

# Mineral mining lease development plan guideline

A guide to preparing and lodging a proposed initial or later development plan for prescribed mineral mining leases under the Mineral Resources Act 1989

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# About this guideline

This guideline provides information about preparing and lodging a proposed initial or later development plan (collectively referred to as 'development plan') for certain mineral mining leases (ML) prescribed under the *Mineral Resources Act 1989* (MRA).

It also explains how development plans can be lodged for 'mining projects' and the consequences of failing to lodge or comply with a development plan.

The department is committed to respecting, protecting and promoting human rights. Under the *Human Rights Act 2019*, the department has an obligation to act and make decisions in a way that is compatible with human rights and, when making a decision, to give proper consideration to human rights. To the extent an act or decision under this document may engage human rights under the *Human Rights Act 2019*, regard will be had to that Act in undertaking the act or making the decision.

# Principal objectives

Development plans give the department valuable information about the mining operation and resource potential so that it has line of sight for when a mine is planning to reduce or increase production, or may be reaching the end of its resource. Development plans also allow the department to ensure an appropriate level of development is occurring.

Only mining operations for strategic minerals above the threshold set by the Mineral Resources Regulation 2013 are required to have a development plan.

The principal objectives of a development plan are to:

- provide a better understanding of the nature and extent of the proposed or continuing development and production activities of the mineral resource for the ML
- allow an assessment of the proposed development or continuing development and whether it
  is appropriate with respect to the area, resource utilisation and the public interest
- assess the prospective resource utilisation and identify any resource sterilisation issues
- allow appropriate resource management decisions to be made.

# The prescribed minerals and thresholds

Development plans are only required for MLs or mining projects that mine one or more prescribed minerals above a threshold production amount in any lease year. The lease year runs from one anniversary date to the next anniversary date.

This table lists the prescribed minerals and threshold amounts<sup>1</sup> that trigger the need for a development plan.

Mineral	Threshold amount
Bauxite	500,000t
Clays	50,000t
Copper	1,000t
Diatomite	10,000t
Dimension stone	50,000t
Gold	100kg
Gypsum	50,000t
Lead	5,000t
Limestone	100,000t

<sup>&</sup>lt;sup>1</sup> Threshold amount - of a prescribed mineral, means an amount of the mineral that equals or exceeds the prescribed threshold for the mineral

Magnesium rich materials	250,000t
Phosphate rock	10,000t
Silica	100,000t
Silver	5,000kg
Tin	100t
Titanium minerals	50,000t
Zinc	5,000t
Zircon	1,000t

### **General information**

## Once met, requirement for Development Plan continues

An ML that requires a development plan continues to need to provide one, even if the ML no longer produces the prescribed mineral above the threshold amount.<sup>2</sup>

The only exception to this, is if the Regulation removes a prescribed mineral or increases the threshold so the ML no longer meets the threshold.

If an ML is part of a mining project, whether an ML meets the threshold amount is determined by reference to the production on the mining project as a whole (the amounts of the prescribed mineral mined are added together across the MLs in the mining project) for the lease year.

If an ML is granted for more than 1 prescribed mineral, the ML stops being a prescribed mineral mining lease only if all minerals mined by the ML are no longer a prescribed mineral or no longer meet the increased threshold.<sup>3</sup>

# **Mining Projects**

For MLs that form part of a mining project, one development plan can be lodged for the project instead of individual plans for individual MLs.

A mining project means a resource project under the Environmental Protection Act 1994—

- · comprised of activities carried out under two or more mining leases; and
- for which the **one** environmental authority is in force.

This means that a development plan can only apply to MLs that operate under a single environmental authority.<sup>4</sup>

<sup>&</sup>lt;sup>2</sup> Section 317C(4) MRA.

<sup>&</sup>lt;sup>3</sup> Section 317X(3) MRA.

<sup>&</sup>lt;sup>4</sup> Section 112 ,118 of the EPA.

### When an Initial Development Plan is required

Only some mineral MLs or ML applications require a development plan to be lodged.

Development plans for MLs for prescribed minerals were introduced on 7 September 2020. This section explains when an initial development plan is required for undecided ML applications, existing MLs and new ML applications.

There is currently no fee when lodging a development plan.

### Undecided applications – for ML grant or renewal

Any existing undecided applications for grant or renewal of a mineral ML as at 7 September 2020 are **not** required to provide a development plan before the application is decided, even if they mine or propose to mine a prescribed mineral that meets the threshold.

The application will be decided based on the MRA in force before 7 September 2020.5

# Existing MLs and grants or renewals of ML applications made before 7 September 2020

Any existing ML that meets the prescribed threshold on or after 7 September 2020 is either:

- a) a prescribed mineral ML; or
- b) a prescribed mineral ML granted or renewed between 7 September 2020 7 September 2023 on an application made before 7 September 2020.

