from the relevant petroleum authority and disposed to a facility licensed to accept such waste.

(E3) Any spillage of hazardous contaminants or other contaminants that may cause environmental harm, must be effectively contained and/or cleaned up as quickly as practicable. Such spillage must not be cleaned up by hosing, or otherwise thereby releasing such waste or contaminants to any land or waters.

(E4) All regulated waste removed from the site must be removed by a person who holds a current authority to transport such waste under the provisions of the Environmental Protection Act 1994 and sent to a facility licensed to accept such waste.

(E5) When regulated waste is removed from within the boundary of the petroleum authority and transported by the holder of this authority, a record must be kept of the following:
a) date of waste transport;
b) quantity of waste removed and transported;
c) type of waste removed and transported;
d) route selected for transport of waste;
e) quantity of waste delivered; and
f) any incidents (e.g. spillage) that may have occurred on route.

(E6) If a person removes regulated waste associated with activities within the petroleum authority and disposes of such waste in a manner which is not authorised or is improper or unlawful then, as soon as practicable, notify the administering authority of all relevant facts, matters and circumstances known concerning the disposal.

SCHEDULE F – LAND

MINIMISING DISTURBANCE TO LAND AND SOIL MANAGEMENT

(F1) The holder of the environmental authority must:
a) minimise disturbance to land in order to prevent land degradation; and
b) ensure that for land that is to be significantly disturbed by petroleum activities, the top layer of the soil profile is removed; and
   i. stockpiled in a manner that will preserve its biological and chemical properties, and
   ii. used for rehabilitation purposes in accordance with Condition (F17).

(F2) The holder of this authority must:
a) minimise the risk to wildlife and stock; and
b) construct borrow pits in a manner that will enable effective restoration consistent with the surrounding landuse.

MANAGEMENT OF PEST AND WEED SPECIES

(F3) Pest and weed species must be managed to minimise population growth and dispersal.

(F4) The holder of this authority must develop a Pest and Weed Management Plan (PWM Plan) prior to undertaking the authorised petroleum activities.

(F5) The PWM Plan must be consistent with the relevant Regional Council Pest and Weed Management Plan.

(F6) The PWM Plan must address the following matters:
a) vehicle, plant and equipment inspection procedures;
b) vehicle, plant and equipment wash down procedures;
c) operation and maintenance of wash down facilities;
d) operation and movement of vehicles, plant and equipment throughout the relevant petroleum authority while the authorised petroleum activities are being carried out;
e) monitoring of pest and weed species;
f) corrective actions that will be undertaken in the event that new pest and weed species are identified or existing populations proliferate because of the authorised petroleum activities; and
g) the management of pest animal species.

VEGETATION MANAGEMENT

(F7) The holder of this authority must:
a) prevent or minimise disturbance to vegetation by petroleum activities;
b) manage the effects of clearing to prevent the loss of biodiversity, reduction of ecological processes and land degradation.

(F8) The holder of this authority must consider whether it is feasible to avoid clearing, and where viable alternatives exist, must not clear vegetation:
a) in, or within 50 metres of, the high bank of a watercourse, except where necessary for pipelines to cross watercourses and for the maintenance of existing pipelines within the pipeline easement;
b) in, or within 50 metres of, the static high water mark of wetlands, lakes or springs;
c) in a way that isolates clumps or dissects corridors of vegetation;
d) on slopes greater than 10%;
e) on dispersible soils; and
f) in existing or potential discharge areas.

(F9) Cleared vegetation must be stockpiled in a manner that facilitates respreading or salvaging and does not impede vehicle, stock or wildlife movements.

MANAGEMENT OF FAUNA

(F10) The holder of this authority must develop and implement a fauna management plan that details how the holder will ensure that petroleum activities are undertaken to minimise the potential risk of causing harm to fauna. The Plan must be developed prior to undertaking the authorised petroleum activities and must be submitted to the administering authority before undertaking any construction activities.

(F11) The Plan must consider, but not be limited to:
a) the "Australian Pipeline Industry Association Code of Environmental Practice - Onshore Pipelines" dated October 2005 or subsequent versions thereof;
b) practices to prevent fauna entrapment and death in pipeline trenches;
c) practices to prevent fauna entrapment within well heads, borrow pits, drill sumps and evaporation dams;
d) fauna handling by a suitably qualified person; and
e) fauna awareness training.

PROTECTION OF RIVERINE AREAS

(F12) Activities 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 alternative location is feasible; and
b) be no greater than the minimum area necessary for the purpose of the significant disturbance; and
c) be designed and undertaken by a suitably qualified and experienced person; and
d) have rehabilitation commence immediately upon cessation of the authorised petroleum activities.

(F13) 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 a spring.

(F14) Routine regular and frequent 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 to limit turbidity before activities recommence.

REHABILITATION REQUIREMENTS

(F15) Progressive rehabilitation of disturbed areas must commence as soon as practicable following the completion of any construction or operational works associated with the authorised petroleum activities on the relevant petroleum authority.

(F16) As soon as practicable and within 3 months of cessation of petroleum activities that cause any significant disturbance to land, the holder of this authority must:
a) investigate contaminated land status in accordance with Environmental Protection Act 1994 requirements and the National Environment Protection (Site Assessment) Measure 1999 (NEPM) where land has been subject to contamination caused by petroleum activities authorised under this authority; and,
b) on all significantly disturbed land, take all reasonable and practicable measures to:
    i. re-establish surface drainage lines; and
    ii. reinstate the top layer of the soil profile; and
    iii. promote the re-establishment of vegetation.

(F17) All land significantly disturbed by petroleum activities must be rehabilitated to:
a) a stable landform with a self-sustaining vegetation cover with same species and density of cover to that of the surrounding undisturbed areas;
b) ensure that all land is reinstated to the pre-disturbed land use and suitability class;

c) ensure that the maintenance requirements for rehabilitated land is no greater than that required for the land prior to its disturbance by petroleum activities; and
d) ensure that the water quality of any residual void or water bodies constructed by petroleum activities meets criteria for subsequent uses and does not have potential to cause environmental harm.

(F18) Maintenance of rehabilitated areas must take place to ensure and demonstrate:
a) stability of landforms;
b) erosion control measures remain effective;
c) stormwater runoff and seepage from rehabilitated areas does not negatively affect the
d) environmental values of any waters;
e) plants show healthy growth and recruitment is occurring; and
f) declared pest plants are controlled on rehabilitated areas to a level consistent with the
g) surrounding property and have not spread to unaffected areas through authorised petroleum activities.

(F19) 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 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 3 years.

