

Guideline

Environmental Protection Act 1994

Spatial information submission

This guideline is intended to assist in the preparation of spatial information associated with the submission of approved forms under the Environmental Protection Act 1994, including the annual return for resource activities, estimated rehabilitation cost, plan of operations and progressive rehabilitation and closure plan.

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1 Introduction

This guideline has been developed for proponents who are submitting spatial information associated with applications and reporting processes under the *Environmental Protection Act 1994* (EP Act).

The purpose of this guideline is to outline formatting and content requirements to ensure the standardisation of spatial information and provide consistency of submissions received, enabling the department to validate, process and analyse information more effectively.

This guideline has been divided into two sections covering the submission of spatial information as:

- digital spatial data (shapefiles)
- PDF maps.

Please refer to the relevant section of the guideline to assist with the submission of digital spatial data or maps. If you require assistance with the preparation or submission of spatial information, please contact the department via email to spatialsubmit@des.qld.gov.au.

2 What is spatial information?

In the context of this guideline, spatial information refers to geographic location data and information related to project infrastructure and activities such as land disturbance and rehabilitation. Spatial information consists of data that can be mapped, and associated information such as metadata which provides context and meaning. Spatial data represents the locations and shapes of geographic features and the relationships between them and is usually stored as coordinates.

An activity or infrastructure that is located within the boundary defined by an environmental authority (EA) may be considered spatial information. Examples include, but are not limited to, the location of:

- buildings
- excavations
- sorting areas
- holding tanks
- storage areas
- exploration or groundwater bores
- monitoring points
- pipelines
- disturbance areas.

2.1 What spatial information is required?

Spatial information can be captured for a range of activities and infrastructure associated with the area and location defined by an EA. Several approved forms under the EP Act support and require the submission of spatial information as part of the application or reporting process. Proponents are required to familiarise themselves with the relevant spatial information obligations within the relevant approved forms for:

- plan of operations
- estimated rehabilitation cost (ERC)
- progressive rehabilitation and closure plan (PRC plan)
- annual return for resource activities.

3 What format requirements apply?

Spatial information must be submitted as either digital spatial data (shapefiles) or as PDF maps. The applicable format is specified within each approved form and proponents are required to review the relevant form and identify which format applies to the spatial information submission.

Further information about the required format for annual returns is provided in

Attachment 1—Annual returns – map requirements and Attachment 2—Annual returns – shapefile attributes and submission requirements of this guideline.

For details on submitting spatial information within this guideline, please refer to:

- section 5 Digital spatial data submissions for details on submitting shapefiles
- section 6 Map submissions for details on submitting static maps.

4 How do I submit spatial information?

Spatial information can be submitted in the following ways:

- digital spatial data (shapefiles) and digital PDF maps as email attachments to:
spatialsubmit@des.qld.gov.au
- hardcopy maps by post to:
Permit and Licence Management
Department of Environment, Science and Innovation
GPO Box 2454
Brisbane QLD 4001
- as otherwise specified within the relevant approved form.

Note: File transfer links, cloud-based systems such as 'Dropbox' etc., USB, hard drives and other file storage devices will not be accepted by the department.

If incorrect or incomplete information is provided or submitted incorrectly, proponents may be required to re-submit the information or provide alternative supporting information. This guideline outlines the minimum submission requirements.

After submission of your files, the department performs a spatial file validation to ensure all spatial files submitted meet the minimum requirements of this guideline and their relevant spatial schema. This spatial file validation process occurs as a standalone process when it is first submitted and does not relate to the validation process of the relevant approved form and application process the spatial data is being submitted for.

4.1 Lodgement via email

The specific requirements for email lodgement are provided below along with an example in Figure 1.

The subject line of the email must include all the following details:

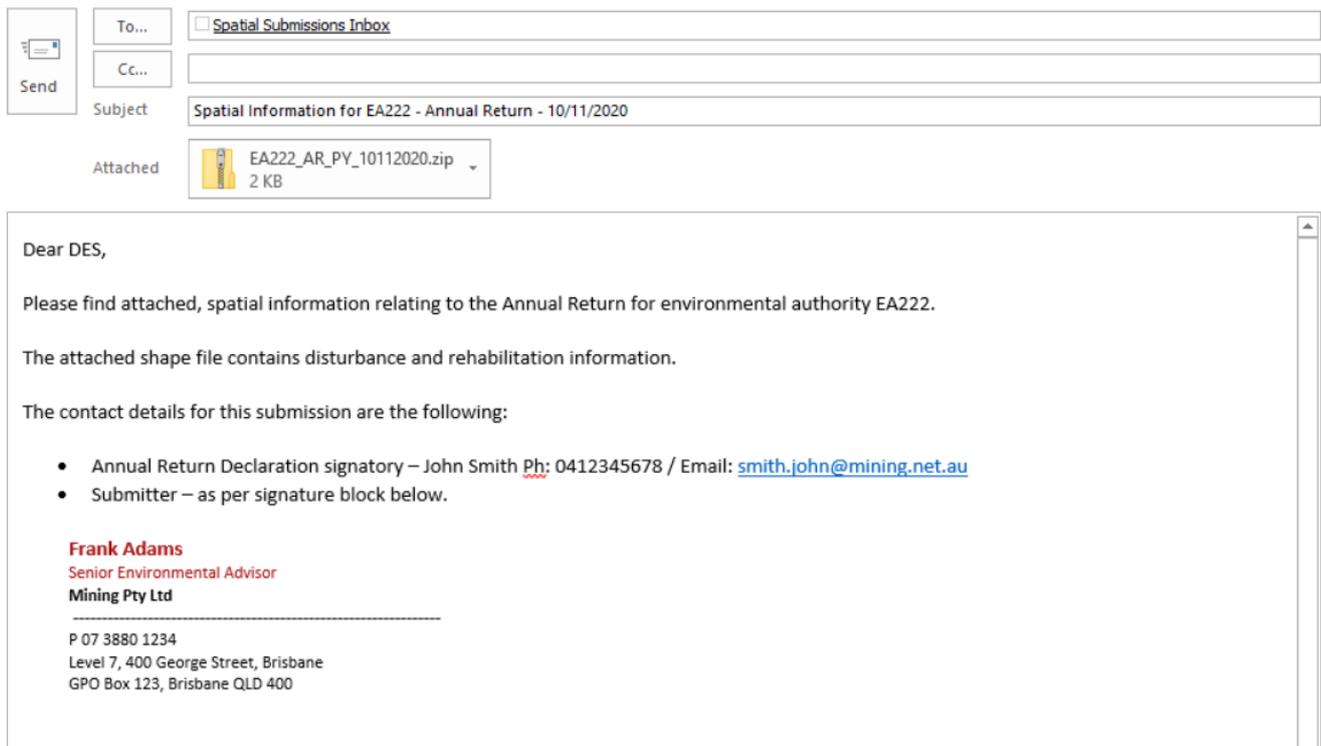
- a heading that states 'Spatial Information for (EA number)...'
- the EA number
- the application or reporting process e.g. annual return
- if multiple emails are being submitted, the number of the email, for example Email 1 of #.

For example: Spatial Information for EA222 - Annual Return

The body of the email should also include all the following information:

1. the relevant declaration signatory name (as completed on the approved form) and their contact details for the matter being submitted
2. the submitter's name and contact details if different from 1 above.

Figure 1: Example email submission



The following limitations apply when submitting digital spatial information via email:

- multiple emails may be submitted
- a size limit of 20MB applies to each email submitted (see section **Error! Reference source not found.** below)
- ensure the two types of spatial information, digital spatial data (shapefiles) and digital PDF maps, are submitted in separate emails (i.e. one email for digital spatial data and another for digital PDF maps).
- where multiple digital PDF maps are being submitted, each should be a separate email attachment and not be combined in a zip file.
- for shapefiles:
 - have one zip folder per shapefile. Do not use sub-folders within the zip folder
 - ensure you include an excel metadata file in the zip folder for each shapefile. Refer to section 5.77 for more information about the metadata requirements
 - you only need to submit one shapefile per relevant geometry type (line, point or polygon), for each approved form (annual return, ERC etc.). Do not break apart shapefiles by status types such as disturbance or rehabilitation
 - adhere to the file naming convention outlined in section 5.44. The filename of the shapefile and the corresponding zip folder must be the same
 - if you are re-submitting data that did not pass spatial file validation the first attempt, please use the current date when you re-submit the new file. Do not use the previous date in the filename.
 - Do not submit data that has been previously approved.

5 Digital spatial data submissions

Proponents are required to submit digital spatial data to the department in shapefile format only. The department requires that the shapefiles and the associated attribute information are submitted in a defined format (schema). To ensure consistency in the data being received from sites across Queensland, schemas (templates) have been created for the different forms (e.g. annual return, ERC, plan of operations and PRC plan), which require submission of spatial information. Please refer to the relevant approved form (excluding annual returns) or the master schema for defined schema requirements and the following sections for additional shapefile submission requirements. The schema and additional shapefile submission requirements for all application types are available on the Queensland Government's website at www.qld.gov.au/environment, using "submission of spatial information" as a search term.