These are known as a transitioning mining lease.

There are special transitional provisions for when transitioning MLs that meet the prescribed mineral threshold need to provide a development plan.

There is no obligation to have a development plan for a transitioning ML until the **earlier** of the following—

- the ML is renewed under section 286A on an application for renewal made after 7 September 2020.
- the transitional period ends (7 September 2023); or
- an initial development plan for the lease is approved.<sup>6</sup>

# Applications for a prescribed mineral mining lease made from 7 September 2020

An application for the grant of an ML for a prescribed mineral made after 7 September 2020 will require a development plan if:

- the applicant proposes to mine a threshold amount of the prescribed mineral under the proposed lease in a lease year, in any one or more of the first 5 lease years for the proposed lease;<sup>7</sup> or
- the proposed lease is to be part of an existing mining project comprised of prescribed mineral MLs that have a development plan approved;<sup>8</sup> or
- the proposed lease is to be part of an existing mining project or proposed mining project **and** the applicant proposes to mine a threshold amount of the prescribed mineral under the mining

<sup>&</sup>lt;sup>5</sup> Section 878(3) MRA.

<sup>&</sup>lt;sup>6</sup> Section 879(2) MRA.

<sup>7</sup> Section 246(1)(a) MRA

<sup>&</sup>lt;sup>8</sup> Section 246(1)(b) MRA

project or proposed mining project in a lease year, in any one or more of the first 5 lease years for the proposed lease.<sup>9</sup>

The lease year for an ML means each 1 year period starting on the day the mining lease was granted and on each anniversary of that day.

Applications that do not fall within the three situations above submit a mining program under section 245(1)(n) of the MRA instead.<sup>10</sup>

Diagram 1 shows the process for new ML applications made from 7 September 2020:

#### Lodge project Is the ML part development plan Application for of an existing project with application mineral mining that meets the amends existing lease threshold development plan for other leases No Will the ML Lodge initial meet the threshold in development the first 5 years of plan with application mining? No Lodge Mining program with application

### Mineral mining lease application

# Mining leases that meet the threshold at a later date

An ML may not meet the prescribed threshold at grant however may reach the threshold later in their production and trigger the requirement for a development plan at that stage. These MLs are referred to as a *new prescribed mineral mining lease*.

Mineral MLs (individually or within a project) that meet the threshold for production of a prescribed mineral must have an approved development plan. 11 The development plan becomes a condition of the lease. 12

An ML may require a development plan after grant as it ramps up production and meets the threshold. The threshold is considered to be met immediately after the lease year for the ML ends. If the ML is part of a mining project, the lease year starts at the first anniversary date for an ML within the project and ends at the next anniversary date for the same ML.

<sup>9</sup> Section 246(1)(c) MRA

<sup>&</sup>lt;sup>10</sup> A template for lodging a mining program is available at <a href="https://www.business.qld.gov.au/industries/mining-energy-water/resources/minerals-coal/authorities-permits/applying/development">https://www.business.qld.gov.au/industries/mining-energy-water/resources/minerals-coal/authorities-permits/applying/development</a>

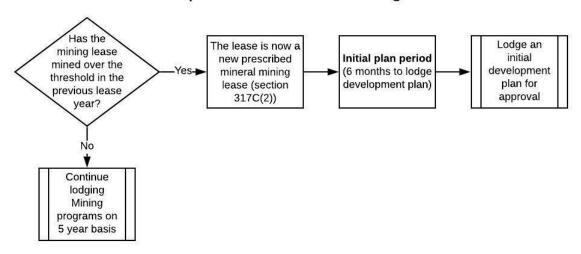
<sup>&</sup>lt;sup>11</sup> Section 317F MRA.

<sup>&</sup>lt;sup>12</sup> Section 317G MRA.

Once the threshold is met, a holder has 6 months after the lease year ends to lodge an initial development plan for approval.

#### Diagram 2

# New prescribed mineral mining leases -



\*Mining programs are submitted with an application for a mining lease under section 245 of the MRA when a development plan isn't required. A template for lodging your mining programs is available at <a href="https://www.business.qld.gov.au/industries/mining-energy-water/resources/minerals-coal/authorities-permits/applying/development">https://www.business.qld.gov.au/industries/mining-energy-water/resources/minerals-coal/authorities-permits/applying/development</a>

# **Later Development Plans**

A later development plan is required to be lodged:

- with an application to renew a prescribed mineral ML (these MLs already have an initial development plan in place);<sup>13</sup> or
- at least 40 business days, but no more than 100 business days, before the expiry of the current development plan for the ML;<sup>14</sup> or
- as soon as practicable after the holder proposes or becomes aware of a significant change to the nature and extent of an authorised activity that is not already dealt with under the current development plan for the lease.<sup>15</sup>

If the holder is given a notice to lodge a later development plan and fails to comply with the notice, the ML is cancelled. 16

Diagram 3 below shows when a development plan needs to be lodged with a mineral ML renewal application.

