

Form

Environmental Protection Act 1994

Submission of a plan of operations

This is the approved form that is to be used by an environmental authority holder under section 291 of the Environmental Protection Act 1994 (EP Act) to submit a plan of operations to the administering authority.¹

A plan of operations is only required for an environmental authority for a petroleum activity authorised under a petroleum lease (other than a petroleum lease granted under the *Petroleum Act 1923*), if the petroleum activity is an ineligible environmentally relevant activity (ERA). However, where the information provided in this plan of operations is to be used to satisfy the spatial information and/or rehabilitation plan requirements in the Estimated Rehabilitation Cost (ERC) application, this plan of operations must include all disturbance and rehabilitation activities under all tenures of the environmental authority for the plan period (including 1923 petroleum leases, authority to prospect (ATP) etc).

An environmental authority holder must not carry out, or allow the carrying out of, an activity under the relevant lease unless a plan of operations for all relevant activities has been given to the administering authority. The environmental authority holder must comply with the plan of operations when carrying out an activity under the relevant lease.

This plan of operations form may be used for submission of an initial plan of operations, replacement plan of operations, or amendment of a current plan of operations. **All of the information provided in this form, including all attachments and submitted spatial information, amounts to the plan of operations.**

Note that a proposed plan of operations may relate to one or more petroleum leases authorised under an environmental authority.

For information on plans of operations, including details of submission requirements and supporting information to be provided, please refer to the guideline *Preparing a plan of operations for an environmental authority relating to a petroleum lease* (ESR/2015/1821²).

If you would like to have a pre-lodgement meeting, please fill out and lodge the form *Application for pre-lodgement services* (ESR/2015/1664) prior to lodging this application.

Definitions of terms used in this form

Where there is inconsistency between the definition of terms here and the terms used in the EP Act, the terms in the EP Act apply.

¹ The Department of Environment and Science is the administering authority under the *Environmental Protection Act 1994*.

² This is the publication number. The publication number can be used as a search term to find the latest version of a publication at www.qld.gov.au.



Ineligible ERA	An environmentally relevant activity that does not comply with the eligibility criteria in effect for the activity, or for which eligibility criteria are not in effect, or that is carried out as part of a significant project.
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GUIDE

If you require assistance in answering any part of this form, or have any questions about your submission, please contact the Energy and Extractive Resources Business Centre. Contact details are at the end of this form.

The environmental authority number and details may be found on the existing environmental authority or quoted in other correspondence received from the administering authority.

If more space is required for any responses, please attach additional information as a separate page.

If there is an agent acting on behalf of the environmental authority holder, provide details in this section. An agent could be a consultant or a contact for the environmental authority holder.

As statutory documents need to be sent to all applicants, this section can also be used when there are multiple environmental authority holders to nominate an address for statutory documentation to be sent 'care of' to.

Application details

1. Environmental authority

ENVIRONMENTAL AUTHORITY NUMBER

EPPG03517915

ENVIRONMENTAL AUTHORITY HOLDER NAME/S

Santos QNT Pty Ltd

Drillseach Energy Pty Ltd

Vamgas Pty Ltd

Project name (if applicable)

PL 1027, PL 1029 and PL 1081 (PL 95)

Address for service / Agent details

The address supplied here will be used as a service address for sending statutory documents. If blank, statutory documents will be sent to the address previously supplied for the holder or principal applicant for the environmental authority.

INDIVIDUAL OR BUSINESS NAME (INCLUDE TRADING NAME IF RELEVANT)

Santos QNT Pty Ltd

RESIDENTIAL ADDRESS OR REGISTERED BUSINESS ADDRESS (NOT A POST OFFICE BOX ADDRESS)

Level 22, 32 Turbot Street

BRISBANE QLD 4000

POSTAL ADDRESS (IF DIFFERENT FROM ABOVE)

CONTACT PERSON AND POSITION

BENNETT WARREN, TEAM LEADER ENVIRONMENT - APPROVALS

PHONE

07 3838 3000

FACSIMILE

N/A

EMAIL

ONSHOREENVCOMPLIANCE@SANTOS.COM

Refer to the guideline Preparing a plan of operations for an environmental authority relating to a petroleum lease (ESR/2015/1821), for the most up to date information required to be included with this submission.

A plan of operations must state a plan period of a maximum of five years

An amendment cannot extend the current plan period.

An ERC decision must be in effect and cover the period of the plan period.

If you are submitting a replacement plan of operations, you must submit an ERC decision application on the same day with the same period.

2. Plan of operations type

☐ Amendment	Proceed to question 3
☒ Replacement	Proceed to question 4
☐ Initial	Proceed to question 4

3. Amendment details

Provide details of the amendments, including the reasons for the amendment and a summary of any changes to activities.

4. Plan period

State the period for which the plan will apply.

COMMENCEMENT DATE	1 / 03 / 2024
COMPLETION DATE	1 / 03 / 2029

It is a condition of the environmental authority that the plan period for the plan of operations must be consistent with the ERC period. The commencement date for the plan of operations should be on or after the ERC commencement date, and the completion date for the plan of operations should be on the same day as the completion date for the ERC completion date.

However, if you are submitting a replacement plan of operations you must submit an ERC decision application on the same day, with the same period.

☒ An application for an ERC decision requesting the same period as the proposed plan of operations period has been submitted

OR

☐ An existing ERC decision that covers the period of the initial proposed plan of operations period is in effect and the existing ERC amount for that decision has not changed.

Petroleum resource being extracted includes all minerals authorised under the P&G Act. For example, Crude Oil, CSG or Natural Gas.

5. Description of each petroleum lease

Provide a description of each petroleum lease for the environmental authority in the table below.

LEASE NUMBER	PETROLEUM RESOURCE BEING EXTRACTED	WILL THERE BE ANY NEW DISTURBANCE TO THE LEASE DURING THE PLAN PERIOD?
PL 1027, PL 1028 and PL 1081 (PL 95)	Conventional oil	☒ Yes ☐ No
		☐ Yes ☐ No
		☐ Yes ☐ No

6. Description of land to which each lease applies

Spatial information must provide a description of the land to which each petroleum lease applies. This description must address the following information for each lease:

- Original land use(s)
- Post-operation land use(s)
- Sensitive receptor(s)
- Project boundary

This information must be consistent with the applicable schema table in Attachment 1.

☒ Spatial information has been submitted

OR

If you have previously submitted this spatial information in a former plan of operations and the information is still current and relevant, you may use this information to satisfy this requirement.

☒ Spatial information has previously been submitted to the department

7. Description of the land to which the plan applies

Identify the categories contained in the table below, where relevant to any areas or potential areas of significant disturbance during the plan period.

Spatial information must be prepared and submitted in accordance with the department's guideline: Spatial Information Submission (ESR/2018/4337).

Refer to the guideline Preparing a plan of operations for an environmental authority relating to a petroleum lease (ESR/2015/1821), for the most up to date information required to be included with this submission, and the

definitions of these categories.

CATEGORY	RELEVANT?
Category A environmentally sensitive area (ESA) defined under the Environmental Protection Regulation 2019	☒ No ☐ Yes
Category B ESA defined under the Environmental Protection Regulation 2019	☒ No ☐ Yes
Matters of National Environmental Significance (MNES) under the <i>Environment Protection and Biodiversity Conservation Act 1999</i>	☐ No ☒ Yes
Matters of State environmental significance (MSES) under the Environmental Offsets Regulation 2014	☒ No ☐ Yes
Areas of regional interest under the <i>Regional Planning Interest Act 2014</i>	☒ No ☐ Yes
Critically endangered, endangered, vulnerable, near threatened or least concern wildlife species under the <i>Nature Conservation Act 1992</i>	☐ No ☒ Yes
Watercourses, wetlands, springs (including relevant environmental values) or river improvement trust asset areas	☐ No ☒ Yes

8. Plan of all activities

Provide a plan describing all activities to be carried out on the land within the plan period.

The plan must include:

A. Existing activities

Spatial information must provide the location and details of all existing activities carried out/ infrastructure constructed on the land at the commencement of the plan period. This information must be consistent with the applicable schema table in Attachment 1.

☒ Spatial information has been submitted

B. Proposed activities

Attach details of all proposed activities to be carried out/ infrastructure to be constructed on the land within the plan period. This information must be in the same format and include the information outlined in Appendix 1.

☒ Proposed activities attached

Spatial information must be prepared and submitted in accordance with the department's guideline: Spatial Information Submission (ESR/2018/4337).

Refer to the guideline
Preparing a plan of
operations for an
environmental authority
relating to a petroleum
lease (ESR/2015/1821),
for the most up to date
information required to be
included with this
submission.

Refer to the guideline
Preparing a plan of
operations for an
environmental authority
relating to a petroleum
lease (ESR/2015/1821),
for the most up to date
information required to be
included with this
submission.

Spatial information must
be prepared and
submitted in accordance
with the department's
guideline: Spatial
Information Submission
(ESR/2018/4337)

9. Action program

Attach an action program for complying with each schedule of conditions in your environmental authority. This program must be in the same format and include the information outlined in Appendix 2.

☒ Action program attached

OR

If you have previously submitted this action program (in the format of Appendix 2) in a former plan of operations and the information is still current and relevant, you may use this document to satisfy this requirement.

☐ Action program has previously been submitted to the department

10. Rehabilitation program

Attach a rehabilitation program for land disturbed or proposed to be disturbed under each relevant lease during the plan period.

Note: If the information in a plan of operations is to be used to satisfy the rehabilitation plan requirements of the ERC application, the rehabilitation program in the plan of operations is to include information about rehabilitation required for disturbance proposed to be undertaken in the plan period AND rehabilitation required for all existing disturbance.

The rehabilitation program must contain the following:

A. Rehabilitation plan

Attach a detailed rehabilitation plan developed with consideration of the nature, staging and areas of proposed rehabilitation works:

☒ Rehabilitation plan attached

OR

If you have previously submitted a rehabilitation plan, or equivalent plan, to the administering authority and the information is still current and relevant, you may use this plan to satisfy this requirement.

☐ Equivalent document has previously been submitted to the department

Name of document:

Date document was submitted:

B. Rehabilitation schedule

Attach a schedule of rehabilitation activities detailing the type and areas of rehabilitation proposed to be undertaken within the plan period. This schedule must be in the same format and include the information outlined in Appendix 3.

Note: If the information in a plan of operations is to be used to satisfy the rehabilitation plan requirements of the ERC application, the rehabilitation schedule is to include information about rehabilitation required for disturbance

proposed to be undertaken in the plan period AND rehabilitation required for all existing disturbance.

☒ Rehabilitation schedule attached

Existing Rehabilitation

Spatial information must provide the location and details of all existing rehabilitation present on the land at the commencement of this plan period. This information must be consistent with the applicable schema table in Attachment 1.

☒ Spatial information has been submitted

The compliance statement must be made:

- 1) If the holder is an individual/s—by the holder
- 2) If the holder is a corporation—by the executive officer of the corporation.

Where there is more than one holder of the environmental authority, this declaration is to be signed by all holders, unless there is an agreement between all holders that one can sign on behalf of the other.

Note: If only one holder is signing this application form, they are committing all holders to the content of the application and the declaration.

Where the environmental authority holder is a company, this form must be signed by an authorised person for that company.

Privacy statement

The Department of Environment and Science is committed to protecting the privacy, accuracy and security of your personal information in accordance with the *Information Privacy Act 2009*. The department is collecting your personal information in accordance with section 292 of the *Environmental Protection Act 1994* in the approved form for a plan of operations. The information will only be accessed by authorised employees within the department. Your information will not be given to any other person or agency unless you have given us permission, or we are authorised or required by law. All information supplied on this form may

11. Compliance statement

A compliance statement for this plan of operations must be provided by completing the form in Appendix 4: Compliance statement for a plan of operations.

Please note: **It is an offence to give the administering authority information that is false, misleading or incomplete.**

☒ Compliance statement attached

12. Declaration

Note: If you have not told the truth in this application you may be prosecuted.