5.1 Geometry

Accepted geometry for plan of operations or ERC shapefiles include point, line or polygon dependent on the feature. Features are to be represented by the relevant geometry for the feature as prescribed in the approved form or master schema for the relevant process.

For all submissions please ensure your geometry is valid before submitting data. Common types of invalid geometry are (but not limited to):

- No geometry. A record in the attribute table is unable to retrieve geometry information
- Empty geometry. A geometry does not contain geometric information, represented by no information of SHAPE_LEN and SHAPE_AREA fields
- Mixed geometries. Points, lines, and polygons must be separated. Any geometry mixed with lines, points, and polygons is invalid.
- Contains discontinuous parts. One of the geometry's parts is composed of disconnected or discontinuous parts.
- Contains self-intersecting polygons. A polygon must not intersect itself, including a polygon on top of another polygon

All GIS software has Geometry checking & handling/repair tools used to validate and repair spatial geometry. Please ensure all geometry is valid and geometry errors are repaired before submitting. Files containing invalid geometry will be returned for repair.

ArcGIS Pro:

Check Geometry (Data Management) <https://pro.arcgis.com/en/pro-app/2.8/tool-reference/data-management/check-geometry.htm>

Repair Geometry (Data Management) <https://pro.arcgis.com/en/pro-app/2.8/tool-reference/data-management/repair-geometry.htm>

QGIS:

Geometry Checker Plugin

https://docs.qgis.org/2.14/en/docs/user_manual/plugins/plugins_geometry_checker.html

https://www.qgistutorials.com/en/docs/3/handling_invalid_geometries.html

5.2 File type

Shapefiles must be submitted in a zip file format (.zip) and contain at a minimum the following file extensions:

- .shp - the main file that stores the feature geometry
- .shx - the index file that stores the index of the feature geometry
- .dbf - the dBASE table that stores the attribute information of features
- .prj - the file that stores the coordinate system information

5.3 Shapefile templates

Shapefiles templates are provided for the following approved forms;

- Template 1:
 - AR = Annual Returns (Polygon)
 - PoO = Plan of Operations Disturbance and Rehabilitation (Polygon, Point, Line)
 - ERCM = Estimated Rehabilitation Cost Mining (Polygon, Point, Line)
 - ERCP = Estimated Rehabilitation Cost Petroleum (Polygon, Point, Line)
- Template 2:
 - PoOL = Plan of Operations Lease (Polygon)
- Template 3:
 - PRCP = Progressive Rehabilitation and Closure Plan (Polygon)

Download and save copies of the required shapefile templates, which are available on the Queensland Government's website at www.qld.gov.au and using "submission of spatial information" as a search term.

To avoid spatial file validation issues, it is strongly advised that you populate the shapefile templates with the required features and spatial information as stated in the relevant schema, with no modifications to field names or data types. Ensure you have the most current shapefile template and schema by checking the website. You are not required to break apart shapefiles by status type such as disturbance or rehabilitation type, you can submit one shapefile per form per geometry type.

5.4 File naming convention for shapefiles

Both the individual shapefiles, the compressed (.zip) files and associated metadata files must be named the same, and follow the naming convention using value names from Table 1 below. Shapefile names must only include alphanumeric characters (letters and numbers) and the underscore character to separate words. The file names must not include spaces, periods, dashes or any other special characters. The file submission naming convention must follow the below format:

EANo_Process_Geometry_FileCreationDate_FileSequenceCode(if required).<file_format>

For example: EPPR00372287_ERCP_PY_03062020_A.zip

Table 1: File names for shapefiles

| Value names | Description |
|-------------|---|
| EANo | Environmental authority permit number |
| Process | The relevant process spatial data is being submitted for, either: <ul style="list-style-type: none"> • AR = Annual Return • PoO = Plan of Operations (Disturbance & Rehabilitation) • PoOL = Plan of Operations Lease • ERCM = Estimated Rehabilitation Cost Mining • ERCP = Estimated Rehabilitation Cost Petroleum • PRCP = Progressive Rehabilitation and Closure Plan |
| Geometry | The geometry code must be one of the following: |

| Value names | Description |
|----------------------------------|---|
| | <ul style="list-style-type: none"> • PT – for point data • LN – for line data • PY – for polygon data |
| File creation date | <p>The date must be in the format DDMMYYYY and ordered from day to year.</p> <ul style="list-style-type: none"> • DD = two digits for day • MM = two digits for month • YYYY = four digits for year |
| File sequence code (if required) | <p>File sequence is an alphabetised code which may be used if required, when multiple files are being submitted for the same data type. For example, using A, B or C at the end of the file name - <i>EPPR00372287_ERC_PY_01052020_A.pdf</i></p> <p>If you need to provide more than 26 shapefiles for one process, you can utilise an alphanumeric code instead of a basic alphabetised code. For example, AA, AB, AC, AD OR 1A, 1B, 1C etc.</p> |

