Application form

*Environmental Protection Act 1994*

Attachment 1—Spatial data requirements for estimated rehabilitation cost

*This is a standalone version of the attachment from the approved form Application for a decision on the estimated rehabilitation cost (ESR/2018/4426).*

Attachment 1 provides guidance on the required content of spatial data 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 guideline Spatial Information Submission prepared by the department. To obtain a copy of the guideline visit [www.qld.gov.au](http://www.qld.gov.au) and search for “ESR/2018/4337”. The following sections provide information about the required fields and attributes for both petroleum and mining activities.

Each geometry type must be submitted in a separate file, as outlined within Tables 1 and 3. Each file must be named in accordance with the requirements outlined within the department’s guideline: Spatial Information Submission (ESR/2018/4337).

Petroleum activities

*Table 1: Shapefiles for petroleum activities*

|  |  |  |  |
| --- | --- | --- | --- |
| **File** | **Spatial information requirement** | **Schema** | **Example file name (e.g. using submission date of 30 June 2023)** |
| 1 | Disturbance, rehabilitation and/or certified rehabilitation on site – points  | Table 2 | EPPR00372287 \_ERCP\_PT\_30062023.zip. |
| 2 | Disturbance, rehabilitation and/or certified rehabilitation on site - lines | Table 2 | EPPR00372287 \_ERCP\_LN\_30062023.zip. |
| 3 | Disturbance, rehabilitation and/or certified rehabilitation on site - polygons | Table 2 | EPPR00372287 \_ERCP\_PY\_30062023.zip. |

Where:

|  |  |
| --- | --- |
| * ERCP = Estimated Rehabilitation Cost Petroleum
 | * LN = line (geometry)
 |
| * PT = point (geometry)
 | * PY = polygon (geometry)
 |

Table 2 comprises the schema for disturbance and rehabilitation data. 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. Please refer to the definitions column for guidance in determining field values for disturbance and rehabilitation polygons.

A spreadsheet containing the schema and a shapefile templates are available on the Queensland Government website at [www.qld.gov.au](http://www.qld.gov.au/environment) and using ‘submission of spatial information’ as a search term.

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

Table 2: Schema for petroleum activities (ERCP) - disturbance and rehabilitation

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Field Name** | **Type** | **Length** | **Definition** | **Domain Values[[1]](#footnote-1)** | **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. |
| **MAP\_ID** | TEXT | 5 | This field contains a unique user entered identifier linking to ERC calculator. This field is optional and must 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. Polygons which represent areas of rehabilitation should describe this field as either R1, R2 or R3 depending on the status of the rehabilitation. 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 |
| 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 | Landfill~~s~~ (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) |
| 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 for ERC and PoO. Not required for Annual Returns. |
| 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 |
| 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. |

Mining activities

*Table 3: Shapefiles for mining activities*

|  |  |  |  |
| --- | --- | --- | --- |
| **File** | **Spatial information requirement** | **Schema** | **Example file name (e.g. using submission date of 30 June 2023)** |
| 1 | Proposed and existing disturbance, rehabilitation and/or certified rehabilitation on site – points  | Table 4 | EPPR00372287 \_ERCM\_PT\_30062023.zip. |
| 2 | Proposed and existing disturbance, rehabilitation and/or certified rehabilitation on site - lines | Table 4 | EPPR00372287 \_ERCM\_LN\_30062023.zip. |
| 3 | Proposed and existing disturbance, rehabilitation and/or certified rehabilitation on site - polygons | Table 4 | EPPR00372287 \_ERCM\_PY\_30062023.zip. |

Where:

|  |  |
| --- | --- |
| * ERCM = Estimate Rehabilitation Cost Mining
 | * LN = line (geometry)
 |
| * PT = point (geometry)
 | * PY = polygon (geometry)
 |

Table 4 comprises the schema for disturbance and rehabilitation data. 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. Please refer to the definitions column for guidance in determining field values for disturbance and rehabilitation polygons.

A spreadsheet containing the schema and a shapefile template is available on the Queensland Government website at [www.qld.gov.au](http://www.qld.gov.au/environment) and using ‘submission of spatial information’ as a search term.