SCHEDULE G – SEWAGE TREATMENT AND DISPOSAL

SEWAGE EFFLUENT MANAGEMENT PLAN

(G1) The holder of this authority must develop and submit to the administering authority a Sewage Effluent Management Plan for the proposed sewage treatment system as outlined in the relevant Environmental Management Plan. The Sewage Effluent Management Plan must address the following matters:
a) identification of environmental issues and potential impacts;
b) control measures for routine operations to minimise likelihood of environmental harm;
c) contingency plans and emergency procedures for non-routine situations;
d) organisational structure and responsibility;
e) effective communication;
f) monitoring of contaminant releases;
g) conducting environmental impact assessments;
h) staff training;
i) record keeping; and
j) periodic review of environmental performance and continual improvement.

(G2) The holder of this authority must submit the Sewage Effluent Management Plan for review to the administering authority within four (4) weeks after this authority is issued.

(G3) The holder of this authority must take advice from the administering authority and, based on that advice, amend the Sewage Effluent Management Plan accordingly if required.

(G4) The holder of this authority must, for all sewage treatment works operate them in accordance with the Sewage Effluent Management Plan.

(G5) The Sewage Effluent Management Plan must not be implemented or amended in a way that contravenes any condition of this authority.

IRRIGATION OF SEWAGE EFFLUENT

(G6) The treated effluent from the sewage treatment plant must only be released to land at designated irrigation areas as determined in the Sewage Effluent Management Plan in compliance with the limits stated in Schedule G - Table 1.

(G7) Notwithstanding the quality characteristics limits specified in Schedule G - Table 1, releases of treated sewage effluent must not have any properties nor contain any organisms or other contaminants in concentrations that are capable of causing environmental harm.

Schedule G - Table 1 Contaminant release limits to land at Compressor Station 4

Quality Characteristics	Units	Release Limit
Biological Oxygen Demand	mg/L	20 (maximum)
pH	scale	6.0 — 8.5 (range)
Total Suspended Solids	mg/L	30 (maximum)
E. coli (thermotolerant coliform units/100m1)	Colony forming units/100mL	<1000 (maximum)
Total Nitrogen	mg/L	35 (Maximum)
Total Phosphorus	mg/L	10 (Maximum)
Dissolved Oxygen	mg/L	2 (Minimum)

(G8) The irrigation of treated effluent must be carried out in a manner such that:
a) vegetation is not damaged;
b) soil erosion and soil structure damage is avoided;
c) there is minimal surface ponding of effluent;
d) percolation of effluent beyond the plant root zone is minimised;
e) the capacity of the land to assimilate nitrogen, phosphorous, salts, organic matter as measured by oxygen demand and water is not exceeded, and
f) the quality of groundwater is not adversely affected.

(G9) Notices must be prominently displayed on any treated effluent irrigation area warning the public that the area is irrigated with treated effluent and not to use or drink the effluent. These notices must be maintained in a visible and legible condition. Public access to any sewage effluent land disposal area must be denied during the release of contaminants to the land and until the irrigation/disposal area has dried.

(G10) When conditions prevent the irrigation of treated effluent to land (such as during or following rain events), the contaminants must be directed to a wet weather storage or alternative measures must be taken to store/lawfully dispose of effluent (such as tanking off site to another treatment plant or sewer). A record must be kept of any removal or discharge off site, including destination, transporter, dates and volumes.

(G11) Monitoring must be undertaken at the frequency specified under the Effluent Management Plan and records kept of contaminant releases to land for the parameters specified in Schedule G - Table 1. All determinations of the quality of contaminants released must be:
a) made in accordance with methods prescribed in the latest edition of the Environmental Protection Agency Water Quality Sampling Manual; and
b) carried out on samples that are representative of the discharge.

SCHEDULE H – STORAGE AND HANDLING OF CHEMICALS, FLAMABLESEWAGE TREATMENT AND DISPOSAL

(H1) All explosives, hazardous chemicals, corrosive substances, toxic substances, gases, dangerous goods, flammable and combustible liquids (including petroleum products and associated piping and infrastructure), must be stored and handled in accordance with the relevant Australian Standard where such is available.

(H2) Notwithstanding the requirements of any Australian Standard, any liquids stored on site that have the potential to cause environmental harm must be stored in or serviced by an effective containment system that is impervious to the materials stored and managed to prevent the release of liquids to waters or land. Where no relevant Australian Standard is available, the following must be applied:

a) storage tanks must be bunded so that the capacity and construction of the bund is sufficient to contain 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; and
b) drum storages must be bunded so that the capacity and construction of the bund is sufficient to contain at least 25% of the maximum design storage volume within the bund.

(H3) All containment systems must be designed to minimise rainfall collection within the system.

SCHEDULE I – NATURE CONSERVATION

ENVIRONMENTALLY SENSITIVE AREAS

(I1) The holder of this authority must ensure that:
a) petroleum activities are not conducted within a category A environmentally sensitive area;
b) petroleum activities other than low impact petroleum activities are not conducted within 1km of a category A environmentally sensitive area or within 200m of a category B environmentally sensitive area;
c) petroleum activities other than low impact petroleum activities, are not conducted in a category B environmentally sensitive area or a category C environmentally sensitive area without the written agreement from the relevant administering authority;
d) if the relevant administering authority gives written permission to conduct petroleum activities in a category B environmentally sensitive area or a category C environmentally sensitive area with conditions that are in conflict with the conditions of this authority, the holder must as a minimum comply with the conditions of this authority; and
e) staff, contractors or agents carrying out petroleum activities on a petroleum authority are aware of the location of any relevant category A, B or C environmentally sensitive areas within the petroleum authority.

(I2) Notwithstanding Condition (I1)(a) (b) and (c), where necessary, petroleum activities, including authorised maintenance activities, can be conducted within Category B and Category C environmentally sensitive areas and their respective primary protection zone, provided the activities occur wholly within the existing disturbed PPL30 easement.

(I3) The holder of this authority must advise the relevant administering authority before conducting petroleum activities, including authorised maintenance activities that are within or outside of the existing disturbed PPL30 easement within the Category C environmentally sensitive area identified as the Callide Timber Reserve, and its primary protection zone.

(I4) Notwithstanding Condition (I1)(b), Cathodic Protection Point KP421 is authorised within the primary protection zone of a Category B ESA at the location identified in Schedule I - Table 1: Authorised petroleum activities in primary protection zone of Environmentally Sensitive Areas.

Schedule I - Table 1: Authorised petroleum activities in primary protection zone of Environmentally Sensitive Areas

Location	Maximum area of disturbance
Cathodic Protection Point KP421 on Lot 64 RN373 between Point 1 - Latitude: -24.275519 Longitude: 150.48105 Point 2 - Latitude -24.27403 Longitude: 150.480645 Point 3 – Latitude -24.275495 Longitude: 150.4811144 Point 4 – Latitude -24.274019 Longitude: 150.480693	900m^2

SCHEDULE K – PETROLEUM INFRASTRUCTURE

GENERAL CONDITIONS

(K1) Petroleum infrastructure authorised under this authority must be located within the area defined by the relevant petroleum authority as shown in Appendix 1.