Where an agreement is in place between all holders of the environmental authority, that one holder can sign on behalf of the other joint holders, please tick the below checkbox.

☐ I have the authority to sign this form on behalf of all the joint holders of the environmental authority.

I declare that:

- I am the holder of the environmental authority or an authorised signatory.
- The information provided is true and correct to the best of my knowledge. I understand that it is an offence under section 480 of the *Environmental Protection Act 1994* to give to the administering authority or an authorised person a document containing information that I know is false, misleading or incomplete in a material particular.
- I understand that failure to provide sufficient information may lead to the plan of operations being invalid.
- I understand that all information supplied on or with this application form may be disclosed publicly in accordance with the *Right to Information Act 2009* and the *Evidence Act 1977*.

SIGNATORY'S NAME	
Refer to Attachment 1	
SIGNATURE	
POSITION OF SIGNATORY	DATE
JOINT HOLDER'S NAME (IF APPLICABLE)	JOINT HOLDER'S SIGNATURE (IF APPLICABLE)
JOINT HOLDER'S NAME (IF APPLICABLE)	JOINT HOLDER'S SIGNATURE (IF APPLICABLE)

be disclosed publicly in accordance with the *Right to Information Act 2009* and *Evidence Act 1977*. For queries about privacy matters email: privacy@des.qld.gov.au or telephone: 13 QGOV (13 74 68).

Further information

The latest version of this publication and other publications referenced in this document can be found at www.qld.gov.au using the relevant publication number (e.g. ESR/2018/4340 for this document) as a search term.

Applicant checklist

- ☒ Application form has been completed and signed
- ☐ Question 6: Spatial information describing each petroleum lease submitted
- ☒ Question 8A: Spatial information for all existing activities submitted
- ☒ Question 8B: Plan of proposed activities attached
- ☒ Question 9: Action program attached
- ☒ Question 10A: Rehabilitation plan attached (if applicable)
- ☒ Question 10B: Rehabilitation schedule for the plan period attached
- ☒ Question 10C: Spatial information for all existing rehabilitation submitted
- ☒ Question 11: Compliance statement attached

Please submit your completed form to the Energy and Extractive Resources Business Centre, Department of Environment and Science by:

- Email: EnergyandExtractive@des.qld.gov.au
- Regular post: GPO Box 2454, BRISBANE QLD 4001

Enquiries:

Energy and Extractive Resources Business Centre

Phone: 07 3330 5715

Email: EnergyandExtractive@des.qld.gov.au

APPENDIX 1—PLAN OF ACTIVITIES: PART B (PROPOSED ACTIVITIES)

1. Include all domains which are applicable to the activities proposed to be undertaken on the land during the plan period.
2. For each domain, add a line for each activity that applies. A list of activities is provided in Attachment 2 of this form.
3. Where a particular activity is not listed in Attachment 2, you may add your own line item to the below table. This activity can be inserted into the applicable domain, or into the 'Additional Activity' domain.
4. Where the information provided in this plan of operations is to be used to satisfy the spatial information requirements in the Estimated Rehabilitation Cost (ERC) application, this plan of activities must include all proposed activities under all tenures of the environmental authority for the plan period (including 1923 petroleum leases, ATP's etc) and must be consistent with what will be input into the ERC calculator.

ACTIVITY <i>Example (exploration): Seismic 2D</i>	DISTURBANCE DETAILS														
	YEAR 1			YEAR 2 <i>(if applicable)</i>			YEAR 3 <i>(if applicable)</i>			YEAR 4 <i>(if applicable)</i>			YEAR 5 <i>(if applicable)</i>		
	TENURE <i>Example: PL123</i>	ADDITIONAL PARAMETERS <i>Example: 200 km</i>	DISTURBANCE AREA (ha) <i>Example: XX Ha</i>	TENURE	ADDITIONAL PARAMETERS	DISTURBANCE AREA (ha)	TENURE	ADDITIONAL PARAMETERS	DISTURBANCE AREA (ha)	TENURE	ADDITIONAL PARAMETERS	DISTURBANCE AREA (ha)	TENURE	ADDITIONAL PARAMETERS	DISTURBANCE AREA (ha)
DOMAIN 1: EXPLORATION <i>(if applicable)</i>															
Total Domain Disturbance Area (ha)															
DOMAIN 2: ROADS, TRACK, LAYDOWN AND BORROW PITS <i>(if applicable)</i>															
Total Domain Disturbance Area (ha)															

DOMAIN 3: CAMPS, BUILDINGS AND SEWAGE TREATMENT PLANTS <i>(if applicable)</i>															
Total Domain Disturbance Area (ha)															
DOMAIN 4: POWER GENERATION AND DISTRIBUTION <i>(if applicable)</i>															
Total Domain Disturbance Area (ha)															
DOMAIN 5: WELL PADS AND ASSOCIATED INFRASTRUCTURE <i>(if applicable)</i>															
Total Domain Disturbance Area (ha)															
DOMAIN 6: PIPELINES <i>(if applicable)</i>															
Total Domain Disturbance Area (ha)															
DOMAIN 7: GAS PROCESSING AND OIL STORAGE FACILITIES <i>(if applicable)</i>															

Total Domain Disturbance Area (ha)															
DOMAIN 8: WATER TREATMENT PLANTS AND TRANSFER STATIONS <i>(if applicable)</i>															
Total Domain Disturbance Area (ha)															
DOMAIN 9: WATER STORAGE INFRASTRUCTURE (DAMS / PONDS & TANKS) <i>(if applicable)</i>															
Total Domain Disturbance Area (ha)															
DOMAIN 10: ADDITIONAL ACTIVITIES <i>(if applicable)</i>															
Domain Disturbance Area (ha)															
TOTAL DISTURBANCE AREA (ha) per year <i>(= D1 + D2 + D3 + D4 + D5 + D6 + D7 + D8 + D9 + D10)</i>															

APPENDIX 2 —ACTION PROGRAM

1. Complete required details demonstrating how you will comply with the conditions of your environmental authority.
2. At a minimum, include all schedules on your environmental authority. Individual conditions may also be included where appropriate.

EA CONDITION	INTERNAL PROCESS / MANAGEMENT SYSTEM (if applicable)	ENVIRONMENTAL MANAGEMENT STRATEGIES
<i>Example: Schedule X</i>	<i>XXXX Monitoring Plan</i>	<i>Schedule construction for dry time of year, get CPESC to develop ESC plan, undertake monitoring and ensure maintenance of ESC measures during construction phase</i>

APPENDIX 3 —REHABILITATION SCHEDULE

- Detail all the rehabilitation activities proposed to be undertaken on the land during the plan period.
- Similar rehabilitation activities can be aggregated together (e.g. 3 wells), provided that the same rehabilitation methodology will be used for all sites and they are all located in areas of equal environmental sensitivity (e.g. if one well is located in a MSES that would need to be a separate line item).
- Where the information provided in this plan of operations is to be used to satisfy the spatial information requirements in the ERC application, this schedule must include all rehabilitation activities under all tenures of the environmental authority for the plan period (including 1923 petroleum leases, ATP's etc).
- If the information in a plan of operations is to be used to satisfy the rehabilitation plan requirements of the ERC application, the rehabilitation schedule in the plan of operations is to include information about rehabilitation required for disturbance proposed to be undertaken in the plan period AND rehabilitation required for all existing disturbance. The 'DOMAIN' and 'REHABILITATION WORKS ALREADY UNDERTAKEN' columns are only required where this plan of operations is to be used to satisfy the rehabilitation plan requirements in the ERC application.

DOMAIN ¹	ACTIVITY	LOCATION	AREA (ha)	POST- OPERATION LAND USE	TIMING (WHEN) ²	REHABILITATION METHODOLOGY ³	REHABILITATION WORKS ALREADY UNDERTAKEN ⁴
Roads, Tracks, Laydowns and Borrow Pits	Roads	PLXXX	XX	Grazing	Rehabilitation site works – Q3 2026 (Year 4 of the Plan) Completed for handover or relinquishment – Q3 2027 (Year 5 of the Plan)	• Removal of aboveground infrastructure. • Strip capping material and reprofile pad. • Reinstate natural drainage lines and contours. • Reinstate topsoil. • Application of seed and fertiliser. • Installation of erosion and sediment controls as required. • Installation of fencing as required.	Nil, sites are still active.

¹ This column is only required where this plan of operations is to be used to satisfy the rehabilitation plan requirements in the ERC application. If this column is required, insert the Domain type from the ERC calculator.

² If this rehabilitation schedule is to be used to satisfy the rehabilitation plan requirements in the ERC application and the rehabilitation is to be undertaken outside of the plan period, include the year if known or insert "Rehabilitation to be undertaken outside of plan period".

³ Provide a description of rehabilitation activities that will be specifically undertaken during the plan period. If this rehabilitation schedule is to be used to satisfy the rehabilitation plan requirements in the ERC application, include the rehabilitation methodology required to restore all existing disturbance and disturbance proposed to be undertaken in the plan period to its post-operation land use.

⁴ This column is only required where this plan of operations is to be used to satisfy the rehabilitation plan requirements in the ERC application. If this column is required, provide a description of rehabilitation activities that have already been undertaken at the start of the plan period.

Attachment 1—Spatial data requirements for plan of operations

Attachment 1—Spatial data requirements for plan of operations

Attachment 1 provides guidance on the required content of spatial information (shapefiles) for the submission of areas of disturbance and rehabilitation on site as authorised under an environmental authority. This attachment should be read in conjunction with the department's guideline: Spatial Information Submission (ESR/2018/4337). To obtain a copy of the guideline visit www.qld.gov.au and search for "ESR/2018/4337". The following sections provide information about the required fields and attributes for datasets.

Important note: where the information provided in a plan of operations is to be used to satisfy the spatial information requirements in the ERC application, the plan of operations must include all disturbance and rehabilitation activities under all tenures of the environmental authority for the relevant plan period (including 1923 petroleum leases, ATP's etc.)

1. Required files—Table 1

Environmental authority holders must submit shapefiles detailing the existing disturbance and rehabilitation on site in addition to a description of the relevant petroleum lease(s). Where the plan relates to a site that has no existing disturbance or rehabilitation, this should be stated in the spatial information submission email to which the description of the petroleum lease file is attached.

Each geometry type must be submitted in a separate file, as outlined within table 1. Each file must be named in accordance with the requirements outlined within the department's guideline: Spatial Information Submission (ESR/2018/4337).

Table 1: Plan of operations shapefile checklist

File	Spatial information requirement	Schema	Example file name (e.g. using submission date of 30 June 2023)
1	Disturbance and rehabilitation on site – points	Table 2	EPPR00372287_PoO_PT_30062023.zip
2	Disturbance and rehabilitation on site -lines	Table 2	EPPR00372287_PoO_LN_30062023.zip
3	Disturbance and rehabilitation on site - polygons	Table 2	EPPR00372287_PoO_PY_30062023.zip
4	Description of petroleum lease	Table 3	EPPR00372287_PoOL_PY_30062023.zip

Where:

- PT = point (geometry)
- LN = line (geometry)
- PY = polygon (geometry)
- PL = description of the petroleum lease(s)

Attachment 1—Spatial data requirements for plan of operations

2. Requirements for disturbance and rehabilitation data – Table 2

Table 2 comprises the schema for disturbance and rehabilitation data as required within questions 8A and 10C of the approved form. It is important to note that a number of options are provided for some fields, however only one value for each field should be populated from the available list.

A spreadsheet containing the schema and a shapefile template is available on the department's website at www.des.qld.gov.au, using the search term “submission of spatial information”.

Table 2: Schema for plan of operations - disturbance and rehabilitation

Field Name	Type	Length	Definition	Domain Values ³	Domain Value Description	Mandatory/Optional
FID	Object ID	N/A	The unique identifier for the spatial feature.			Mandatory
SHAPE	Geometry	N/A	Allowed Geometry: Polygon, Line, Point.			Mandatory
PERMIT_REF	TEXT	50	The alpha-numeric environmental authority number relevant to the spatial information.			Mandatory
PROCESS	TEXT	4	The relevant process spatial data is being submitted for.	PoO	Plan of Operations	Mandatory
SITE_NAME	TEXT	254	Site name relating to the environmental authority.			Mandatory
SITE_ID	TEXT	20	This field contains a unique identifier for the spatial feature, which has been generated by the proponent.			Mandatory

³ If blank, populate based on Attribute type and definition.