5.5 Coordinate reference system requirements

The department has updated its spatial systems to enable the use of Geocentric Datum of Australia 2020 (GDA2020). It is our strong preference that shapefiles are provided in the geographic coordinate system and in the Australian geodetic datum reference system - Geocentric Datum of Australia 2020 (GDA2020) in unprojected geographic coordinate format [Lat/Long]. The department's shapefile templates are provided in GDA2020 to support this.

However, in line with the Queensland Government's transition to GDA2020¹ the department will continue to support the submission of Geocentric Datum of Australia 1994 (GDA2020) until June 2022.

Information about [Geocentric Datum of Australia \(GDA\) transformation software](#) is available on the Business Queensland website at www.business.qld.gov.au.

5.6 Multiple sites

For EAs which cover multiple sites, spatial data is required to be submitted as one shapefile.

5.7 Metadata requirements

Shapefiles must be submitted with the minimum metadata outlined in Table 2: Metadata requirements for shapefiles below. The provision of metadata is mandatory and should only be provided as:

- an excel compatible spreadsheet (.xls or .xlsx) within your zip file.

Note the file naming convention within Section 5.4 applies to metadata files.

Table 2: Metadata requirements for shapefiles

| Metadata field | Details |
|--------------------------------|--|
| Environmental authority permit | Provide the environmental authority number relating to the submission. |

¹ The Department of Resources is responsible for implementing the change to GDA 2020 on behalf of the Queensland Government. More information about [GDA2020 in Queensland](#) is available on their website at www.dnrme.qld.gov.au.

| Metadata field | Details |
|---|--|
| number | |
| Environmental authority holder name/s | Provide environmental authority holder/s details. |
| Title | Provide the title for the submission. For example: Annual return spatial data submission 2021. Resource Productions Pty Ltd, Winding Creek. |
| Date | Provide the date of shapefile creation and last revision (if applicable). |
| Abstract and purpose | Provide a summary of the data and its purpose. |
| Metadata author and contact information | Name of individual Organisation name Position name Role Email address Phone number |
| Metadata date stamp | Metadata creation date, which is not necessarily the same as the date the shapefile was created. |
| Identification Information | Basic information about the shapefile including e.g. citation, keywords and spatial extent of the data. |
| Topic category | Provide the topic category/categories that the data relates to. For example, rehabilitation, disturbance and/or improvement. |
| Release statement | As owners of the data, provide acknowledgement and release for the use of the data in accordance with the relevant legislation. For example: Resource Productions, being the owners of this data, acknowledge that the data may be used in accordance with the administration of the <i>Environmental Protection Act 1994</i> by the department. |

6 Map submissions

The following sections outline the requirements for submitting spatial information as a map. For the purposes of this guideline, 'map' includes the following:

- Digital map – a map produced and supplied in a digital format. Table 3 includes a list of the accepted file format
- Hardcopy map – printed on paper.

6.1 Map features

Maps must show the relevant features on site clearly. Areas of interest are most often shown as 'polygons'. Figure 2 shows an example of a map containing several polygons (green hatched areas) shown over an aerial image. The map contains grid coordinates and central coordinates within each polygon on the map. Maps indicating areas of interest, for example disturbance or rehabilitation can be hand drawn or drawn using an electronic system.