(K2) All petroleum infrastructure (including buildings, structures, petroleum equipment and plant erected and/or used for the petroleum activities) must be removed from the relevant petroleum authority prior to surrender of this authority, accept where agreed in writing by the administering authority and the current landowner.

(K3) Prior to the commencement of decommissioning or abandonment activities, the scope of work for decommissioning or abandonment of project infrastructure shall be developed and agreed to with the administering authority.

PIPELINES - GENERAL CONDITIONS

(K4) The holder of this authority must decommission each petroleum and gas pipeline to a situation where ongoing, or potential environmental harm is prevented or minimised. As a minimum, pipelines must be decommissioned such that:
a) they no longer contain hazardous contaminants;
b) they are left is stable condition;
c) all the above ground infrastructure is removed, and
d) all areas disturbed by above ground infrastructure are rehabilitated in accordance with the requirements of this authority.

(K5) Prior to the commencement of decommissioning or abandonment activities the scope of work for decommissioning or abandonment shall be developed and agreed to with the administering authority.

LOCATION OF PETROLEUM PIPELINES

(K6) The gas pipeline must only be located within the PPL30 petroleum authority as shown in Appendix 1 and defined by coordinates listed in Schedule K, Table 1 — Location of the PPL30 pipeline corridor.

(K7) The relevant pipeline facilities for the gas pipeline authorised under this authority is to be located in accordance with Schedule K, Table 2 – PPL30 Pipeline Facilities.

Schedule K - Table 1 - Location of the PPL30 pipeline corridor

Pipeline Licence No.	Location	Latitude (GDA94)	Longitude (GDA94)
PPL30	Wallumbilla Meter Station	-26.692444	149.184017
	Westgrove Junction Meter Station	-25.452864	148.632004
	Rolleston Junction Meter Station	-24.708639	148.844389
	Fairview Meter Station	-25.616155	148.923427
	Banana Meter Station	-24.359027	150.160469
	Gladstone City Gate Meter Regulating Station	-23.822598	151.154730

	QAL Meter Station	-23.86352	151.287193
	QER Meter Station	-23.788131	151.148932

Note: The holder of the authority must include at a minimum four control points for each pipeline including the start and end points for each pipeline.

Schedule K - Table 2 - PPL30 Pipeline Facilities

Pipeline Facilities	Description	Location (KP)
Pig Launchers and/or Receivers	Wallumbilla Meter Station	0
	Gooimbah Scraper Station	93.917
	Westgrove Junction Meter Station	154.038
	Rolleston Junction Meter Station	243.449
	Oombabeer Scraper Station	318.070
	Banana Meter Station	386.398
	Bell Creek Scraper Station	449.969
	Gladstone City Gate Meter Regulating Station	514.312
	Larcom Station (RBL)	0.0 (RBL)
	Bajool Scraper Station (RBL)	50.365 (RBL)
	Rockhampton City Gate (RBL)	96.704 (RBL)
	Ridgelands Station (FE)	25.636.(FE)
	Fairview Meter Station (FE)	0.0 (FE)
	QAL Meter Station (GCM)	16.1 (GCM)
	Arcadia Valley MLV Scraper Station	208.043
	Rolleston Compressor Station Scraper Station	243.449
Compressor Stations	Rolleston Compressor Station	243.449
	Banana Compressor Station	386.398
Supervisory Control and Data Acquisition (SCADA)	Wallumbilla Meter Station	0
	Westgrove Junction Meter Station	154.038
	Rolleston Junction Meter Station	243.449
	Banana Meter Station	386,398
	Gladstone City Gate Meter Regulating Station	514.312
	Yarwun Meter Station	
Pipeline markers	At regular intervals as required by AS/NZ 2885: 2007	
Main Line Valves	Wallumbilla Meter Station	0
	Mt Saltbush MLV	41.512
	Gooimbah Scraper Station	93.917
	Ridgelands Station	134.5
	Westgrove Junction Meter Station	154.038
	Arcadia MLV	208.043
	Rolleston Meter Station	243.449
	Oombabeer Scraper Station	318.070
	Banana Meter Station	386.398
	Bell Creek Scraper Station	449.969
	Calliope MLV	481.671
	Gladstone City Gate Meter Regulating Station	514.312
	Yarwun Meter Station	
	Bajool Station (RBL)	50.365 (RBL)
	MLV 1 (Gavial Rd)	75.870 (RBL)
	MLV 2 ((Airport) (RBL)	86.362 (RBL)
	Red Rover Rd (MLV) GCM)	8.398 (GCM)

Meter Station	Wallumbilla Meter Station Westgrove Junction Meter Station Rolleston Meter Station Moura Inlet Meter Station Gladstone City Gate Meter Regulating Station Yarwun Meter Station Larcom Station (RBL) QAL Meter Station (GCM) AMC Meter Station (AMCE) Ticor Meter Station (TE) QER Meter Station (SOSE) Fairview Meter Station (FE)	0 154.038 243.449 386.398 514.312 0.0 (RBL) 16.1 (GCM) 0.5 (AMCE) 1.93 (TE) 2.826 (SOSE) 0.0 (FE)
Cathodic Protection	Impressed current cathodic protection units at each scraper station and at each end of the pipeline.	Test points spaced at approximately every 2km.
Leak Detection and line break	NA	NA

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

EMERGENCY RESPONSE PLANS FOR DEALING WITH PIPELINE INCIDENTS THAT MAY RESULT IN ENVIRONMENTAL HARM

(K8) The holder of this authority must develop and submit to the Administering Authority a copy of the original or subsequently amended Emergency Response Plan for the operating of the pipelines and associated facilities to aid in the effective response to an emergency situation that may result in environmental harm. The plan shall include:
a) means by which an emergency response is initiated;
b) defined key roles and responsibilities required to respond to an emergency;
c) facilities required to coordinate the emergency response;
d) key contact list;
e) criteria for escalation of an emergency
f) likely emergency scenarios and guidelines for responding to such scenarios;
g) communication and documentation requirements; and
h) evacuation protocols and muster points.

(K9) The Emergency Response Plan shall be reviewed annually to validate the adequacy of the scope of emergency scenarios and adequacy of the content.

(K10) In accordance with Condition (K9), the holder of this authority must ensure that relevant personnel shall be trained and competent to effectively fulfill their roles required as detailed in the Emergency Response Plan to deal with pipeline incidents that could potentially result in environmental harm. Training records are to be kept for five years.

(K11) The holder of this authority must undertake emergency exercises to:
a) test the effectiveness of the emergency response plan;
b) validate the competency of key emergency response personnel;
c) assess capability to respond to an emergency;
d) reinforce prior training; and
e) identify opportunities for improvement.