Attachment 1—Spatial data requirements for plan of operations

Field Name	Type	Length	Definition	Domain Values ³	Domain Value Description	Mandatory/Optional
MAP_ID	TEXT	5	This field contains a unique user entered identifier linking to ERC calculator. This field is optional and should only be used where a MAP ID is to be provided in the ERC Calculator.			Optional
DATE_START	DATE	dd/mm/yyyy	This field indicates the reporting commencement date e.g. 01/01/2023.			Mandatory
DATE_END	DATE	dd/mm/yyyy	This field indicates the reporting end date e.g. 31/12/2023.			Mandatory
STATUS	TEXT	3	This field relates to the status of the activity in terms of rehabilitation or disturbance. Certified Rehabilitation is rehabilitation which has been completed and approved as progressively certified under section 318ZH of the EP Act.	Dis	Disturbance	Mandatory
				Reh	Rehabilitation	
				CR	Certified Rehabilitation (for which progressive certification has been approved in accordance with the EP Act)	
SOURCE	TEXT	5	This field identifies the source of the spatial information and the capture methodology for the spatial information provided.	DIG	Digitising (Tracing over Ortho Imagery)	Mandatory
				GPSD	GPS Differential Survey	
				GPSND	GPS Non Differential Survey	
				RTK	Real-Time Kinematic (RTK) Survey	

Attachment 1—Spatial data requirements for plan of operations

Field Name	Type	Length	Definition	Domain Values ³	Domain Value Description	Mandatory/ Optional
				UK	Un Known	
ACT_TYPE	TEXT	4	This field indicates the type of activity. If the activity is for rehabilitation, please select the previous activity for the area. If your activity is not available from the list and the ACTIVITY_TYPE is selected as 'Other', you must select the appropriate domain in the DOMAIN_TYPE field and provide information on the activity type in the COMMENTS field.	AW	Appraisal Well (Point)	Mandatory
				Core	Core hole (Point)	
				OGW	Conventional oil/gas well (Point)	
				OW	Operational Well (Point)	
				GPA	Gas pipeline (above ground) (Line)	
				GPB	Gas pipeline (below ground) (Line)	
				OPA	Oil pipeline (above ground) (Line)	
				OPB	Oil pipeline (below ground) (Line)	
				PL	Power Lines (Line)	
				WPA	Water pipeline (above ground) (Line)	
				WPB	Water pipeline (below ground) (Line)	
				AT	Access Track (Polygon)	
				BP	Borrow Pit (Polygon)	
				CT	Communication tower (Polygon)	
				DTB	Demountable / temporary building (Polygon)	
				GPF	Gas processing facility (Polygon)	
				LF	Landfills (Polygon)	
				LNGP	LNG plant (Polygon)	
				LY	Laydown yard (Polygon)	
				NRDL	Non-regulated dam - lined (Polygon)	
				NRDU	Non-regulated dam - unlined (Polygon)	
				OSF	Oil storage facility (Polygon)	
				PB	Stand-alone permanent building (Polygon)	

Attachment 1—Spatial data requirements for plan of operations

Field Name	Type	Length	Definition	Domain Values ³	Domain Value Description	Mandatory/ Optional
				PC	Permanent camp (Polygon)	
				PGF	Power generation facility (Polygon)	
				RDL	Regulated dam - lined (Polygon)	
				RDU	Regulated dam - unlined (Polygon)	
				Road	Road (Polygon)	
				RoW	Right of way (Polygon)	
				STP	Sewage treatment plant (Polygon)	
				S2D	Seismic 2D (Polygon)	
				S3D	Seismic 3D (Polygon)	
				TC	Temporary camp (Polygon)	
				WaTS	Water transfer station (Polygon)	
				WP	Well pads (Polygon)	
				WTP	Water treatment plant (Polygon)	
				WTS	Waste transfer station (Polygon)	
				OTH	Other (Point, Line, Polygon)	
DOM_TYPE	TEXT	4	This field indicates the domain for the petroleum activity. If the activity is for rehabilitation, please select the domain of the previous activity for the area. If the ACTIVITY_TYPE = 'Other', select the relevant domain to the activity type.	Exp	Exploration	Mandatory
				RTLB	Roads, tracks, laydown, borrow pits	
				CB	Camps, Buildings and Sewage Treatment Plants	
				PGD	Power generation and distribution facility	
				WPI	Well Pads and associated infrastructure	
				Pipe	Pipelines	
				GOF	Gas processing facility or Oil Storage	
				WTTS	Water treatment plants and transfer stations	

Attachment 1—Spatial data requirements for plan of operations

Field Name	Type	Length	Definition	Domain Values ³	Domain Value Description	Mandatory/Optional
				WS	Water storage infrastructure	
				LNG	LNG plant	
				AA	Additional Activities	
REHAB_ACT	TEXT	254	This field provides a description of the rehabilitation activities which have been undertaken to date. Mandatory if STATUS = Reh.			Mandatory if STATUS = Reh
AREA_HA	DOUBLE	N/A	This field indicates the area in Hectares. (Polygon only)			Mandatory for Polygon only
COMMENTS	TEXT	254	A free text field has been provided to include any additional information the proponent wishes to provide in relation to the data or to provide a description for activities which are not included in this table.			Mandatory if ACT_TYPE = OTH

Attachment 1—Spatial data requirements for plan of operations

3. Requirements for describing petroleum leases—Table 3

Table 3 outlines the schema for providing spatial information to describe the petroleum lease(s) as required within question 6 of the approved form. All data for the petroleum lease(s) description is required to be provided as a single file which meets the naming convention within the department's guideline: Spatial Information Submission.

All features provided in this shapefile must be a polygon.

Table 3: Description of petroleum lease schema

Field Name	Type	Length	Definition	Domain Values ⁴	Domain Value Description	Mandatory/Optional
FID	Object ID	N/A	The unique identifier for the spatial feature.			Mandatory
SHAPE	Geometry	N/A	Allowed Geometry: Polygon			Mandatory
PERMIT_REF	TEXT	50	The alpha-numeric environmental authority number relevant to the spatial information.			Mandatory
PROCESS	TEXT	4	The relevant process spatial data is being submitted for	PoOL	Plan of Operations Lease	Mandatory
SITE_NAME	TEXT	254	Site name relating to the environmental authority.			Mandatory
FEATURE	TEXT	4	This field contains the land use feature on site which this polygon is describing. Select the relevant option of either original land use, post-operation land use, sensitive receptor or project boundary using the codes specified.	OLU	Original land use	Mandatory
				PoLU	Post-operation land use	
				SR	Sensitive receptor	
				PB	Project boundary	

⁴ If blank, populate based on Attribute type and definition.

Attachment 1—Spatial data requirements for plan of operations

Field Name	Type	Length	Definition	Domain Values ⁴	Domain Value Description	Mandatory/Optional
FEAT_DESC	TEXT	254	Feature description		This field provides a description of the feature identified in 'FEATURE'.	Mandatory
DATE_	DATE	dd/mm/yyyy	Date of submission			Mandatory
SOURCE	TEXT	5	This field identifies the source of the spatial information and the capture methodology for the spatial information provided.	DIG	Digitising (Tracing over Ortho Imagery)	Mandatory
				GPSD	GPS Differential Survey	
				GPSND	GPS Non Differential Survey	
				RTK	Real-Time Kinematic (RTK) Survey	
				UK	Un Known	
COMMENTS	TEXT	254	A free text field has been provided to include any additional information the proponent wishes to provide in relation to the data.			Optional

Attachment 2—list of petroleum activities

1. Use the following list to complete the table in Appendix 1 (Proposed Activities) and Appendix 3 (Rehabilitation Schedule).
2. Where a particular activity is not listed in the table below, you may add your own line item into the applicable table and choose the appropriate 'additional parameters' (e.g. if you have additional work areas on site, add these as an additional line item in Appendix 1 and include the 'number' of work areas as the additional parameter).
3. Where using this table to complete information which will be used for an ERC application, ensure that the ERC calculator is consistent with the domains and activity types used in the supporting information.

Domain	Activity type	Additional Parameters
Exploration	Seismic 2D	Length (km)
	Seismic 3D	Length (km)
	Coreholes	Number
Roads, Track, Laydown and Borrow Pits	Road	Length (km)
	Access Track	Length (km)
	Laydown Yard	Number
	Borrow Pits	Number
	Landfills	Number
Camps, Buildings and Sewage Treatment Plants	Temporary Camp	Number
	Permanent Camp	Number
	Demountable/ Temporary Building	Number
	Stand-alone Permanent Building	Number
	Waste Transfer Station	Number
	Sewage Treatment Plant	Number
Power Generation and Distribution	Power Lines	Length (km)
	Power Generation Facility	Number
	Communication Tower	Number
Well Pads and Associated Infrastructure	Appraisal Well	Number
	Operational Well	Number
	Conventional Oil/ Gas Well	Number
	Well pads	Number
Pipelines	Gas Pipelines (Below Ground)	Length (km)
	Oil Pipelines (Below Ground)	Length (km)
	Water Pipelines (Below Ground)	Length (km)
	Gas Pipelines (Above Ground)	Length (km)
	Oil Pipelines (Above Ground)	Length (km)
	Water Pipelines (Above Ground)	Length (km)
	Right of way	Number
Gas Processing and Oil Storage Facilities	Gas Processing Facility	Number
	Oil Storage Facility	Number

Attachment 2—List of petroleum activities

Water Treatment Plants and Transfer Stations	Water Treatment Plant	Number
	Water Transfer Station	Number
Water Storage Infrastructure (Dams and Tanks)	Regulated Dam – lined	Number
	Regulated Dam – unlined	Number
	Non-regulated Dam – lined	Number
	Non-regulated Dam – unlined	Number
Additional Activities	(Description of activity)	Number / Length (km)

Attachment 1

Question 11. Declaration

Environmental Authority Holder's Name Santos QNT Pty Ltd	
Signature 	
Position of Signatory (Acting) Manager Environment – Onshore	Date 2 April 2024
Joint Holder's Name Vamgas Pty Ltd	Joint Holder's Signature 
Joint Holder's Name Drillsearch Energy Pty Ltd	Joint Holder's Signature

Question 11. Declaration

Environmental Authority Holder's Name Santos QNT Pty Ltd	
Signature	
Position of Signatory (Acting) Manager Environment – Onshore	Date
Joint Holder's Name Vamgas Pty Ltd	Joint Holder's Signature
Joint Holder's Name Drillsearch Energy Pty Ltd	Joint Holder's Signature 

Appendix 2 – Spatial Information

Refer to attached zip files

Appendix 3 – Plan of Activities

1. Existing Activities

Spatial information detailing all existing petroleum activities will be provided to DES at the time of PoO submission in accordance with ESR/2018/4337.

2. Proposed Activities

In accordance with the DES Form – Submission of a plan of operations (ESR/2018/4340), the details of all proposed activities to be carried out / infrastructure to be constructed on the land within the plan period is detailed in **Table 1**.

The number and location of proposed petroleum activities to be carried out / constructed on relevant land during the PoO period is subject to change dependent on detailed engineering design and approvals, including landholder agreements under petroleum legislation.