Figure 2: Example of a map showing polygons

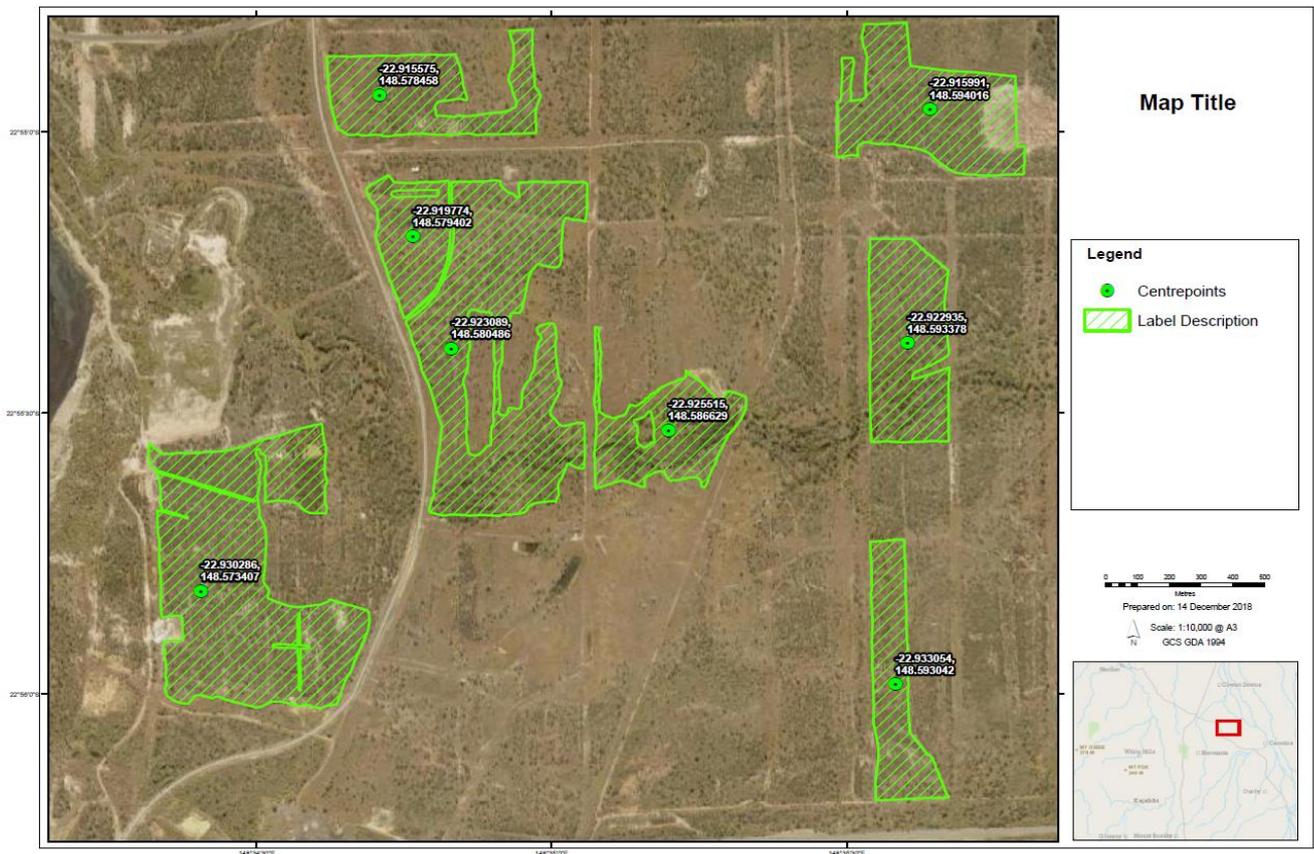


Table 3: Map requirements

| Requirement type | Description |
|-------------------|--|
| File type | <p>Maps must be submitted as either a:</p> <ul style="list-style-type: none"> • hardcopy map – printed on paper <li style="text-align: center;">or • digital map in PDF format. |
| Location | <p>The location of site features must be shown as one of the following:</p> <ol style="list-style-type: none"> 1. <u>Coordinates of site activities – for sites with a limited number of features</u> Each map should contain a minimum of six (6) coordinates. Coordinates to be labelled in latitudes and longitudes - decimal degrees to 6 decimal places. For example, 147.806912 / -21.988621. <li style="text-align: center;">or 2. <u>Grid – for sites with a large number of features</u> Each map to include a coordinate grid of two or more latitudes and longitudes per axis shown and labelled. Coordinates to be labelled in latitudes and longitudes - decimal degrees to 6 decimal places. |
| Coordinate system | <p>Indicate the coordinate reference system used for example, GDA2020. Please note that the use of some reference systems such as UTM or MGA2020 (as eastings and northings) will also need to provide information about the relevant zone on the map.</p> |
| Map data | <p>At a minimum the map must show:</p> <ul style="list-style-type: none"> • The feature of interest e.g. the rehabilitation area(s), • Locational coordinate as either 1 or 2 above, • The name of the feature (e.g. North West Tailings Dam), • For any mapped points (e.g. exploration bores), the coordinate locations for each must be included either on the map or as a labelled table attachment, • If an aerial image is not used as the underlying map, any nearby local feature for map orientation e.g. a road or watercourse. |
| Map features | <p>The map must contain the following information:</p> <ul style="list-style-type: none"> • A legend containing map symbology, • Title and version if applicable, • North point, • Scale shown as a multiple of either 1K, 2.5K, 5K or 10K, • Date of map production • Inset reference map showing nearby townships. |
| Paper size | <p>Maps must be provided on either A4 or A3 and fitted to page.</p> |

6.2 File size limit

Emails are also limited to a maximum of 20MB including attachments. If your email exceeds the 20MB limit, break the content up across multiple emails.