Note: Emergency response exercises may be in the form of simulated emergencies, practical drills, desktop exercises, resources and equipment checks, or other exercises designed to systematically include all personnel likely to be involved.

(K12) Subject to condition (K11), the holder of this authority must notify the administering authority in writing at least ten (10) business days prior to conducting an emergency response exercise. The holder of this authority must also telephone the DETSI Pollution Hotline (1300 130 372) or local office during the emergency response exercise.

SCHEDULE L – COMPRESSOR STATIONS

FUEL BURNING

(L1) The release of contaminants to the atmosphere from a point source must only occur from those release points identified in Schedule L - Table 1 and 2 and must be directed vertically upwards without any impedance or hindrance.

(L2) Contaminants must be released to the atmosphere from a release point at a height and flow rate not less than the corresponding height and velocity stated for that release point stated in Schedule L - Table 1 and 2.

(L3) Contaminants must not be released to the atmosphere from a release point at a mass emission rate/ concentration, as measured at a monitoring point, in excess of that stated in Schedule L -Table 1 and 2 and monitored not less frequently than Schedule L - Table 3.

Schedule L - Table 1 - Release of Contaminants at Banana Compressor

Release point number	Minimum release height (metres)	Minimum velocity (m/sec)	Contaminant release	Maximum release limit
A1 Natural Gas Engine	14	7	NOx	250 mg/Nm^3 @ 5% O_2 (dry) and 1.0 grams/second
A2 Gas Engine Alternator	4.2	9.5	NOx	1700 mg/Nm^3 @ 5% O_2 (dry) and 0.32 grams/second

Schedule L - Table 2 - Release of Contaminants at Rolleston Compressor Station

Release point number	Minimum release height (metres)	Minimum velocity (m/sec)	Contaminant release	Maximum release limit
B1 Natural Gas Engine	14	7	NOx	250 mg/Nm^3 @ 5% O_2 (dry) and 1.0 grams/second
B2 Gas Engine Alternator	4.2	9.5	NOx	1700 mg/Nm^3 @ 5% O_2 (dry) and 0.32 grams/second

(L4) The only type of fuel to be burnt in the compressors, under normal operating conditions, is natural gas.

(L5) Air intake silencers, exhaust silencers and pipe lagging must be fitted to all compressors within the Banana and Rolleston Compressor Stations.

(L6) The compressors at the Banana and Rolleston Compressor Stations must be located within an acoustic housing.

MONITORING OF CONTAMINANT RELEASES TO THE ATMOSPHERE

(L7) The holder of this authority must conduct and keep records of a monitoring program of contaminant release to the atmosphere at the release points, frequency, and the parameters specified in Schedule L - Table 3 and which complies with the following:

a) monitoring provision for the release points listed in Schedule L - Table 3 must comply with the Australian Standard AS4323.1 - 1995 'Stationary source emissions Method 1: Selection of sampling provisions'.
b) the following test must be performed for each required determination specified in Table 3:
   i. gas velocity and volume flow rate;
   ii. temperature and oxygen content;
   iii. water vapour concentration.
c) where practicable samples taken must be representative of the contaminants discharged when emissions are expected to be at maximum rates.
d) during the sampling period the following additional information must be gathered:
   i. number of operating units;
   ii. reference to actual test methods and accuracy's.

Schedule L - Table 3 - Required Release Point Determinations

Determination Required	Release Point Numbers	Frequency
Mass emission rate and concentration of oxides of nitrogen (NOx) in the flue gas at the specified oxygen reference level.	Stacks A1, A2 and B1, B2	During commissioning of the plant, twice a year for the first two years of operation and then annually thereafter.

(L8) When requested by the administering Authority, contaminant monitoring and recording must be undertaken to investigate any complaint, and the results notified with 14 days to the Administering Authority. When monitoring is requested the following must be complied with:

a) monitoring provisions for the release points listed in Schedule L - Table 3 must comply with the Australian Standard AS42323.1 - 1995 'Stationary source emissions Method 1: Selection of sampling positions'.
b) the following test must be performed for each required determination specified in Schedule L - Table 1, 2 and 3.
   i. gas velocity and volume flow rate;
   ii. temperature and oxygen content;
   iii. water vapour concentration.
c) where practicable samples taken must be representative of the contaminants discharged when emissions are expected to be at maximum rates.
d) during the sampling period the following additional information must be gathered:
   i. number of operating units;
   ii. reference to actual test methods and accuracy's.

(L9) All release points referred to in Schedule L - Table 3 - Required Release Point Determinations, must be conspicuously marked with the corresponding release point number and be located in accordance with Map 3 and 4, Appendix 3.

(L10) All determinations of air contaminant releases to the atmosphere must be made in accordance with the methods prescribed in the most recent version of the Environmental Protection Agency's Air Quality Sampling Manual. If monitoring requirements for specific contaminants are not described in the Environmental Protection Agency's Air Quality Sampling Manual, monitoring protocols must be in accordance with a method as approved by New South Wales EPA, Victorian EPA or United States EPA.

SCHEDULE M – MONITORING PROGRAMS

(M1) The holder of this authority must:
a) develop and implement a monitoring program that will demonstrate compliance with the conditions in this authority; and
b) document the monitoring and inspections carried out under the program and any actions taken.

(M2) The holder of this authority must ensure that a suitably qualified, experienced and competent person(s) conduct all monitoring required by this authority.

(M3) Record, compile and keep for a minimum of five years all monitoring results required by this authority and make available for inspection all or any of these records upon request by the administering authority. Monitoring results relating to rehabilitation should be kept until the relevant petroleum tenure is surrendered.

(M4) Any management or monitoring plans, systems or programs required to be developed and implemented by a condition of this authority must be reviewed for performance and amended if required on an annual basis.

(M5) An annual monitoring report must be prepared each year and presented to the administering authority when requested. This report shall include but not be limited to:
a) a summary of the previous twelve (12) months monitoring results obtained under any monitoring programs required under this authority and, a comparison of the previous twelve (12) months monitoring results to both this authority limits and to relevant prior results; and
b) an evaluation/explanation of the data from any monitoring programs; and
c) a summary of any record of quantities of releases required to be kept under this authority; and
d) a summary of the record of equipment failures or events recorded for any site under this approval;
e) an outline of actions taken or proposed to minimise the environmental risk from any deficiency identified by the monitoring or recording programs; and
f) a record of petroleum activities, including authorised maintenance activities in Category B and C environmentally sensitive areas.

SCHEDULE N – COMMUNITY ISSUES

(N1) When the administering authority advises the holder of a complaint alleging nuisance, the holder must investigate the complaint and advise the administering authority in writing of the action proposed or undertaken in relation to the complaint.