Tenures applicable to this document include:

- PL 1027
- PL 1029
- PL 1081 (PL 95)

Table 1. “Appendix 1 – Plan of Activities: Part B (Proposed Activities)”, ESR/2018/4340

Domain and Activity Type	Disturbance Details														
	Year 1			Year 2 (if applicable) ¹			Year 3 (if applicable) ¹			Year 4 (if applicable) ¹			Year 5 (if applicable)		
	Tenure	Additional Parameters	Disturbance Area (ha)	Tenure	Additional Parameters	Disturbance Area (ha)	Tenure	Additional Parameters	Disturbance Area (ha)	Tenure	Additional Parameters	Disturbance Area (ha)	Tenure	Additional Parameters	Disturbance Area (ha)
Domain 1: Exploration <i>(if applicable)</i>															
Nil	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Domain Disturbance Area (Ha)	0 ha			N/A			N/A			N/A			N/A		
Domain 2: Roads, Tracks, Laydown and Borrow Pits <i>(if applicable)</i>															
Access Track	PL 1027 PL 1029 PL 1081	108 km	151 ha	PL 1027 PL 1029 PL 1081	Activities not completed in year 1 will carry over to year 2	PL 1027 PL 1029 PL 1081	Activities not completed in year 2 will carry over to year 3	PL 1027 PL 1029 PL 1081	Activities not completed in year 3 will carry over to year 4	PL 1027 PL 1029 PL 1081	Activities not completed in year 4 will carry over to year 5				
Laydown		NA	18 ha												
Borrow Pits		NA	72 ha												
Water Tank Sites (Contractor Owned Tanks for Drill Water)		NA	3.6 ha												
Total Domain Disturbance Area (Ha)	245 ha			N/A			N/A			N/A					
Domain 3: Camps and Buildings <i>(if applicable)</i>															
Temporary Camp	PL 1027 PL 1029 PL 1081	NA	18 ha	PL 1027 PL 1029 PL 1081	Activities not completed in year 1 will carry over to year 2	PL 1027 PL 1029 PL 1081	Activities not completed in year 2 will carry over to year 3	PL 1027 PL 1029 PL 1081	Activities not completed in year 3 will carry over to year 4	PL 1027 PL 1029 PL 1081	Activities not completed in year 4 will carry over to year 5				
Total Domain Disturbance Area (Ha)	18 ha			N/A			N/A			N/A					
Domain 4: Power Generation and Distribution <i>(if applicable)</i>															
Nil	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Domain Disturbance Area (Ha)	0 ha			N/A			N/A			N/A			N/A		
Domain 5: Well Pads and Associated Infrastructure <i>(if applicable)</i>															
Conventional Oil/Gas Well	PL 1027 PL 1029 PL 1081	18 wells	29 ha	PL 1027 PL 1029 PL 1081	Activities not completed in year 1 will carry over to year 2	PL 1027 PL 1029 PL 1081	Activities not completed in year 2 will carry over to year 3	PL 1027 PL 1029 PL 1081	Activities not completed in year 3 will carry over to year 4	PL 1027 PL 1029 PL 1081	Activities not completed in year 4 will carry over to year 5				
Total Domain Disturbance Area (Ha)	29 ha			N/A			N/A			N/A					
Domain 6: Pipelines <i>(if applicable)</i>															
Pipelines (Below Ground)	PL 1027 PL 1029 PL 1081	1.8 km	Refer to RoW	PL 1027 PL 1029 PL 1081	Activities not completed in year 1 will carry over to year 2	PL 1027 PL 1029 PL 1081	Activities not completed in year 2 will carry over to year 3	PL 1027 PL 1029 PL 1081	Activities not completed in year 3 will carry over to year 4	PL 1027 PL 1029 PL 1081	Activities not completed in year 4 will carry over to year 5				
Pipelines (Above Ground)		108 km	Refer to RoW												
Right of Way		NA	83 ha												
Total Domain Disturbance Area (Ha)	83 ha			N/A			N/A			N/A					
Domain 7: Gas Processing and Oil Storage Facilities <i>(if applicable)</i>															
Nil	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Domain Disturbance Area (Ha)	0 ha			N/A			N/A			N/A			N/A		
Domain 8: Water Treatment Plants and Transfer Stations <i>(if applicable)</i>															
Nil	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Domain Disturbance Area (Ha)	0 ha			N/A			N/A			N/A			N/A		
Domain 9: Water Storage Infrastructure (Dams and Tanks) <i>(if applicable)</i>															
Nil	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Domain Disturbance Area (Ha)	0 ha			N/A			N/A			N/A			N/A		

¹ Whilst disturbance schedules are in place, the schedules are flexible. Given this flexibility, the allocation of disturbance details past year 1 may result in non-compliance with the Plan of Operations and has therefore not been specified.

Domain and Activity Type	Disturbance Details														
	Year 1			Year 2 (if applicable) ¹			Year 3 (if applicable) ¹			Year 4 (if applicable) ¹			Year 5 (if applicable)		
	Tenure	Additional Parameters	Disturbance Area (ha)	Tenure	Additional Parameters	Disturbance Area (ha)	Tenure	Additional Parameters	Disturbance Area (ha)	Tenure	Additional Parameters	Disturbance Area (ha)	Tenure	Additional Parameters	Disturbance Area (ha)
Domain 10: LNG Plants <i>(if applicable)</i>															
Nil	-	-	-	-	-		-	-		-	-		-	-	
Total Domain Disturbance Area (Ha)	0 ha			N/A			N/A			N/A			N/A		
Domain 11: Additional Activities <i>(if applicable)</i>															
Nil	-	-	-	-	-		-	-		-	-		-	-	
Total Domain Disturbance Area (Ha)	0 ha			N/A			N/A			N/A			N/A		
Total disturbance area (ha) (=D1+D2+D3+D4+D5+D6+D7+D8+D9+D10+D11)	375 ha			N/A			N/A			N/A			N/A		

Appendix 4 – Proposed Activities Map

143.260000 °

143.280000 °

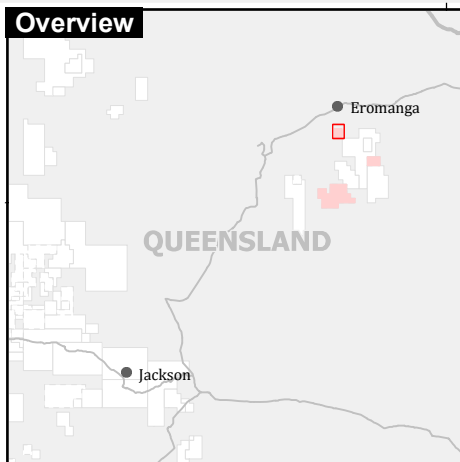


-26.740000 °

-26.760000 °

-26.780000 °

Overview



PL 95/PL 1081

Indicative only – final location and design subject to landholder agreement, regulatory approval constraints, cultural heritage and detailed design. The number and location of infrastructure associated with the proposed wells is not currently known – this will be determined during detailed design.

 Santos Tenement

Santos

Queensland

EPPG03517915

Proposed Activities



Scale 1:25,000

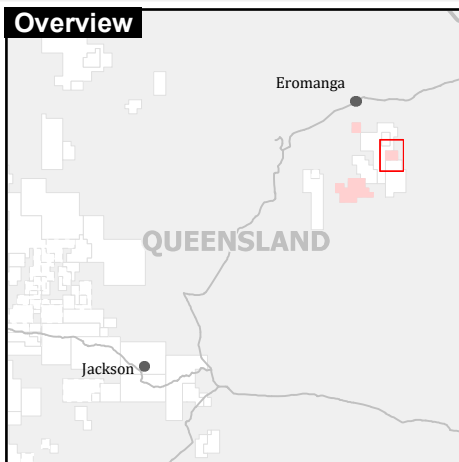
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Date: 27/02/2024 File No. ENVIR 921c.WOR



Overview



143.400000 °

143.450000 °



-26.850000 °

-26.850000 °

-26.900000 °

-26.900000 °

143.400000 °

143.450000 °

PL 169/PL 1027

○ Gimboola App A

○ Gimboola West App A

Indicative only – final location and design subject to landholder agreement, regulatory approval constraints, cultural heritage and detailed design. The number and location of infrastructure associated with the proposed wells is not currently known – this will be determined during detailed design.

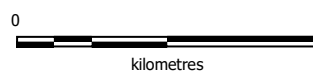
- Proposed Well
- Santos Tenement

Santos

Queensland

EPPG03517915

Proposed Activities



Scale 1:50,000

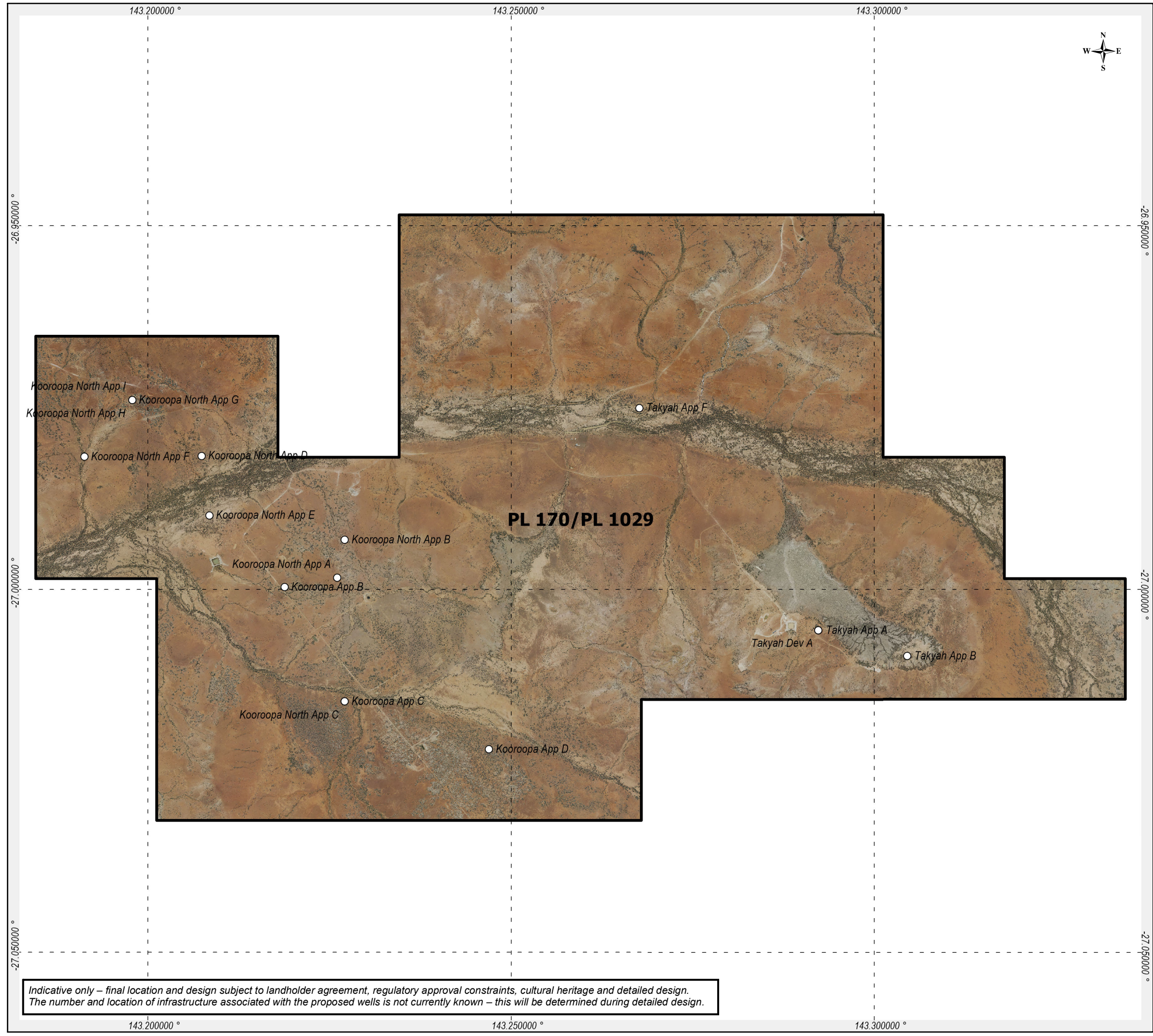
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Overview

Proposed Well

Santos Tenement

Santos

Queensland

EPPG03517915

Proposed Activities

02

kilometres

Scale 1:50,000

Rev 2

Date: 27/02/2024

File No. ENVIR 921b.WOR

GDA 2020

Indicative only – final location and design subject to landholder agreement, regulatory approval constraints, cultural heritage and detailed design.
The number and location of infrastructure associated with the proposed wells is not currently known – this will be determined during detailed design.