6.3 File naming convention for maps

Digital map files must be named using Value Names from Table 4. File names must only include letters, numbers and the underscore character to separate words. The naming convention must follow the format below:

EANo_Process_STATUSType_FileCreationDate.<file_format>

For example: EPPR00372287_AR_D1_01052019.pdf

Table 4: Digital map file name descriptions

| Value names | Description |
|--------------------|---|
| EANo | Environmental authority permit number |
| Process | For example: <ul style="list-style-type: none"> • AR = Annual Return • ERCM = Estimated Rehabilitation Cost Mining • ERCP = Estimated Rehabilitation Cost Petroleum |
| STATUS type | STATUS type refers to the data within each map. For example, type may be existing rehabilitation or proposed disturbance. STATUS type codes are provided within the schema of the relevant approved form, and for annual returns are also provided in Table 7 of Attachment 1—Annual returns – map requirements. |
| File creation date | The date must be in the format DDMMYYYY ordered from day to year within the file name. <ul style="list-style-type: none"> • DD = two digits for day • MM = two digits for month • YYYY = four digits for year |

6.4 Supporting information

Maps must be submitted with supporting information as outlined within Table 5 and be provided as a separate file (for example as a word document or text file), or hardcopy (paper) submission.

Table 5: Supporting information

| Information | Details |
|---------------------------------------|---|
| Environmental authority permit number | Provide the environmental authority number relating to the submission. |
| Environmental authority holder name/s | Provide environmental authority holder/s details. |
| Title | Provide the title for the submission. For example: Annual return spatial data submission 2019. Resource Productions Pty Ltd, Winding Creek. |
| Date | Provide the date of map creation and last revision (if applicable). |
| Author and contact information | Provide the author and contact information. |
| Abstract and purpose | Provide a summary of the map and its purpose. |
| Author and contact information | Name of individual Organisation name Position name Email address Phone number |
| Topic category | Provide the category that the data relates to. For example: Rehabilitation or disturbance. |
| Release statement | As owners of the data, provide acknowledgement and release for the use of the data in accordance with the relevant legislation. For example: Resource Productions being the owners of this data, acknowledge that the data may be used in accordance with the administration of the <i>Environmental Protection Act 1994</i> by the department. |

7 Glossary

| Term | Definition |
|-------------------------------------|--|
| Approved form | A form that has been approved for use under the <i>Environmental Protection Act 1994</i> . |
| Attribute (field) | Descriptive information about features or elements of a database. |
| Department | The administering authority for environmental authorities under the <i>Environmental Protection Act 1994</i> . |
| Digital map | A map supplied in a digital format for example, PDF, JPEG or TIFF. |
| Geographic coordinate system | Coordinate system where the position on earth's surface is measured in terms of latitude and longitude using an angular unit of measurement. |
| Geographic information system (GIS) | A GIS is the spatial capture of themed data layers and the storing, analysing and displaying of the geographically referenced information. A GIS also includes the procedures, software, hardware, operating personnel and spatial data associated with the system. |
| Geometry | The measures and properties of points, lines and polygons (surfaces). In a GIS, geometry is used to represent the spatial component of geographic features. |
| Line | For spatial data, a linear map feature that is not associated with an area. It may be a straight line between two points, but typically includes intermediate point nodes that connect line segments. |
| Map | Digital or hard-copy image that depicts spatial data and usually includes geographic referencing information. |
| Metadata | Information that describes the content, quality, condition, origin, and other characteristics of data or other pieces of information. Metadata for spatial data may describe and document its subject matter, how, when, where and by whom the data was collected, the availability and distribution of information, its projection, scale, resolution and accuracy, and its reliability with regard to a particular standard. |
| Point | For spatial data, a location that is defined by a single coordinate pair (X / Y or lat / long). |
| Polygon | A polygon is a shape with at least three straight sides and angles. A polygon feature may have one or more parts. For spatial data, a polygon is a digital map feature that has a closed set of lines that define a perimeter boundary to represent a place or object that has area at a given scale. |
| Schema | A schema is commonly used in database management systems and documents and describes the structure of database objects (such as a table or a table field) and their format and type. |
| Shapefile | A vector data storage format for digitally storing the location, shape and attributes of geographic features. A shapefile is stored in a set of related files and contains one geometry type. |
| Spatial information and | For the purposes of this guideline, the term spatial data or information refers to |

| | |
|------------------------|---|
| spatial data | vector data only. Spatial data includes the location (usually as coordinates), the shape of the location (a point, line or polygon), and may also include the topological relationships between associated geographical features. |
| STATUS type | STATUS 'type' refers to the data within each map. For example, type may be existing rehabilitation or proposed disturbance. STATUS type codes are provided within the schema of each approved form. |
| Unique user identifier | A unique label or number generated either by the proponent or their GIS which identifies an area on site. |
| Vector | A vector is a mathematical description of an object that has a magnitude (or length) and a direction. For spatial data it is used to represent geographic features as points, lines, and polygons using coordinate-based data. |