(N2) When requested by the administering authority, the holder of this authority must undertake monitoring specified by the administering authority, within a reasonable and practicable timeframe nominated by the administering authority to investigate any complaint of environmental harm at any sensitive or commercial place.

(N3) The results of the investigation (including an analysis and interpretation of the monitoring results) and abatement measures implemented must be provided to the administering authority within fourteen (14) days of completion of the investigation, or receipt of monitoring results, whichever is the latter.

(N4) If monitoring in accordance with Condition (N2), indicates that emissions exceed the limits set by this authority or are causing nuisance, then the holder of this authority must:
a) address the complaint including the use of appropriate dispute resolution if required; and/or
b) as soon as practicable implement abatement or attenuation measures so that noise, dust, particulate or odour emissions from the authorised activities do not result in further environmental nuisance.

(N5) Maintain a record of complaints and incidents causing environmental harm, and actions taken in response to the complaint or incident.

(N6) The holder of this authority must record the following details for all complaints received and provide this information to the administering authority on request:
a) name, address and contact number for complainant;
b) time and date of complaint;
c) reasons for the complaint;
d) investigations undertaken;
e) conclusions formed;
f) actions taken to resolve complaint;
g) any abatement measures implemented; and
h) person responsible for resolving the complaint.

(N7) Retain the record of complaints required by this condition for 5 years.

SCHEDULE O – NOTIFICATION PROCEDURES

(O1) The holder of this authority must telephone the DETSI Pollution Hotline (1300 130 372) or local office as soon as practicable after becoming aware of any release of contaminants not in accordance with the conditions of this authority or any event where environmental harm has been caused or may be threatened.

(O2) Subject to Condition (O1), the holder of this authority is required to report in the case of uncontained spills (including hydrocarbon, associated water or a mixtures of both) of the following volumes or kind:
a) releases of any volume to water; and
b) releases of volume greater than 200L to land; and
c) releases of any volumes where potential serious or material environmental harm is considered to exist.

(O3) The notification of emergencies or incidents as required by condition (O1) and (O2) must include but not be limited to the following:
a) the authority number and name of holder;
b) the name and telephone number of the designated contact person;
c) the location of the emergency or incident;
d) the date and time of the release;
e) the time the holder of the authority became aware of the emergency or incident;
f) the estimated quantity and type of any substances involved in the incident;
g) the actual or potential suspected cause of the release;
h) a description of the effects of the incident including the environmental harm caused, threatened, or suspected to be caused by the release;
i) any sampling conducted or proposed, relevant to the emergency or incident; and
j) actions taken to prevent any further release and mitigate any environmental harm caused by the release.

(O4) Within fourteen (14) days following the initial notification of an emergency or incident or receipt of monitoring results, whichever is the later, further written advice must be provided to the administering authority, including the following:
a) results and interpretation of any samples taken and analysed;
b) outcomes of actions taken at the time to prevent or minimise environmental harm; and
c) proposed actions to prevent a recurrence of the emergency or incident.

(O5) As soon as practicable, but not more than six (6) weeks following the conduct of any environmental monitoring performed in relation to the emergency or incident, which results in the release of contaminants not in accordance, or reasonably expected to be not in accordance with the conditions of this authority, written advice must be provided of the results of any such monitoring performed by the administering authority.

SCHEDULE P - DEFINITIONS

TERM	MEANING
Administering authority	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 the Environment, Tourism, Science and Innovation; or (c) another State Government Department, Authority, Storage Operator, Board or Trust, whose role is to administer provisions under other enacted legislation.
Authorised maintenance activities	means any of the following activities: (a) Clearing Easement Regrowth (including native vegetation) – involving slashing, tree lopping, brush cutters, mulching and foliar spraying activities; (b) Pest Weed Control – involving herbicide application and manual weed removal; (c) Maintaining Erosion and Sediment Control Structures; (d) Cathodic Protection (CP) System Maintenance – involving checking CP test points and effectiveness of anode beds; and (e) Annual Pipeline Dig-Ups – involving excavation works, repair and restoration works.
Authority	Means an environmental authority granted in relation to an environmentally relevant activity under the *Environmental Protection Act 1994.*
Associated water	Underground water taken from or interfered with from a petroleum well during the course of or resulting from carrying out petroleum activities. Associated water may be potable or suitable for stock purposes, or saline, high in fluoride, contain hydrocarbons, and/or is otherwise contaminated by a hazardous contaminant. It may be classified as a hazardous waste.
AS 2885	Australian Standard Pipelines — Gas and Liquid Petroleum (2007 or subsequent versions thereof)
Background noise level	Background noise level $_{490,15min}$ means the A-weighted sound pressure level of the residual noise exceeded for 90% of a representative time period of not less than 15 minutes, using time weighting, **'F'.**
Category A ESA	has the meaning in the Environmental Protection Regulation 2019.
Category B ESA	has the meaning in the Environmental Protection Regulation 2019.
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

Competent person	A person with the demonstrated skill and knowledge required to carry out the task to a standard necessary for the reliance upon collected data or protection of the environment.
Commercial place	A work place used as an office or for business or commercial purposes, which is not part of the petroleum activity and does not include employees' accommodation or public roads.
Construction	Includes building a new dam or pipeline and modifying or lifting an existing dam or pipeline.
Contaminant	The *Environmental Protection Act 1994* defines, under Section 11, a contaminant as: (a) a gas, liquid or solid; or (b) an odour; or (c) an organism (whether alive or dead), including a virus; or (d) energy, including noise, heat, radioactivity and electromagnetic radiation; or (e) combination of contaminants.
Dam	Means a structure that is designed to contain, divert or control flowable substances - including any substances that are thereby contained, diverted or controlled by that structure; but does *not* mean a fabricated or manufactured tank or container designed to a recognised standard. The flowable substances referred to in this context may have been, are, or could be flowable under any perceivable conditions; and thereby present a hazard as defined in this authority. In case there is any doubt, a levee or a bund is a dam.
Design plan	Is the documentation required to describe the physical dimensions of the pipeline, the materials and standards to be used for construction of the pipeline, and the procedures and criteria to be used for operating the pipeline. It will also include the decommissioning and rehabilitation objectives in terms of procedures, works and outcomes at the end of pipeline life. The documents must include design and investigation reports, specifications and certifications; and may include 'as constructed' drawings.
Discharge area	Discharge area is: (a) that part of the land surface where groundwater discharge produces a net movement of water out of the groundwater; and (b) identified by an assessment process consistent with the document: Salinity Management Handbook, Queensland Department of Natural Resources, 1997; or (c) identified by an approved salinity hazard map held by the Department of Natural Resources, Mines and Water.
Dispersible soils	Soils in which clay material disintegrates into particles less than 2 microns across. This can be observed within 24 hours when soil crumbs are submerged in distilled water.
Dissects corridors	Dissects corridors of vegetation means clearing vegetation that results in a break more than 50 metres wide across a corridor.
Environmental Management Plan	The environmental management plan is an environmental management document to be submitted during the application process for a level 1 environmental authority (petroleum activities).
Environmental nuisance	Environmental nuisance is unreasonable interference or likely interference with an environmental value caused by: (a) aerosols, fumes, light, noise, odour, particles or smoke; or (b) an unhealthy, offensive or unsightly condition because of contamination; or (c) another way prescribed by regulation.