Tenure	Well Opportunities	Latitude (°S)	Longitude (°E)
PL 95 / PL 1081	Nil	N/A	N/A
PL 169 / PL 1027	Gimboola App A	26.868341	143.408486
	Gimboola West App A	26.871518	143.402778
PL 170 / PL 1029	Koorroopa App B	26.999536	143.218795
	Koorroopa App C	27.01532	143.227068
	Koorroopa App D	27.021909	143.246894
	Koorroopa North App A	26.998283	143.226045
	Koorroopa North App B	26.993055	143.22707
	Koorroopa North App C	27.01532	143.227068
	Koorroopa North App D	26.981532	143.207373
	Koorroopa North App E	26.989695	143.208462
	Koorroopa North App F	26.981645	143.191259
	Koorroopa North App G	26.973845	143.197855
	Koorroopa North App H	26.973845	143.197855
	Koorroopa North App I	26.973845	143.197855
	Takyah App A	27.005481	143.2923
	Takyah App B	27.009079	143.304514
	Takyah App F	26.97494	143.267609
	Takyah Dev A	27.005481	143.2923

Appendix 5 – Action Program

1. Action Program

This action program has been developed utilising the Santos Management System (SMS) to demonstrate Santos's capacity to comply with the conditions of the EA relevant to this Plan of Operations (PoO). The action program is detailed in **Table 2**, and further information on the SMS is provided in **Sections 1.1 to 1.2**. The Action Program addresses the requirements of Question 9 of the DES Form – *Submission of a plan of operations* (ESR/2018/4340).

1.1. Management Framework

Santos has a company-wide integrated management system (the Santos Management System (SMS)), developed to be consistent with ISO 14001/18001, which applies to all Santos operations worldwide. The SMS provides a structured framework for effective environmental, and health and safety practices across all activities and operations through the company's corporate values, policy statements (particularly the environment, health and safety policy) and supporting the standards and procedures, processes and tools, which set minimum performance requirements.

The documents that constitute the SMS are controlled, with the current version maintained in electronic form in a central database ("Discover"), which is accessible to all Santos sites and personnel.

Further discussion of the components of the SMS is provided in the following sections.

1.1.1. Corporate Values

Santos' core values are the overarching principles that define how business is conducted and what the company stands for. These values form the basis of Santos' commitment to long term sustainability which includes taking care of the environment in which it operates through:

- **Work as one team** – value diverse perspectives, challenge respectfully then get behind the decision, unit and share learnings.
- **Act with integrity** – always keep yourself and other safe, act ethically and do the right thing, value our customer relationships, confront the facts, treat people with respect.
- **Pursue exceptional results** – deliver value for our stakeholders, be decisive about what we can do better, recognise and reward achievement, strive for constant improvement, enable innovation.
- **Always safe** – plan work to protect all from harm, be skilled and competent, understand the risks, controls and barriers, follow the rules and respond to change, speak up and step back, think and be ready
- **Be accountable** – do what we say we are going to do, take responsibility for our actions, be disciplined about meeting requirements and standards, learn from success and failure.
- **Build a better future** – leave a positive legacy, invest in our people, have a positive impact in our communities, protect the environment, be health and safety champions.

These values guide the policy statements governing Santos activities as discussed below.

1.1.2. Policies and the Santos Code of Conduct

The policies and code of conduct outline the company's objectives and the behaviours expected of anyone who works for or with Santos. Relevant policies are outlined in **Table 1**.

Table 1. Relevant Corporate Policies

Policy	Commitment
Environment, Health and Safety policy	Santos is committed to a workplace where we all go home without injury or illness and manage the impact of our operations on the environment.

Climate change policy	Santos recognises the science of climate change and supports the objective of limiting global temperature rise to less than 2 degrees Celsius. Our strategy focusses on natural gas which we believe will continue to play a key role in a low carbon future. We are committed to being part of the solution by supporting the twin objectives of limiting greenhouse gas emissions while providing access to reliable and affordable energy to domestic and global markets.
Risk Management	Santos is committed to managing risk in a proactive, structured and effective manner in order to achieve our business objectives.

1.1.3. Management Standards and Procedures

Each policy is supported by management standards and procedures which set the minimum performance requirements:

- **Management standards** identify the minimum and mandatory requirements in relation to key business processes, operational matters and assurance activities to systematically manage environmental health and safety (EHS) risk across our operations and activities; and
- **Procedures, Technical Standards, Processes and Tools** outline how the performance requirements and expectations in the policies, code of conduct and management standards are to be met.

The management standards and corresponding procedures, technical standards, processes and tools relevant to Environment, Health and Safety are listed below:

- Environment, Health and Safety Policy
- Climate Change Policy
- Charters for the Board and Executive sub committees
- **SMS-MS01** Risk Management Standard
- **SMS-MS01-ST01** Risk Management General Procedure
- **SMS-MS01-ST01** Santos Risk Matrix
- **SMS-MS01-ST03** Work Activity Risk Management Procedure
- **SMS-MS01-ST04** Management of Change Procedure
- **SMS-MS01-ST10** Chemical Management Procedure
- **SMS-MS01-ST11** Occupational Exposure Management Procedure
- **SMS-MS01-ST13** Environmental Hazard Controls Procedure
- **SMS-MS01-ST14** Cultural Heritage Controls Procedure
- **SMS-MS01-ST19** Managing Risk During Adverse Weather Events
- **SMS-MS02** Data and Information Systems Management Standard
- **SMS-MS04** Compliance Management Standard
- **SMS-MS04-ST01** Compliance Procedure
- **SMS-MS04-ST03** Environmental Approvals Procedure
- **SMS-MS04-ST06** Access Management Procedure
- **SMS-MS06** External Affairs Management Standard
- **SMS-MS06-ST06** Stakeholder and Approvals Management Procedure
- **SMS-MS11** Incident and Crisis Management Standard
- **SMS-MS11-ST01** Emergency and Crisis Management Procedure
- **SMS-MS11-ST02** Incident Reporting, Investigation and Learning
- **SMS-MS12** Operations Excellence Management Standard
- **SMS-MS12-ST02-PD02** Operations Practices Procedure
- **1541-012-WPR-0010** Operational Risk Management
- **SMS-MS12-ST01-PD04** Management of Change Procedure
- **SMS-MS12-ST05-PD02** Performance Standard and Audit Procedure
- **SMS-MS13** Supply Chain Management Standard
- **SMS-MS13-ST01** Supply Chain Procedure

- **SMS-MS14** People Management Standard
- **SMS-MS14-ST04** EHS Induction Procedure
- **SMS-MS14-ST09** Competency and Training Procedure
- **SMS-MS15** Assurance Management Standard
- **SMS-MS15-ST01** Assurance Procedure
- **SMS-E&A-OS01** Environmental Operating Standard

1.1.4. Environmental Management Plans and Programs

Environmental Management Plans have been prepared to address environmental requirements within South West Queensland project areas. These management plans are largely risk based, taking into account the legal, other obligations and commitments. These plans include:

- South West Queensland Seepage Monitoring Program
- South West Queensland Stock Watering Risk Assessment (An Assessment Against the ANZECC 2000 Guideline)
- Methodology for Conducting Ecological Assessments (SWQ Operations)
- South West Queensland Residual Drilling Mud Burial Method
- South West Queensland Stimulation Impact Monitoring Program
- South West Queensland Contingency Procedure for Emergency Environmental Incidents
- Santos Cooper Basin Oil and Gas Fields, South West Queensland Groundwater Monitoring Plan
- South West Queensland Underground Water Impact Report Monitoring Program
- Cooper Basin Pond and Source Water Monitoring Program
- Waste Management Plan - Cooper Basin Operations
- Pest Plants and Animals Management Plan – Cooper Basin Operations
- Santos Soil Management Plan
- Tarbat Area Waterflood (Enhanced Oil Recovery) Injection Management Plan

1.2. Key Compliance Tools

Santos uses the following key compliance systems and tools to manage compliance with legal and other obligations:

- **EHS Toolbox**
 - Incident Management System (IMS)
 - Audit and Inspection Manager (AIM)
 - Significant Hazard Risk Register (SHRR)
 - Complaints Register.
- **Comtrack** – regulatory approvals database.
- **EQulS** – environmental quality information system.
- **EART Database** – environmental approval request tracking database.

Table 2. "Appendix 2 - Action Program", Page 13 of ESR/2018/4340 Version 3.00

EA Condition	Internal Process / Management System (if applicable)	Environmental Management Strategies
Schedule A - General Conditions	• Environment, Health and Safety Policy • Climate Change Policy • Charters for the Board and Executive sub committees • SMS-MS01 Risk Management Standard • SMS-MS02 Data and Information Systems Management Standard • SMS-MS04 Compliance Management Standard • SMS-MS06 External Affairs Management Standard • SMS-MS11 Incident and Crisis Management Standard • SMS-MS14 People Management Standard • SMS-MS15 Assurance Management Standard	• South West Queensland Contingency Procedure for Emergency Environmental Incidents • SMS-MS01-ST01 Santos Risk Matrix • SMS-MS01-ST13 Environmental Hazard Controls Procedure • SMS-MS01-ST19 Managing Risk During Adverse Weather Events • SMS-MS04-ST01 Compliance Procedure • SMS-MS04-ST04-TP1 Environmental Assessment of Santos' Activities Form • SMS-MS06-ST06 Stakeholder and Approvals Management Procedure • SMS-MS11-ST01 Emergency and Crisis Management Procedure • SMS-MS11-ST02 Incident Reporting, Investigation and Learning • SMS-MS14-ST04 EHS Induction Procedure • SMS-MS14-ST09 Competency and Training Procedure • SMS-MS15-ST01 Assurance Procedure • Third Party Audit Reports • EHS Toolbox: ○ Incident Management System (IMS) ○ Audit and Inspection Manager (AIM) ○ Integrated Risk Register (IRR) ○ SRM Complaints Register • Comtrack (regulatory approvals database) • Environmental Quality Information System (EQulS)
Schedule B - Water	• Environment, Health and Safety Policy • Climate Change Policy • Charters for the Board and Executive sub committees • SMS-MS01 Risk Management Standard	• Cooper Basin Pond and Source Water Monitoring Program • Santos Soil Management Plan • Methodology for Conducting Ecological Assessments (SWQ Operations) • SMS-MS01-ST13 Environmental Hazard Controls Procedure • SMS-MS01-ST01 Santos Risk Matrix • SMS-MS04-ST01 Compliance Procedure

	• SMS-MS02 Data and Information Systems Management Standard • SMS-MS04 Compliance Management Standard • SMS-MS12 Operations Excellence Management Standard • SMS-MS15 Assurance Management Standard	• SMS-MS04-ST03 Environmental Approvals Procedure • SMS-MS04-ST06 Access Management Procedure • SMS-MS04-ST04-TP1 Environmental Assessment of Santos' Activities Form • SMS-MS12-ST02-PD02 Operations Practices Procedure • 1541-012-WPR-0010 Operational Risk Management • SMS-MS12-ST01-PD04 Management of Change Procedure • SMS-MS15-ST01 Assurance Procedure • SMS-E&A-OS01 Environmental Operating Standard • EHS Toolbox (tools and resources as described in Schedule A) • Comtrack (regulatory approvals database) • Environmental Quality Information System (EQulS) • EART Database (environmental approval request tracking database)
Schedule C - Groundwater	• Environment, Health and Safety Policy • Climate Change Policy • Charters for the Board and Executive sub committees • SMS-MS01 Risk Management Standard • SMS-MS02 Data and Information Systems Management Standard • SMS-MS04 Compliance Management Standard • SMS-MS15 Assurance Management Standard	• South West Queensland Seepage Monitoring Program • South West Queensland Stock Watering Risk Assessment (An Assessment Against the ANZECC 2000 Guideline) • Methodology for Conducting Ecological Assessments (SWQ Operations) • South West Queensland Stimulation Impact Monitoring Program • Santos Cooper Basin Oil and Gas Fields, South West Queensland Groundwater Monitoring Plan • SMS-MS01-ST13 Environmental Hazard Controls Procedure • SMS-MS01-ST01 Santos Risk Matrix • SMS-MS04-ST01 Compliance Procedure • SMS-MS04-ST03 Environmental Approvals Procedure • SMS-MS04-ST06 Access Management Procedure • SMS-MS04-ST04-TP1 Environmental Assessment of Santos' Activities Form • SMS-MS12-ST02-PD02 Operations Practices Procedure • 1541-012-WPR-0010 Operational Risk Management • SMS-MS12-ST01-PD04 Management of Change Procedure • SMS-MS15-ST01 Assurance Procedure • SMS-E&A-OS01 Environmental Operating Standard

