

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, Science and Innovation 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

EPPG03219115

ENVIRONMENTAL AUTHORITY HOLDER NAME/S

CH4 Pty Ltd, Arrow CSG (ATP364) Pty Ltd

Project name (if applicable)

BOWEN GAS PROJECT (BGP)

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)

ARROW ENERGY PTY LTD

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

LEVEL 39, 111 EAGLE ST. BRISBANE, QLD, 4000

POSTAL ADDRESS (IF DIFFERENT FROM ABOVE)

PO BOX 5262, BRISBANE, QLD, 4001

CONTACT PERSON AND POSITION

BELINDA OBERIA - SENIOR ENVIRONMENTAL ADVISOR

PHONE

07 3012 4000

FACSIMILE

EMAIL

BELINDA.OBERIA@ARROWENERGY.COM.AU

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	27 / 05 / 2024
COMPLETION DATE	26 / 05 / 2027

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?
PL486	COAL SEAM GAS (CSG)	☒ 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

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

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

Pursuant to section 540 of the *Environmental Protection Act 1994* (EP Act), A copy of this form, its attachments and submitted spatial information are releasable to the public register. The public register is available for inspection by members of the public who are able to take extracts, or copies of the documents from the public register. Documents that are required to be kept on the public register are published in their entirety, unless alteration is required by the EP Act. There is no general discretion allowing the Department to withhold documents or information required to be kept on the public register. For more information on the Department's public register, search 'public register' at www.qld.gov.au. For queries about privacy matters please email privacy@des.qld.gov.au or telephone 13 74 68.

12. Declaration

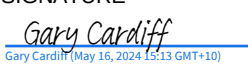
Note: If you have not told the truth in this application you may be prosecuted.

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 a document containing information that I know, or ought reasonably to know, is false or misleading in a material particular.
- I understand that it is an offence under section 480A of the *Environmental Protection Act 1994* to give to the administering authority a document containing information that I know, or ought reasonably to know, contains incomplete information 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 GARY CARDIFF	
SIGNATURE  Gary Cardiff (May 16, 2024 15:13 GMT+10)	
POSITION OF SIGNATORY OPERATIONS DIRECTOR	DATE 16/05/2024
JOINT HOLDER'S NAME (IF APPLICABLE)	JOINT HOLDER'S SIGNATURE (IF APPLICABLE)
JOINT HOLDER'S NAME (IF APPLICABLE)	JOINT HOLDER'S SIGNATURE (IF APPLICABLE)

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

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.

Please submit your completed form to the Energy and Extractive Resources Business Centre, Department of Environment, Science and Innovation 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 (if applicable)			YEAR 3 (if applicable)			YEAR 4 (if applicable)			YEAR 5 (if applicable)		
	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 (if applicable)															
Total Domain Disturbance Area (ha)															
DOMAIN 2: ROADS, TRACK, LAYDOWN AND BORROW PITS (if applicable)															
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
Example: Schedule X	XXXX Monitoring Plan	Schedule construction for dry time of year, get CPESC to develop ESC plan, undertake monitoring and ensure maintenance of ESC measures during construction phase
m,./		

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.

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) ARROW CSG (ATP364) PTY LTD, CH4 PTY LTD
ABN / ACN 092 970 557, 092 501 016
NAME OF EXECUTIVE OFFICER ZHENGXIN PENG
POSITION OF EXECUTIVE OFFICER CHIEF EXECUTIVE OFFICER
ADDRESS OF EXECUTIVE OFFICER LEVEL 39, 111 EAGLE STREET, BRISBANE, QLD 4000

3. Compliance statement

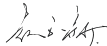
State the extent to which the plan of operations complies with the conditions of the environmental authority:

THE PLAN OF OPERATIONS COMPLIES WITH THE CONDITIONS OF THE ENVIRONMENTAL AUTHORITY (EA). THE PROPOSED ACTIONS WITHIN THE PLAN OF OPERATIONS ALIGNS WITH ACTIVITIES AUTHROISED BY THE EA AND REQUIREMENTS OF THE EA (INCLUDING REHABILITATION REQUIREMENTS).

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 understand that it is an offence under section 480 of the *Environmental Protection Act 1994* to give to the administering authority a document containing information that I know, or ought reasonably to know, is false or misleading in a material particular.
- I understand that it is an offence under section 480A of the *Environmental Protection Act 1994* to give to the administering authority a document containing information that I know, or ought reasonably to know, contains incomplete information in a material particular.
- 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 17/05/2024	
NAME ZHENGXIN PENG			
ADDRESS LEVEL 39, 111 EAGLE 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.

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 master schema spreadsheet 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
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.	AR	Annual Return	Mandatory
				ERCP	Estimated Rehabilitation Cost Petroleum	
				PoO	Plan of Operations	
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 for ARs. And PoO. Optional for ERCs.

³ If blank, populate based on Attribute type & definition

Attachment 1—Spatial data requirements for plan of operations

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 and is not required for Annual Returns.			Not required for ARs. Optional for ERC / PoO.
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	2	This field relates to the status of the activity in terms of rehabilitation or disturbance. Polygons which represent areas of disturbance should describe this field as 'D1' for disturbance. <u>Polygons which represent areas of rehabilitation should describe this field as either R1, R2 or R3 depending on the status of the rehabilitation.</u> R1 - indicates that rehabilitation works have commenced on ground. R2 - indicates where rehabilitation has been completed but not certified in accordance with the EP Act. R3 - indicates areas of completed and certified rehabilitation in accordance with the EP Act.	D1	Disturbance	Mandatory
				R1	Rehabilitation Commenced (non-certified)	
				R2	Completed Rehabilitation (for which progressive certification has not yet been approved in accordance with the EP Act)	
				R3	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	

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				RTK	Real-Time Kinematic (RTK) Survey	
				UK	Unknown	
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 for ERC and PoO. Not required for Annual Returns.
				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)	

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				NRDL	Non-regulated dam - lined (Polygon)	
				NRDU	Non-regulated dam - unlined (Polygon)	
				OSF	Oil storage facility (Polygon)	
				PB	Stand-alone permanent building (Polygon)	
				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	Exp	Exploration	Mandatory for ERC and PoO. Not required for Annual Returns.
				RTL	Roads, tracks, laydown, borrow pits	
				CB	Camps, Buildings and Sewage Treatment Plants	

Attachment 1—Spatial data requirements for plan of operations

			for the area. If the ACTIVITY_TYPE = 'Other', select the relevant domain to the activity type.	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	
				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 = R1.			Mandatory if STATUS = R1 for ERC or PoO. Not required for Annual Returns.
AREA_HA	DOUBLE	N/A	This field indicates the area in Hectares. (Polygon only)			Mandatory if GEOMETRY = polygon.
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.

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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.

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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)