Environmentally sensitive area	means Category A, B or C environmentally sensitive areas (ESAs).
Groundwater	Groundwater means subsurface water, generally saturating the soil or rock in which it occurs.
Hazardous contaminant	A contaminant that, if improperly treated, stored, disposed of or otherwise managed, is likely to cause serious or material environmental harm because of: (a) its quantity, concentration, acute or chronic toxic effects, carcinogenicity, teratogenicity, mutagenicity, corrosiveness, explosiveness, radioactivity or flammability; or (b) its physical, chemical or infectious characteristics.
Infrastructure	Means water storage dams, well sites, pipelines, roads and tracks, buildings and other structures built for the purpose of petroleum activities.
Licensed waste disposal facility	A facility approved under a development approval and operated by a holder of a registration certificate for environmentally relevant activity item number 60 under Schedule 1 of the *Environmental Protection Regulation 2008.*
$L_{A\ max,\ adj,\ T}$	$L_{A\ max,\ adj,\ T}$ is the adjusted average maximum A-weighted sound pressure level measured over a time period T. The maxima must be measured on a sound level meter with a frequency-weighting that corresponds to perceived loudness ("A" weighting) and the meter must be set to the "fast" response time-weighting. The measured values are to be adjusted upwards by 2 dB(A) to 5 dB(A) if the noise source has tonal characteristics. The measuring period must be in excess of five minutes. The arithmetic average of the adjusted maxima, after eliminating any extraneous noise peaks, is the measure used to characterise the noise environment. (This measure will generally be similar to a percent exceedance of 10% or less. Refer to Australian Standard AS1055.)
Lake	A natural or artificial body of water, either permanent or intermittent.
Land degradation	Land degradation includes the following: (a) soil erosion; (b) rising water tables; (c) the expression of salinity; (d) mass movement by gravity of soil or rock; (e) stream bank instability; and (f) a process that results in declining water quality.
Land use	Term to describe the selected final use of the land, which is planned to occur after the cessation of petroleum operations.
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.
Noise	Noise means a sound or vibration of any frequency, whether transmitted through air or any other physical medium.
Normal cubic metre (Nm^3)	The volume of dry gaseous contaminant which occupies one cubic metre at a temperature of zero degrees Celsius and at an absolute pressure of 101.3 kilopascals.

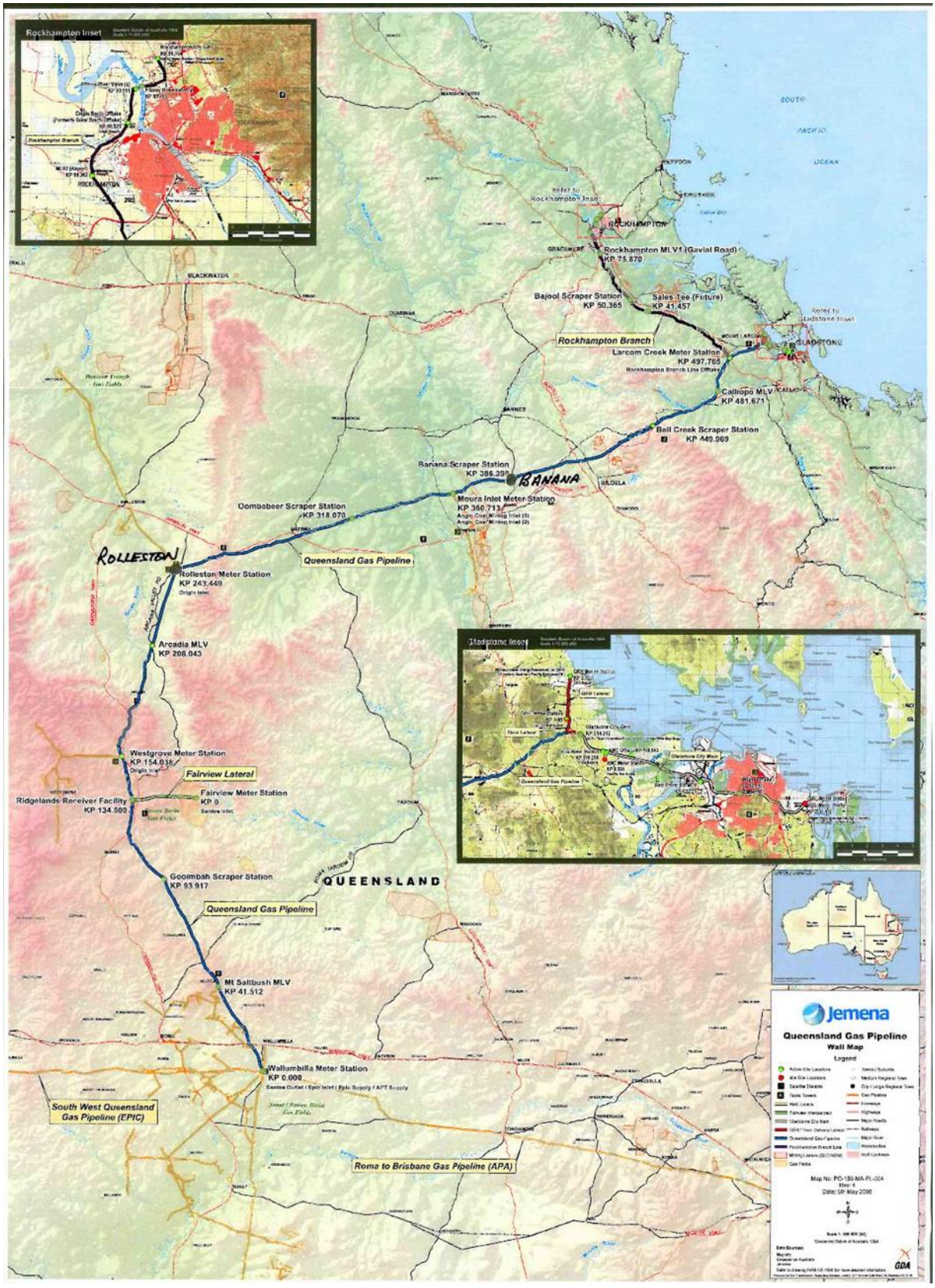
Operational land	Means the land associated with the petroleum project for which this authority has been issued.
Petroleum activities	Petroleum activities means activities authorised to take place on land subject to a petroleum authority, including rehabilitation and decommissioning activities.
Petroleum authority	A petroleum authority is— (a) a 1923 Act petroleum tenure granted under the *Petroleum Act 1923;* or (b) a petroleum 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.*
Petroleum project	A petroleum project is all activities carried out, or proposed to be carried out, under 1 or more of the following, in any combination, as a single integrated operation— (a) a 1923 Act petroleum tenure granted under the *Petroleum Act 1923;* (b) a petroleum authority granted under the *Petroleum and Gas (Production and Safety) Act 2004;* (c) a licence, permit, pipeline licence, primary licence, secondary licence or special prospecting authority granted under the *Petroleum (Submerged Lands) Act 1982*
Petroleum works site	A separate location on the area subject to a petroleum authority where petroleum activities are undertaken (e.g. a well site, seismic survey line, camp site, compressor site, evaporation pond etc).
Potential discharge area	Low lying parts of the landscape (relative to adjacent terrain) where groundwater movements are within 2-5m of the land surface and the landscape may be subject to upward movement of groundwater in the future.
Primary Protection Zone	means an area within: a) 1km from the boundary of a Category A ESA; b) 200m from the boundary of a Category B ESA.
Protected area	A protected area under the *Nature Conservation Act 1992;* or o a marine park under the *Marine Parks Act 1992;* or o a World Heritage Area.
Progressive rehabilitation	Rehabilitation (defined below) undertaken progressively or as a staged approach to rehabilitation as petroleum operations are ongoing.
Rehabilitation	The process of reshaping and revegetating land to restore it to a stable landform and in accordance with the acceptance criteria set out in this environmental authority and, where relevant, includes remediation of contaminated land.
Representative	A sample set which covers the variance in monitoring or other data either due to natural changes or operational phases of the petroleum activities.
Riverine area	Refers to the land confined to the flood flow channel of a watercourse.
Sedimentation pond	A bunded or excavated structure used to contain and settle waterborne sediment running off disturbed areas.
Self sustaining	An area of land that has been rehabilitated and has maintained the required acceptance criteria without human intervention for a period nominated by the administering authority.