		• EHS Toolbox (tools and resources as described in Schedule A) • Comtrack (regulatory approvals database) • Environmental Quality Information System (EQulS) • EART Database (environmental approval request tracking database) • Drill bore logs
Schedule D - Dams	• Environment, Health and Safety Policy • Climate Change Policy • Charters for the Board and Executive sub committees • SMS-MS01 Risk Management Standard • SMS-MS02 Data and Information Systems Management Standard • SMS-MS04 Compliance Management Standard • SMS-MS11 Incident and Crisis Management Standard • SMS-MS12 Operations Excellence Management Standard • SMS-MS13 Supply Chain	• Cooper Basin Pond and Source Water Monitoring Program • Waste Management Plan - Cooper Basin Operations • SMS-MS01-ST03 Process Operations Risk Procedure • SMS-MS01-ST03 Work Activity Risk Management Procedure • SMS-MS01-ST04 Management of Change Procedure • SMS-MS01-ST10 Chemical Management Procedure • SMS-MS01-ST11 Occupational Exposure Management Procedure • SMS-MS01-ST13 Environmental Hazard Controls Procedure • SMS-MS01-ST19 Managing Risk During Adverse Weather Events • SMS-MS04-ST03 Environmental Approvals Procedure • SMS-MS04-ST06 Access Management Procedure • SMS-MS04-ST04-TP1 Environmental Assessment of Santos' Activities Form • SMS-MS11-ST01 Emergency and Crisis Management Procedure • SMS-MS11-ST02 Incident Reporting, Investigation and Learning • SMS-MS12 Operations Excellence Management Standard • SMS-MS12-ST02-PD02 Operations Practices Procedure • 1541-012-WPR-0010 Operational Risk Management • SMS-MS12-ST01-PD04 Management of Change Procedure • SMS-MS13-ST01 Supply Chain Procedure • SMS-MS14-ST04 EHS Induction Procedure • SMS-E&A-OS01 Environmental Operating Standard • EHS Toolbox (tools and resources as described in Schedule A) • Environmental Quality Information System (EQulS)
Schedule E - Land	• Environment, Health and Safety Policy • Climate Change Policy	• Cooper Basin Pond and Source Water Monitoring Program • Santos Soil Management Plan

	• Charters for the Board and Executive sub committees • SMS-MS01 Risk Management Standard • SMS-MS02 Data and Information Systems Management Standard • SMS-MS04 Compliance Management Standard • SMS-MS11 Incident and Crisis Management Standard	• Methodology for Conducting Ecological Assessments (SWQ Operations) • Pest Plants and Animals Management Plan – Cooper Basin Operations • Waste Management Plan - Cooper Basin Operations • South West Queensland Residual Drilling Mud Burial Method • SMS-MS01-ST13 Environmental Hazard Controls Procedure • SMS-MS04-ST03 Environmental Approvals Procedure • SMS-MS04-ST06 Access Management Procedure • SMS-MS04-ST04-TP1 Environmental Assessment of Santos' Activities Form • SMS-MS11-ST01 Emergency and Crisis Management Procedure • SMS-MS11-ST02 Incident Reporting, Investigation and Learning • SMS-E&A-OS01 Environmental Operating Standard
Schedule F - Biodiversity	• Environment, Health and Safety Policy • Climate Change Policy • Charters for the Board and Executive sub committees • SMS-MS01 Risk Management Standard • SMS-MS02 Data and Information Systems Management Standard • SMS-MS04 Compliance Management Standard • SMS-MS11 Incident and Crisis Management Standard • SMS-MS15 Assurance Management Standard	• Methodology for Conducting Ecological Assessments (SWQ Operations) • Santos Soil Management Plan • South West Queensland Residual Drilling Mud Burial Method • Site-specific Rehabilitation Plans • Pest Plants and Animals Management Plan – Cooper Basin Operations • SMS-MS01-ST03 Process Operations Risk Procedure • SMS-MS01-ST03 Work Activity Risk Management Procedure • SMS-MS01-ST04 Management of Change Procedure • SMS-MS01-ST13 Environmental Hazard Controls Procedure • SMS-MS04-ST03 Environmental Approvals Procedure • SMS-MS04-ST06 Access Management Procedure • SMS-MS04-ST04-TP1 Environmental Assessment of Santos' Activities Form • SMS-MS11-ST01 Emergency and Crisis Management Procedure • SMS-MS11-ST02 Incident Reporting, Investigation and Learning • SMS-MS15-ST01 Assurance Procedure • SMS-E&A-OS01 Environmental Operating Standard
Schedule G - Acoustic	• Environment, Health and Safety Policy • Climate Change Policy	• SMS-MS01-ST13 Environmental Hazard Controls Procedure • SMS-MS04-ST03 Environmental Approvals Procedure

	• Charters for the Board and Executive sub committees • SMS-MS01 Risk Management Standard • SMS-MS02 Data and Information Systems Management Standard • SMS-MS04 Compliance Management Standard • SMS-MS06 External Affairs Management Standard • SMS-MS11 Incident and Crisis Management Standard • SMS-MS12 Operations Excellence Management Standard	• SMS-MS04-ST06 Access Management Procedure • SMS-MS04-ST04-TP1 Environmental Assessment of Santos' Activities Form • SMS-MS06-ST06 Stakeholder and Approvals Management Procedure • SMS-MS11-ST02 Incident Reporting, Investigation and Learning • SMS-MS12 Operations Excellence Management Standard • SMS-MS12-ST02-PD02 Operations Practices Procedure • 1541-012-WPR-0010 Operational Risk Management • SMS-MS12-ST01-PD04 Management of Change Procedure • SMS-E&A-OS01 Environmental Operating Standard • EHS Toolbox (tools and resources as described in Schedule A) • Environmental Quality Information System (EQulS)
Schedule H - Air	• Environment, Health and Safety Policy • Climate Change Policy • Charters for the Board and Executive sub committees • SMS-MS01 Risk Management Standard • SMS-MS02 Data and Information Systems Management Standard • SMS-MS04 Compliance Management Standard • SMS-MS06 External Affairs Management Standard • SMS-MS11 Incident and Crisis Management Standard • SMS-MS12 Operations Excellence Management Standard	• SMS-MS01-ST13 Environmental Hazard Controls Procedure • SMS-MS04-ST03 Environmental Approvals Procedure • SMS-MS04-ST06 Access Management Procedure • SMS-MS04-ST04-TP1 Environmental Assessment of Santos' Activities Form • SMS-MS06-ST06 Stakeholder and Approvals Management Procedure • SMS-MS11-ST02 Incident Reporting, Investigation and Learning • SMS-MS12 Operations Excellence Management Standard • SMS-MS12-ST02-PD02 Operations Practices Procedure • 1541-012-WPR-0010 Operational Risk Management • SMS-MS12-ST01-PD04 Management of Change Procedure • SMS-E&A-OS01 Environmental Operating Standard • EHS Toolbox (tools and resources as described in Schedule A) • Environmental Quality Information System (EQulS)
Schedule I - Waste	• Environment, Health and Safety Policy • Climate Change Policy • Charters for the Board and Executive sub committees • SMS-MS01 Risk Management Standard	• Waste Management Plan - Cooper Basin Operations • South West Queensland Residual Drilling Mud Burial Method • Contaminated Sites Assessment and Contaminated Site Management Plan • Cooper Basin Pond and Source Water Monitoring Program

	• SMS-MS02 Data and Information Systems Management Standard • SMS-MS04 Compliance Management Standard • SMS-MS11 Incident and Crisis Management Standard • SMS-MS14 People Management Standard	• SMS-MS01-ST03 Process Operations Risk Procedure • SMS-MS01-ST03 Work Activity Risk Management Procedure • SMS-MS01-ST04 Management of Change Procedure • SMS-MS01-ST13 Environmental Hazard Controls Procedure • SMS-MS04-ST03 Environmental Approvals Procedure • SMS-MS04-ST06 Access Management Procedure • SMS-MS04-ST04-TP1 Environmental Assessment of Santos' Activities Form • SMS-MS06-ST06 Stakeholder and Approvals Management Procedure • SMS-MS11-ST02 Incident Reporting, Investigation and Learning • SMS-MS14-ST04 EHS Induction Procedure • SMS-MS14-ST09 Competency and Training Procedure • SMS-E&A-OS01 Environmental Operating Standard • EHS Toolbox (tools and resources as described in Schedule A) • Environmental Quality Information System (EQulS) • Comtrack (regulatory approvals database)
Schedule J - Rehabilitation	• Environment, Health and Safety Policy • Climate Change Policy • Charters for the Board and Executive sub committees • SMS-MS01 Risk Management Standard • SMS-MS02 Data and Information Systems Management Standard • SMS-MS04 Compliance Management Standard • SMS-MS06 External Affairs Management Standard • SMS-MS11 Incident and Crisis Management Standard • SMS-MS15 Assurance Management Standard	• Site-specific Rehabilitation Plans • Pest Plants and Animals Management Plan – Cooper Basin Operations • SMS-MS01-ST13 Environmental Hazard Controls Procedure • SMS-MS04-ST01 Compliance Procedure • SMS-MS04-ST03 Environmental Approvals Procedure • SMS-MS04-ST06 Access Management Procedure • SMS-MS06-ST06 Stakeholder and Approvals Management Procedure • SMS-MS11-ST02 Incident Reporting, Investigation and Learning • SMS-MS15-ST01 Assurance Procedure • SMS-E&A-OS01 Environmental Operating Standard • EHS Toolbox (tools and resources as described in Schedule A) • Comtrack (regulatory approvals database)
Schedule K - Well Construction, Maintenance, Stimulation	• Environment, Health and Safety Policy	• South West Queensland Stimulation Impact Monitoring Program

	• Climate Change Policy • Charters for the Board and Executive sub committees • SMS-MS01 Risk Management Standard • SMS-MS02 Data and Information Systems Management Standard • SMS-MS04 Compliance Management Standard • SMS-MS11 Incident and Crisis Management Standard • SMS-MS12 Operations Excellence Management Standard • SMS-MS13 Supply Chain	• South West Queensland Contingency Procedure for Emergency Environmental Incidents • Santos Cooper Basin Oil and Gas Fields, South West Queensland Groundwater Monitoring Plan • South West Queensland Underground Water Impact Report Monitoring Program • SMS-MS01-ST03 Process Operations Risk Procedure • SMS-MS01-ST03 Work Activity Risk Management Procedure • SMS-MS01-ST04 Management of Change Procedure • SMS-MS01-ST10 Chemical Management Procedure • SMS-MS01-ST11 Occupational Exposure Management Procedure • SMS-MS01-ST13 Environmental Hazard Controls Procedure • SMS-MS01-ST19 Managing Risk During Adverse Weather Events • SMS-MS04-ST03 Environmental Approvals Procedure • SMS-MS04-ST06 Access Management Procedure • SMS-MS04-ST04-TP1 Environmental Assessment of Santos' Activities Form • SMS-MS11-ST01 Emergency and Crisis Management Procedure • SMS-MS11-ST02 Incident Reporting, Investigation and Learning • SMS-MS12 Operations Excellence Management Standard • SMS-MS12-ST02-PD02 Operations Practices Procedure • 1541-012-WPR-0010 Operational Risk Management • SMS-MS12-ST01-PD04 Management of Change Procedure • SMS-MS13-ST01 Supply Chain Procedure • SMS-E&A-OS01 Environmental Operating Standard • EHS Toolbox (tools and resources as described in Schedule A) • Environmental Quality Information System (EQulS)
Schedule L - Underground Gas Storage	• Environment, Health and Safety Policy • Climate Change Policy • Charters for the Board and Executive sub committees • SMS-MS01 Risk Management Standard	• Site-specific Rehabilitation Plans • Pest Plants and Animals Management Plan – Cooper Basin Operations • SMS-MS01-ST03 Process Operations Risk Procedure • SMS-MS01-ST03 Work Activity Risk Management Procedure • SMS-MS01-ST04 Management of Change Procedure