8 Further information

More information about the [submission of spatial information](#) and access to the shapefile templates and schemas mentioned herein is available on the Queensland Government's website at www.qld.gov.au/environment, using "submission of spatial information" as a search term.

For assistance regarding the submission of spatial information, please contact the department via email to spatialsubmit@des.qld.gov.au.

9 Approved by

Dean Raihman
Director of Regional and Regulation Support
Department of Environment, Science and Innovation

Enquiries:
Email: spatialsubmit@des.qld.gov.au

7 April 2022

Version history

| Version | Effective date | Description of changes |
|---------|------------------|--|
| 1.00 | 19 December 2018 | New document |
| 2.00 | 26 March 2019 | First version of this guideline following amendments to the <i>Environmental Protection Act 1994</i> , after the passing of the <i>Mineral and Energy Resources (Financial Provisioning) Act 2018</i> . |
| 2.01 | 2 May 2019 | Version number adjustment. No change to content. |
| 3.00 | 1 November 2019 | Third version of this guideline, to account for the commencement of the requirement for ineligible mining lease environmental authority holders to prepare a progressive rehabilitation and closure plan. |
| 3.01 | 9 December 2019 | This version provides that metadata can be submitted as either an .xml file or excel compatible spreadsheet. |
| 4.00 | 4 February 2021 | Changes to the spatial information requirements for spatial data (shapefiles) and hardcopy forms. Improved guidance about validation of spatial data and lodgement of digital spatial information via email. |
| 4.01 | 3 March 2021 | Grammatical correction in section 5.1 Geometry. |
| 4.02 | 25 March 2021 | Correction of typo in Table 8 of Attachment 2. |
| 4.03 | 15 April 2021 | Correction of date format instruction |
| 5.00 | 07 April 2022 | Updated geometry requirements, file size and feature limits. |

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|------|------------------|-------------------------------|
| 5.01 | 21 February 2024 | Updated to align with the MOG |
|------|------------------|-------------------------------|

Attachment 1—Annual returns – map requirements

The annual return (question 2) allows proponents to provide disturbance and rehabilitation information as a map for eligible resource activities.

If providing maps as part of the annual return:

- a **minimum of four (4) maps** relating to disturbance and rehabilitation are required **for petroleum activities** (refer to Maps 1-4 in Table 6)
- a **minimum of eight (8) maps** relating to existing and proposed disturbance and rehabilitation are required **for mining activities** (refer to Maps 1-8 in Table 6).

Table 6 contains the details of the maps to be provided and an example of the map file naming convention using an example submission date of 1 January 2021. Table 7 provides the status types and associated acronyms (from the annual return schema) that relate to the map naming convention. More information about the map file naming convention is available in section 6.3 of this guideline.

Table 6: Annual return—disturbance and rehabilitation requirements

| Map | Spatial information requirement ² | Relationship to Table 1 in the approved form ² | Example file name (using submission date of 1 January 2021) |
|---|---|---|---|
| Disturbance—Total at end of reporting period (e.g. at 31 December 2020) and completed work during the reporting period (e.g. 1 January to 31 December 2020) | | | |
| 1 | Disturbance on site Map to contain the following separately identified areas: <ul style="list-style-type: none"> Total existing area of disturbance on site at the end of the reporting period Area disturbed during the reporting period | Items 2 and 6 | EPPR00372287_AR_D1_01012021.pdf |
| Rehabilitation—Total at end of reporting period (e.g. at 31 December 2020) and completed work during the reporting period (e.g. 1 January to 31 December 2020) | | | |
| 2 | Rehabilitation commenced on site Map to contain the following separately identified areas: <ul style="list-style-type: none"> Total area of rehabilitation commenced at the end of the reporting period, <u>excluding</u> certified or completed rehabilitation Area of rehabilitation commenced during the reporting period, <u>excluding</u> certified or completed rehabilitation | Items 5 and 9 | EPPR00372287_AR_R1_01012021.pdf |
| 3 | Completed rehabilitation on site Map to contain the following separately identified areas: <ul style="list-style-type: none"> Total area of completed rehabilitation at the end of the reporting period, | Items 4 and 8 | EPPR00372287_AR_R2_01012021.pdf |