Sensitive place	Sensitive place means any of the following places — (a) a dwelling; (b) a library, childcare centre, kindergarten, school, college, university or other educational institution; (c) a hospital, surgery or other medical institution; (d) a protected area or an area identified under a conservation plan as a critical habitat or an area of major interest, under the Nature Conservation Act 1992; (e) a marine park under the Marine Parks Act 1982; and (f) a park or garden that is open to the public (whether or not on payment of money) for use other than for sport or organised entertainment).
Sewage	Sewage is the effluent discharged from a sanitary appliance (i.e. sewage treatment works).
Significantly disturbed land	Significantly disturbed land and significant disturbance means land if: (a) it is contaminated land; or (b) it has been disturbed and human intervention is needed to rehabilitate it: i. to a state required under the relevant environmental authority; or ii. if the environmental authority does not require the land to be rehabilitated to a particular state — to its state immediately before the disturbance. Examples of a 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, waterway, wetland or lake where petroleum activities occur and human intervention is necessary to restore or stabilise the disturbed area; (e) areas submerged by hazardous waste storage and dam walls in all cases; (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, 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 or long-term infrastructure; (d) areas that were significantly disturbed prior to the grant of the environmental authority, unless those areas are re-disturbed by the holder of the environmental authority during the term of the authority; (e) minor disturbances such as drill sumps and minor respreading of soil on GPS located seismic lines.
Stable	Means land form 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.

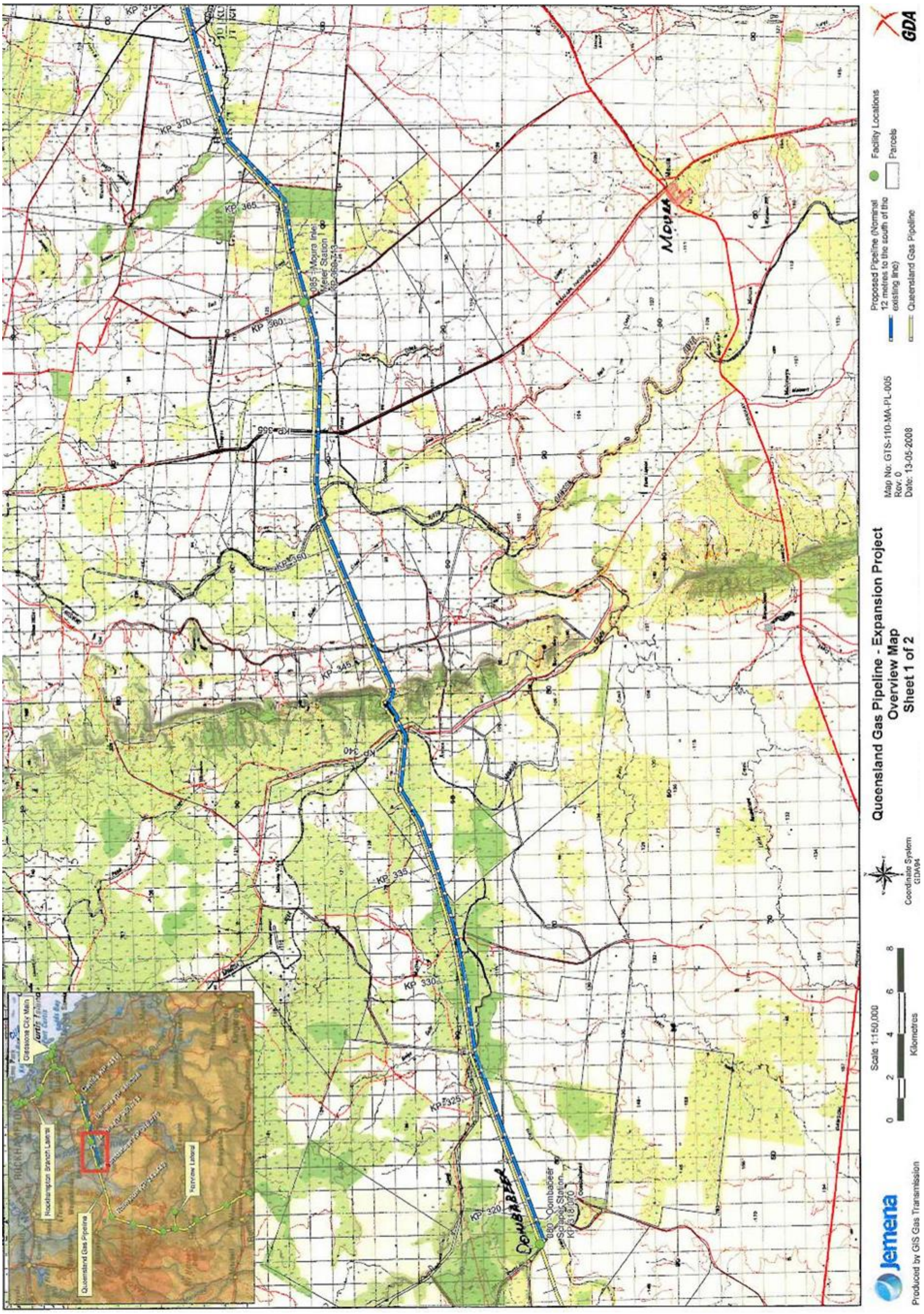
Suitably qualified and experienced person for pipelines	Means one who is a Registered Professional Engineer of Queensland (RPEQ) under the provisions of the *Professional Engineers Act 1988,* OR registered as a National Professional Engineer (NPER) with the Institution of Engineers Australia, OR holds equivalent professional qualifications to the satisfaction of the administering authority for the Act, in these 'relevant fields' of designing, constructing, operating and decommissioning high pressure petroleum pipelines.
Top layer	The surface layer of a soil profile, which is usually more fertile, darker in colour, better structured and supports greater biological activity than underlying layers. The surface layer may vary in depth depending on soil forming factors, including parent material, location and slope, but generally is not greater than about 300mm in depth from natural surface.
Void	Means any man-made, open excavation in the ground.
Watercourse	has the meaning in Schedule 4 of the Environmental Protection Act 1994 and means: 1) a river, creek or stream in which water flows permanently or intermittently— (a) in a natural channel, whether artificially improved or not; or (b) in an artificial channel that has changed the course of the watercourse. 2) Watercourse includes the bed and banks and any other element of a river, creek or stream confining or containing water.
Waters	Waters includes river, stream, lake, lagoon, pond, swamp, wetland, unconfined surface water, unconfined water natural or artificial watercourse, bed and bank of any waters, dams, non-tidal or tidal waters (including the sea) or any part-thereof, stormwater channel, stormwater drain, roadside gutter, stormwater run-off, and groundwater and any part thereof.
Waterway	A naturally occurring feature where surface water runoff normally collects, such as a clearly defined swale or gully, but only flows in response to a local rainfall event.
Wetland	An area of permanent or periodic/intermittent inundation, whether natural or artificial, 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 6m. Wetlands typically include areas such as lakes, swamps, marshes, estuaries or mudflats.