	• SMS-MS02 Data and Information Systems Management Standard • SMS-MS04 Compliance Management Standard • SMS-MS06 External Affairs Management Standard • SMS-MS15 Assurance Management Standard	• SMS-MS01-ST13 Environmental Hazard Controls Procedure • SMS-MS04-ST01 Compliance Procedure • SMS-MS04-ST03 Environmental Approvals Procedure • SMS-MS04-ST06 Access Management Procedure • SMS-MS06-ST06 Stakeholder and Approvals Management Procedure • SMS-MS15-ST01 Assurance Procedure • SMS-E&A-OS01 Environmental Operating Standard • EHS Toolbox (tools and resources as described in Schedule A) • Comtrack (regulatory approvals database)
Schedule M - Enhanced Oil Recovery	• Environment, Health and Safety Policy • Climate Change Policy • Charters for the Board and Executive sub committees • SMS-MS01 Risk Management Standard • SMS-MS02 Data and Information Systems Management Standard • SMS-MS04 Compliance Management Standard • SMS-MS11 Incident and Crisis Management Standard • SMS-MS12 Operations Excellence Management Standard	• Tarbat Area Waterflood (Enhanced Oil Recovery) Injection Management Plan • South West Queensland Contingency Procedure for Emergency Environmental Incidents • Santos Cooper Basin Oil and Gas Fields, South West Queensland Groundwater Monitoring Plan • South West Queensland Underground Water Impact Report Monitoring Program • SMS-MS01-ST03 Process Operations Risk Procedure • SMS-MS01-ST03 Work Activity Risk Management Procedure • SMS-MS01-ST04 Management of Change Procedure • SMS-MS01-ST10 Chemical Management Procedure • SMS-MS01-ST11 Occupational Exposure Management Procedure • SMS-MS01-ST13 Environmental Hazard Controls Procedure • SMS-MS01-ST19 Managing Risk During Adverse Weather Events • SMS-MS04-ST03 Environmental Approvals Procedure • SMS-MS04-ST06 Access Management Procedure • SMS-MS04-ST04-TP1 Environmental Assessment of Santos' Activities Form • SMS-MS11-ST01 Emergency and Crisis Management Procedure • SMS-MS11-ST02 Incident Reporting, Investigation and Learning • SMS-MS12 Operations Excellence Management Standard • SMS-MS12-ST02-PD02 Operations Practices Procedure

		• 1541-012-WPR-0010 Operational Risk Management • SMS-MS12-ST01-PD04 Management of Change Procedure • SMS-E&A-OS01 Environmental Operating Standard • EHS Toolbox • EQUIS
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Appendix 6 – Rehabilitation Program

1. Rehabilitation Plan

In accordance with Question 10 of the DES Form – *Submission of a plan of operations (ESR/2018/4340)*, a rehabilitation plan developed with consideration of the nature, staging and areas of proposed rehabilitation works is provided below.

1.1.Scope

Rehabilitation compliance requirements for Petroleum Leases (PL) 1027, 1029 and 1081 (95) are detailed in *Schedule J – Rehabilitation* of Environmental Authority (EA) EPPG03517915 and are shown in **Table 1** below.

Table 1. Schedule J - Rehabilitation, Environmental Authority EPPG03517915

Condition	Section in Plan
(J1) <u>Rehabilitation</u> of disturbed areas must take place progressively as works are staged.	Section 1.1.1
Remaining Dams	
(J2) Where there is a <u>dam</u> (including a <u>low consequence dam</u>) that is <u>being or intended to be utilised by the landholder or overlapping tenure holder</u> , the <u>dam</u> 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 at the time of handover.	Section 1.2
(J3) <u>Significantly disturbed areas</u> , other than those <u>being or intended to be utilised by the landholder or overlapping tenure holder</u> must be <u>rehabilitated</u> in accordance with conditions (J5) to (J8).	Section 1.1.1
(J4) Rehabilitation of <u>significantly disturbed areas</u> in accordance with condition (J5) that are no longer required for on-going petroleum activities must commence within 12 <u>months</u> (unless an exceptional circumstance in the area to be <u>rehabilitated</u> (e.g. a flood event) prevents this timeframe being met).	Sections 1.1.1.1 and 1.1.1.2
(J5) <u>Rehabilitation</u> of <u>significantly disturbed areas</u> must meet the following acceptance criteria: (a) contaminated land resulting from petroleum activities is remediated (b) the areas are: i. non-polluting ii. a <u>stable</u> landform iii. re-profiled to contours consistent with the surrounding landform (c) surface drainage lines are re-established; (d) top soil where present, is <u>reinstated</u> ; and (e) plant <u>pest species (restricted matter)</u> are not present, or are consistent with the surrounding areas.	Section 1.2
Decommissioning of Pipelines	
(J6) Pipeline decommissioning must meet Australian Standards where such a standard is applicable.	Section 1.2
Progressive Rehabilitation	
(J7) Pipelines trenches must be backfilled in accordance with Condition (J8) after pipe laying and rehabilitated as soon as practicable but not longer than three (3) months after completion.	Section 1.1.1
(J8) For the life of the operational pipeline, backfilled pipeline trenches must: (a) be a <u>stable</u> landform, exhibiting no subsidence or erosion gullies for the life of the operational pipeline; and (b) be re-profiled to a level consistent with surrounding soils; and (c) be re-profiled to original contours and established drainage lines; and (d) plant <u>pest species (restricted matter)</u> are not present, or are consistent with the surrounding areas.	Sections 1.1.1 and 1.2

1.1.1. Lifecycle of Disturbances

An overview of the lifecycle of disturbances within Santos South West Queensland tenures is illustrated in **Figure 1**. Within the disturbance lifecycle, there are two distinct stages of rehabilitation works that are carried out by Santos for project-related disturbances:

- **Stage 1 – Stabilisation** - Stabilisation works are completed post-construction within construction footprints of operational assets. Areas are stabilised to enable the safe and effective operation of assets, to minimise the risk of on-going environmental issues such as erosion, soil loss and weed invasion and to return areas to the host use (such as grazing natural vegetation) where possible. Santos will look to promote stabilisation and reduce the footprint size of the disturbances where practical.
- **Stage 2 - Rehabilitation** - Disturbance footprints that are no longer required for operational purposes are returned to the previous land use, or to a land use in accordance with landholder or overlapping tenure holder needs and regulatory requirements.

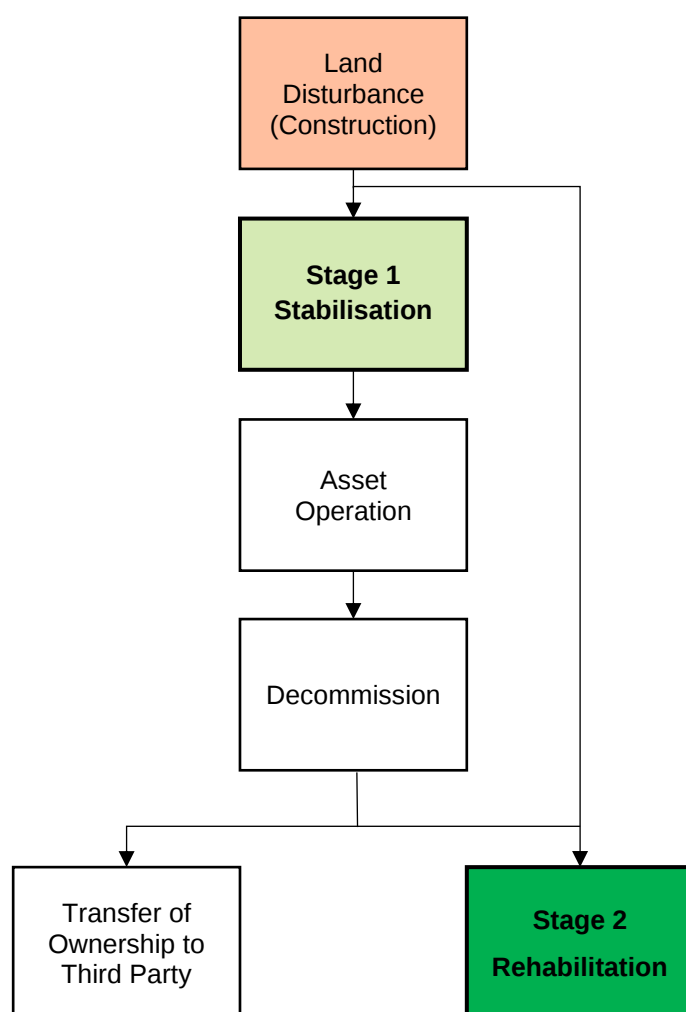


Figure 1. South West Queensland Disturbance Lifecycle

These two rehabilitation stages are discussed further in the following sections.

1.1.1.1. Stabilisation

Stabilisation works are carried out on significantly disturbed areas of land associated with construction activities that surround or are adjacent to operational assets. The stabilised area may not be regularly utilised in day-to-day operational activities, however, it may still be required for the safe operation of the asset (e.g. safety buffer) or future

additional construction / maintenance works (e.g. well work-over). In line with Santos' rehabilitation objectives, stabilisation aims to achieve a landform which is non-polluting, stable, and with contours consistent with the surrounding land. Stabilisation works involve the following types of activities:

- Remediating areas of contaminated land resulting from petroleum activities (where required and in accordance with the Santos Management System (SMS))
- Drainage and erosion control
- Surface preparation and site contouring

Stabilisation works are to commence as soon as practicable after the completion of construction activities, but not longer than 12 months from the time that the area is no longer required for day-to-day activities. Pipeline trenches will be backfilled immediately after pipe laying and stabilised within three months after completion.

The most prevalent examples of disturbances required to undergo stabilisation works in Santos South West Queensland tenures are extended areas of operational well leases (i.e. water tank storage areas and sumps), and operational right of way for pipeline easements.

1.1.1.2. Rehabilitation

Stage 2 rehabilitation is carried out on significantly disturbed areas that are no longer required for operational use. This may occur post-construction (i.e. disturbed construction footprint not required for operations) or post-decommissioning (e.g. closure of temporary camps and laydown areas, well leases, pipelines etc).

Stage 2 rehabilitation works carried out by Santos aim to achieve a final landform and land use. In most instances, this will be returning the land to its pre-disturbance state or providing the foundations for the land to return to its pre-disturbance state.

The exact timing / staging of these rehabilitation works is highly dependent on construction schedules, local environment, site-specific environmental obligations, landholder or overlapping tenure holder requirements, weather, and the operational life of the petroleum activity. Notwithstanding, for significantly disturbed areas that are no longer required for on-going petroleum activities and are not assets being retained by the landholder or overlapping tenure holder, rehabilitation will be commenced within 12 months.

Rehabilitation works include the following types of activities:

- Remediating areas of contaminated land resulting from petroleum activities (where required and in accordance with the Santos Management System (SMS))
- Re-establishing natural drainage
- Re-profiling of contours to be consistent with the surrounding landform
- Respreading topsoil where available
- Promoting the natural re-establishment of vegetation of similar species composition and density to the surrounding undisturbed land.

1.1.1.3. Example of Stabilisation vs. Rehabilitation

The following illustrates the difference between the two stages for pipeline easements.