² Please refer to the annual return approved form—Annual return notice (ESR/2017/3484)—for your specified reporting period and the definitions of the disturbance and rehabilitation categories used in this table.

| | | | |
|--|--|---------------|----------------------------------|
| | <p><u>excluding</u> rehabilitation commenced or certified rehabilitation</p> <ul style="list-style-type: none"> Area of completed rehabilitation during the reporting period, <u>excluding</u> rehabilitation commenced or certified rehabilitation | | |
| 4 | <p>Certified rehabilitation on site</p> <p>Map to contain the following separately identified areas:</p> <ul style="list-style-type: none"> Total area of certified rehabilitation at the end of the reporting period, <u>excluding</u> rehabilitation commenced or completed rehabilitation Area of certified rehabilitation during the reporting period, <u>excluding</u> rehabilitation commenced or completed rehabilitation | Items 3 and 7 | EPPR00372287_AR_R3_01012021.pdf |
| Proposed works for the next reporting period (e.g. 1 January to 31 December 2021) | | | |
| ONLY REQUIRED FOR MINING ACTIVITIES | | | |
| Proposed disturbance | | | |
| 5 | Area of additional disturbance proposed for the next reporting period (e.g. 1 January to 31 December 2021) | Item 10 | EPPR00372287_AR_PD_01012021.pdf |
| Proposed rehabilitation | | | |
| 6 | Area of rehabilitation proposed to be commenced on site during the next reporting period (excluding proposed certified or completed rehabilitation) | Item 13 | EPPR00372287_AR_PR1_01012021.pdf |
| 7 | Area of completed rehabilitation during the reporting period (excluding rehabilitation commenced or certified rehabilitation) | Item 12 | EPPR00372287_AR_PR2_01012021.pdf |
| 8 | Area of certified rehabilitation during the reporting period (excluding rehabilitation commenced or completed rehabilitation) | Item 11 | EPPR00372287_AR_PR3_01012021.pdf |

Status types for file naming convention for maps

Table 7 contains the status types for annual returns for use in the file naming convention for maps. Note these status types are also used for shapefile submissions, but not required in the shapefile file naming convention. Status types are contained in the shapefile data.

Note that some of the status types are only relevant to certain resource activities, these are specified in the key for Table 7 below.

Table 7: Status types for annual returns

| Status type | Description |
|-------------|--|
| D1 | Disturbance |
| 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*^ |

Key

*These status types are only relevant to mining activities.

^These status types are only relevant to ineligible resource activities with an approved PRC plan.

Attachment 2—Annual returns – shapefile attributes and submission requirements

The department requires that digital spatial data is submitted in a defined schema to ensure consistency in the data being received from sites across Queensland. A spreadsheet containing the schema, and a shapefile template, for annual returns is available on the Queensland Government’s website at www.qld.gov.au and using ‘submission of spatial information’ as a search term.

Spatial data attributes

The annual return approved form—Annual return notice (ESR/2017/3484)—(questions 3 and 6) requires proponents to provide disturbance and rehabilitation information as shapefiles for ineligible resource activities.

When providing spatial information as part of the annual return, **a minimum of one (1) shapefile** containing all required disturbance, rehabilitation and improvement areas as specified in Table 8 below and the relevant sections of the approved form.

Table 8 below contains the annual return spatial data requirements and includes examples of the file naming convention using 1 January 2021 as the submission date.

Table 8: Annual return disturbance and rehabilitation requirements (example submission 1 January 2021)

| File | Spatial information requirement ³ | Example file name (e.g. using submission date of 1 January 2021) |
|------|---|--|
| 1 | <p>For an environmental authority for an ineligible resource activity <u>without</u> an approved PRC plan (refer to question 3 and Table 1 of the approved form):</p> <ul style="list-style-type: none"> disturbance and rehabilitation on site—polygon <p>For an environmental authority for an ineligible resource activity <u>with</u> an approved PRC plan (refer to question 6 and Table 2 of the approved form):</p> <ul style="list-style-type: none"> disturbance, rehabilitation and improvement on site—polygon | EPPR00372287_AR_PY_01012021.zip |

Where:

- AR = annual return
- PY = polygon (geometry)

³ Please refer to the annual return approved form—Annual return notice (ESR/2017/3484)—for definitions of the disturbance, rehabilitation and improvement categories used in this table.