Appendix 1 - Plans

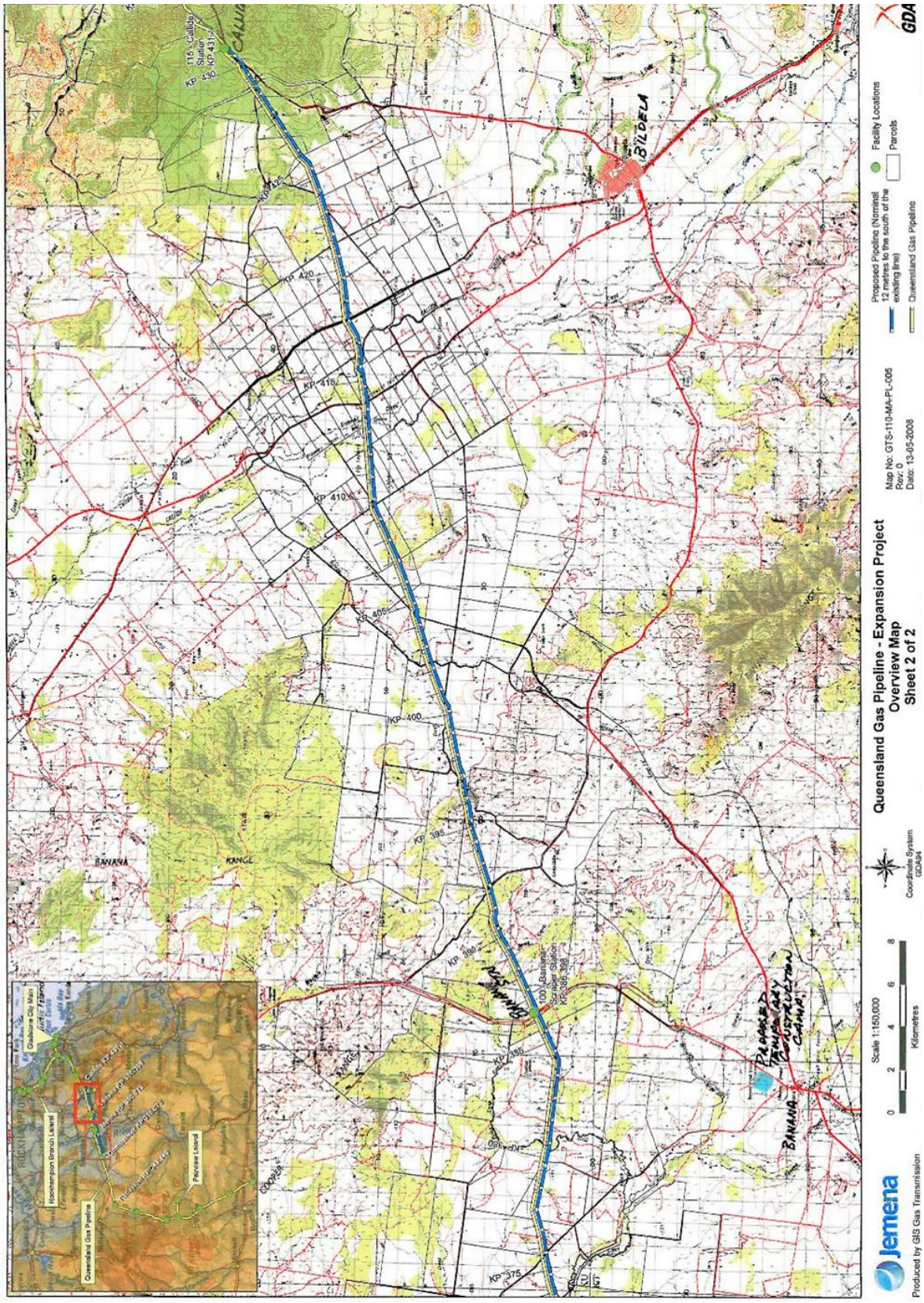
Plan 1 - Location of PPL30 Licence Area, Rolleston and Banana Compressor Stations



Plan 2 - Location of 'Looped' Pipeline on PPL30



Plan 3 — Location of 'Looped' Pipeline on PPL3O (cont'd)



END OF ENVIRONMENTAL AUTHORITY