Following the completion of construction of a pipeline, the operational pipeline easement undergoes stabilisation works. The operational easement will vary in width dependent on how much infrastructure is located within the easement. This section of the easement cannot undergo Stage 2 rehabilitation as it must remain free of significant vegetation to maintain the pipeline's integrity. The pipeline may also be subject to maintenance throughout its lifetime, which may require disturbance to the easement. It may often also be traversed by vehicles for inspection purposes.

Stage 2 rehabilitation will occur in areas outside of the operational easement (**Figure 2**). Where the pipeline is located within agricultural land uses, Stage 2 rehabilitation is often able to occur along the entire easement (subject to landholder agreements).

Following pipeline decommissioning, Stage 2 rehabilitation will occur across the entire easement to promote the natural re-establishment of vegetation of a similar species composition and density to the surrounding undisturbed land.

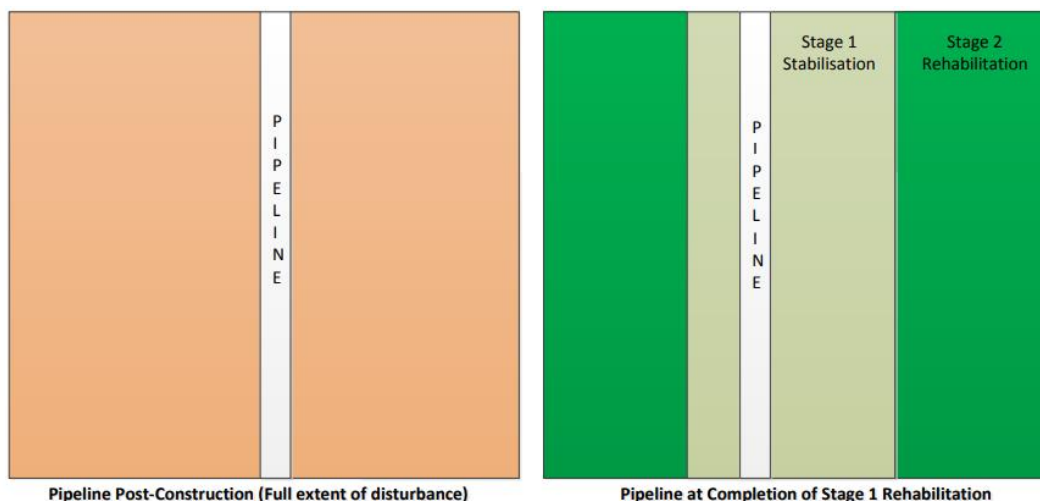


Figure 2. Pipeline Easement Post Construction vs At Completion of Stage 1 Rehabilitation

1.2. Rehabilitation Techniques

Traditional rehabilitation techniques including those described in **Table 2**, will be employed to rehabilitate disturbed land to achieve the compliance requirements listed in **Table 1**. Given the nature and the climate within the subject area (i.e. average rainfall is low and evaporation rates are high), stabilisation and rehabilitation activities as discussed above, are focused on promoting the natural re-establishment of vegetation of similar species composition and density to the surrounding undisturbed land.

Table 2. Rehabilitation Techniques

Surface Preparation and Site Contouring	Drainage Control and Erosion Control	Natural Re-establishment of Vegetation
Seismic Lines		
- Replace cuttings and debris from shotholes; - Seal and level excess materials - Install traffic barriers of natural materials at road crossings as required; and - Light rip to alleviate accidental compaction where required.	- Re-establish natural drainage; and - Install diversion berms on long slopes.	- Create roughened surface by gouging or scarifying; and - Re-spread cut brush and compact with bulldozer if necessary to promote establishment of seed.
Camps		
- Removal of infrastructure; - Strip surface gravels for reuse or bury in cut to prevent surface exposure; - Re-contour according to end land use as necessary; - Round-off cut slopes to smooth transition; - Uncompact by ripping (except in gibber plains areas); and - Respread topsoil where available.	- Re-establish natural drainage; - Install diversion berms on long slopes; and - Terraces on cut slopes as required.	Create roughened surface by gouging or scarifying to promote natural establishment of vegetation.
Well Leases and Associated Infrastructure		
- Sumps and pits backfilled and recontoured consistent with surrounding land contours; - Removal of infrastructure; - Strip surface gravels (where present) for reuse or bury in cut to prevent surface exposure; - Re-contour according to end land use if necessary; - Round-off cut slopes to smooth transition; - Uncompact by ripping (except in gibber plains areas); and	- Re-establish natural drainage; - Install diversion berms on long slopes; and - Terraces on cut slopes as required.	Create roughened surface by gouging or scarifying to promote natural establishment of vegetation.

• Respread topsoil where available.		
Pipelines		
• Decommissioning of pipelines in accordance with the relevant Australian Standard; • Backfill trenches and compact; • Mound to allow for settling; • Grade cut and fill slopes to conform to adjacent terrain; • Install traffic barriers of natural materials at road crossings as required; and • Respread topsoil.	• Re-establish natural drainage; and • Install diversion berms on long slopes.	• Create roughened surface by gouging or scarifying to promote natural establishment of vegetation.
Roads, Tracks and Laydowns		
• Strip surface gravels (where present) for reuse; remove culverts; re-contour according to end land use; round-off cut slopes to smooth transition; uncompact by ripping (except in gibber plains areas); respread topsoil where available.	• Re-establish natural drainage; and • Install diversion berms on long slopes and terraces on cut slopes as required.	• Create roughened surface by gouging or scarifying to promote natural establishment of vegetation.
Borrow Pits		
• Re-contour according to end land use; round-off cut slopes to smooth transition; uncompact by ripping (except in gibber plains areas); respread topsoil where available.	• Install diversion berms and terraces on cut slopes as required.	• Create roughened surface by gouging, scarifying to promote natural establishment of vegetation.
Other Non-Linear Disturbances (i.e. Production Facility)		
• Removal of infrastructure; • Strip surface gravels for reuse or bury in cut to prevent surface exposure; • Re-contour according to end land use; • Round-off cut slopes to smooth transition; • Uncompact by ripping; and • Respread topsoil.	• Re-establish natural drainage; and • Install diversion berms on long slopes and terraces on cut slopes as required.	• Create roughened surface by gouging or scarifying to promote natural establishment of vegetation.

1.2.1. Contaminated Land

Where there is a risk of contaminated land occurring, a site-specific contaminated land assessment and subsequent management plan may be developed for each asset. The scale and type of contamination will determine the chosen management strategy. Small volumes may be disposed offsite via facilities licenced to accept the waste whereas larger volumes may be managed on site using landfarming techniques.

1.2.2. Weed Management

Weed management will be required to enable the regeneration of pre-disturbance land uses and to ensure that the disturbance does not allow for the introduction of new species to an area or increase the localised population of a species. Weed control requiring chemicals will be undertaken by licenced contractors under the *Agricultural Chemicals Distribution Control Act 1966*, if required. All chemical application will be carried out in strict accordance with registered labels and SDS requirements and considering any *Minor Use Permit PER11463* requirements as issued by the *Australian Pesticides and Veterinary Medicines Authority* for ground-based herbicide application in non-agricultural areas (i.e. bushland areas).

1.3. Monitoring, Maintenance and Corrective Actions

Regular monitoring will be required at the completion of most rehabilitation works to ensure that the rehabilitation objectives will be achieved. The monitoring methodology will be determined on a case-by-case basis and will be dependent on the success of rehabilitation, season or natural disasters impeding rehabilitation efforts. Sites will be monitored until such time the rehabilitation criteria discussed above can be demonstrated.

Where monitoring identifies that rehabilitation criteria are not being met, maintenance actions will be implemented (i.e. weed management, landform management, etc). Where rehabilitation areas require maintenance at the completion of the monitoring timeframes, due to ineffective rehabilitation activities or natural disasters, the monitoring and maintenance schedule will be extended until the rehabilitation area meets the rehabilitation criteria.

2. Rehabilitation Schedule

In accordance with Question 10 of the DES Form – *Submission of a plan of operations (ESR/2018/4340)*, a schedule of rehabilitation activities detailing the type and areas of rehabilitation proposed to be undertaken within the plan period is detailed in **Table 3**.

Table 3. “Appendix 3 – Rehabilitation Schedule”, ESR/2018/4340

Activity	Location	Area (ha)	Post-Operation Land Use	Timing (When)	Rehabilitation Activities
Proposed Pipelines (Infield)	EPPG03517915 Project Area	82.9 ha	Grazing native vegetation unless otherwise agreed with the landowner and DES.	As per the requirements of the environmental authority.	Stage 2 Rehabilitation of pipeline right of ways outside of the operational easement. Pipeline right of ways are reinstated immediately following pipeline construction (within 3 months). This involves reinstatement of topsoil and re-profiling, reinstatement of surface drainage as required and re-establishment of appropriate groundcover.

3. Existing Rehabilitation

Spatial information detailing all existing rehabilitation present on the land at the commencement of this plan period will be provided to DES at the time of PoO submission in accordance with ESR/2018/4340.

Appendix 7 – Compliance Statement

APPENDIX 4 – COMPLIANCE STATEMENT

GUIDE

The compliance statement must be made:

- 1) If the holder is an individual/s—by the holder
- 2) If the holder is a corporation—by the executive officer of the corporation.

Where there is more than one environmental authority holder, this certification is to be signed by the person authorised to sign on behalf of all EA holders (i.e. the principal holder).

1. Joint holders

Where an agreement is in place between all holders of the environmental authority, that one holder can sign on behalf of the other joint holders, please tick the below checkbox.

- ☐ I have the authority to sign this form on behalf of all the joint holders of the environmental authority.

2. Person(s) making the compliance statement

This compliance statement is made by (tick one):

- ☐ **A.** the environmental authority holder (individual/s):

PRINT FULL NAME
PRINT FULL NAME
PRINT FULL NAME
PRINT FULL NAME
PRINT FULL NAME

- ☐ **B.** An executive officer of the environmental authority holder (corporation):

NAME OF ENVIRONMENTAL AUTHORITY HOLDER(S) SANTOS QNT PTY. LTD. VAMGAS PTY LTD DRILLSEARCH ENERGY PTY LTD
ABN / ACN 33 083 077 196 76 006 245 110 73 006 474 844
NAME OF EXECUTIVE OFFICER David Gornall
POSITION OF EXECUTIVE OFFICER (Acting) Manager Environment - Onshore
ADDRESS OF EXECUTIVE OFFICER Level 22, 32 Turbot Street BRISBANE QLD 4000

3. Compliance statement

State the extent to which the plan of operations complies with the conditions of the environmental authority:

The Plan of Operations has been prepared by Santos QNT Pty Ltd on behalf of the holders of the environmental authority and complies with the conditions of the EA insofar as the EA conditions relate to the citing of existing petroleum activities.

4. Compliance statement certification

I do solemnly and sincerely declare that:

- I am the holder, or where the holder is a corporation, an executive officer of the holder of the environmental authority.
- To the best of my knowledge all information provided as part of this compliance statement, including attachments, addresses the relevant matters and is true, correct, complete, and does not contain misleading information.
- I have not knowingly failed to reveal any relevant information or document to the administering authority.
- The opinions expressed in this compliance statement, including attachments, are honestly and reasonably held.
- I am aware that it is an offence under section 480 of the *Environmental Protection Act 1994*, to give the administering authority information that I know is false, misleading or incomplete.
- I understand that all information supplied as part of this compliance statement, including attachments, can be disclosed publicly in accordance with the *Right to Information Act 2009* and the *Evidence Act 1977*.

SIGNATURE 	DATE 2 April 2024
NAME David Gornall, (Acting) Manager Environment - Onshore, Santos QNT Pty Ltd	
ADDRESS Level 22, 32 Turbot Street BRISBANE QLD 4000	
JOINT HOLDER SIGNATURE(S) (WHERE APPLICABLE)	JOINT HOLDER SIGNATURE(S) (WHERE APPLICABLE)
JOINT HOLDER SIGNATURE(S) (WHERE APPLICABLE) 	JOINT HOLDER SIGNATURE(S) (WHERE APPLICABLE)

Please read carefully through the certification opposite before signing.

The address provided must be the residential address of the signatory.