Table 4: Schema for mining activities (ERCM) - disturbance and rehabilitation

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Field Name** | **Type** | **Length** | **Definition** | **Domain Values[[2]](#footnote-2)1** | **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 |
| ERCM | Estimated Rehabilitation Cost Mining |
| **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. Optional for ERCs. |
| **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. |  |  | Optional for ERCs. Not required for ARs. |
| **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. Polygons which represent areas of disturbance should describe this field as ‘D1’ for disturbance. Polygons which represent areas of proposed disturbance should describe this field as 'PD'.Polygons which represent areas of rehabilitation should describe this field as either R1, R2 or R3 depending on the status of the rehabilitation. 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 - for areas of completed and certified rehabilitation in accordance with the EP Act. Polygons which represent areas of proposed rehabilitation should describe this field as PR1, PR2 or PR3. PR1 - indicates that rehabilitation works are proposed to commence on ground. PR2 - indicates where rehabilitation works are proposed to be completed by not certified in accordance with the EP Act.PR3 - indicates areas of rehabilitation proposed to be completed and certified under the EP Act.Improvement areas must be provided if the PRCP Schedule contains an approved non-use management area. Polgyons which represent areas of improvement should describe this field as either IC, PIC, IA or PIA. IC - indicates the area where improvement commenced in the reporting period.PIC - indicates the area where additional improvement is proposed to be commenced in the next reporting period.- IA indicates the area that has achieved sufficient improvement in the reporting period.PIA - indicates the area where it is proposed to achieve sufficient improvement in the next reporting period. | D1 | Disturbance | Mandatory |
| PD | Proposed Disturbance |
| 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) |
| PR1 | Proposed rehabilitation commenced (non-certified) |
| PR2 | Proposed rehabilitation completed (for which progressive certification has not yet been approved in accordance with the EP Act) |
| PR3 | Proposed rehabilitation certified (in accordance with the EP Act) |
| IC | Improvement commenced |
| PIC | Proposed improvement commenced |
| IA | Sufficient improvement achieved |
| PIA | Proposed sufficient improvement achieved |
| **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 | 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. | BH | Bore hole (Point) | Mandatory for ERCs. Not required for Annual Returns |
| DH | Drill hole (Point) |
| VS | Ventilation Shafts (Point) |
| Con | Conveyor (Line) |
| FL | Fence Line (Line) |
| Pip | Pipeline (Line) |
| PL | Power Lines (Line) |
| RL | Rail Line (Line) |
| AT | Access Track (Polygon) |
| Bui | Building (Polygon) |
| BP | Borrow Pit (Polygon) |
| CA  | Cleared area (Polygon) |
| Camp | Camp (Polygon) |
| CDA | Co-disposal area (Polygon) |
| CP | Concrete pad (Polygon) |
| CT | Communication tower (Polygon) |
| EOWS | Evaporation and other unlined water storage (Polygon) |
| GI | Gas Infrastructure (Polygon) |
| HLP | Heap leach pad (Polygon) |
| HR | Mine Haul Road (Polygon) |
| LF | Landfill (Polygon) |
| LY | Laydown yard (Polygon) |
| OD | Overburden dump (Polygon) |
| OWS | Other water storage (Polygon) |
| OWST | Other water structures (Polygon) |
| Pit | Pit (Polygon) |
| PPE | Processing plant and equipment (Polygon) |
| PWS | Process water storage (Polygon) |
| Ramp | Ramp (Polygon) |
| RLF | Rail loading facility (Polygon) |
| Road | Road (Polygon) |
| RomP | Run of Mine (ROM) Pad (Polygon) |
| RoW | Right of way (Polygon) |
| RS | Regulated structure (Polygon) |
| RWS | Raw water storage (Polygon) |
| SBH | Silo/bin/hopper (Polygon) |
| SP | Spoil pile (Polygon) |
| STP | Sewage treatment plant (Polygon) |
| Sub | Subsidence (Polygon) |
| SY | Switchyard (Polygon) |
| Tank | Tank (Polygon) |
| TS | Topsoil stockpile (Polygon) |
| TSF | Tailings storage facility (Polygon) |
| TStr | Topsoil Stripping (Polygon) |
| UW | Underground workings (Polygon) |
| UND | Undisturbed Land (Polygon) |
| WRD | Waste rock dump (Polygon) |
| OTH | Other (Point, Line, Polygon) |
| **DOM\_TYPE** | TEXT | 5 | This field indicates the domain for the Mining 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 for ERCs. Not required for Annual Returns. |
| Inf | Infrastructure |
| WS | Water storage |
| WT | Water treatment and pumping |
| PE | Process and Heavy Equipment |
| WRODP | Waste rock dumps, overburden dumps, spoil piles and stockpiles |
| HLP | Heap Leach Pads |
| TSF | Tailings Storage Facilities , Rejects, Slimes, Slimes Storage Facilities |
| Pit | Pits |
| UM | Underground mines |
| PO | Ports |
| 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 or STATUS = PR1. Not required for Annual Returns. |  |  | Mandatory IF STATUS = R1 OR STATUS = PR1. 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 for ERCs if ACT\_TYPE = OTH. Optional for Annual Returns. |

1. If blank, populate based on Attribute type & definition [↑](#footnote-ref-1)
2. 1 If blank, populate based on Attribute type & definition [↑](#footnote-ref-2)