<sup>&</sup>lt;sup>13</sup> Section 286AA(1)(a) MRA.

<sup>&</sup>lt;sup>14</sup> Section 317O(3)(a) MRA.

<sup>&</sup>lt;sup>15</sup> Section 317O(3)(b) MRA.

<sup>&</sup>lt;sup>16</sup> Section 317P(4) MRA.

### Diagram 3

#### Is the Lodge project ML part of a development plan Renewal for project and has a with renewal mineral mining current project application lease development (Section 246(3)) plan? No Is the Lodge later MLa development prescribed mining plan with lease with a current renewal development application plan? No Lodge initial Will the ML development meet the threshold in plan with the first 5 years of the renewal renewed term? application No Lodge Mining program with application

# Mineral mining lease renewal application

Proposed development plans should be lodged online via the <u>MyMinesOnline</u> electronic lodgement system.

# Scope of development plan

The extent of a proposed development plan will vary depending on the size and complexity of the proposed or existing development. The plan for a smaller open cut mining operation, for instance, would require less detail than a combined open cut or underground operation with multiple production points.

In all cases a proposed development plan must:

- · address all relevant legislative requirements;
- cover every mineral that is being or is proposed to be mined;
- provide adequate spatial information (maps) of the resource.

### **Technical information**

### Initial development plan requirements

Information on how to comply with the legislative requirements for a proposed initial development plan for a proposed mineral ML (section 317J) or a new prescribed mineral ML (section 317K) are set out in Table 1 below.

Table 1- Guide to content and scope for typical proposed initial development plan

Legislative requirement – relevant to proposed initial development	Information to be provided
plan	

A proposed initial development plan should include a table of contents that references where each of the statutory requirements is addressed.

A mine plan should form part of the proposed initial development plan. A mine plan is the plan that ML applicants or holders create or have in place to plan the production and development of the mine. It is recommended that ML applicants consider extending the usual period of the mine plan from 3 years to 5 years, to align with the initial development plan period.

**Section 317J(2)(a)** - an overview of the activities proposed to be carried out under the proposed mining lease during all of its proposed term.

Section 317K(2)(a) - an overview of the activities proposed to be carried out under the mining lease during all of the relevant term

- A mine plan, covering the proposed term of the ML, and if different, the life of the mine, in a table format detailing:
  - the scheduling (timing and extent) of all minerals proposed to be mined during the term,
  - the total extent of mine workings, waste dumps and related infrastructure.
  - key milestones during the anticipated life of mine.
- Include a detailed map, for each year of the plan period, at an appropriate scale showing all of the above.

Section 317J(2)(b) for each year of the plan period: Section 317K(2)(b) for each year of the plan period:

The plan period for a proposed initial development plan is defined by the term for the application for an ML. If the term is:

- less than five years from the granting of the ML—the plan period is for the term of the ML, or
- five years or more from the start of the term— the plan period is five years from the start of the

For a new prescribed mineral mining lease, the plan period:

- starts when the mining lease becomes a prescribed mineral mining lease under section 317C(2)<sup>17</sup> and ends when -
  - the period is five years from the first day after the end of the year<sup>18</sup> in which the lease met the threshold; or
  - if the lease ends before five years, ends on the date the lease expires.

<sup>18</sup> Threshold year - *threshold year*, for a mining lease, means—

<sup>&</sup>lt;sup>17</sup> Section 317D(2)(a)

<sup>(</sup>a) if the lease is part of a mining project—the first project year in which a threshold amount of a prescribed mineral is mined under the mining project; or

<sup>(</sup>b) otherwise—the first lease year in which a threshold amount of a prescribed mineral is mined under the lease.

Legislative requirement – relevant to proposed initial development plan	Information to be provided	
Section 317J(2)(b)(i) – the nature and extent of activities proposed to be carried out under the proposed mining lease during the year;  Section 317K(2)(b)(i) – the nature and extent of activities proposed to be carried out under the mining lease during the year	<ul> <li>For each year:</li> <li>A general outline provided in tabular form related to a map or sufficiently detailed mine plan(s). Identify the type of activities to be undertaken including for example, mining method, minerals to be mined.</li> <li>Any proposed partial recovery of resources is to be described. Resources not planned to be mined need to be shown or described and the reasons for not mining rationalised.</li> <li>Digital data ('shapefiles') of the mine extraction sequence by year (polygon of extraction area).</li> </ul>	
Section 317J(2)(b)(ii) - where the activities are proposed to be carried out;  Section 317K(2)(b)(ii) - where the activities are proposed to be carried out;	<ul> <li>Identify where all authorised activities are proposed to occur on the ML. This should include mining, haul roads, infrastructure, planned exploration, etc.</li> <li>The level of detail should be appropriate to communicate the mine plan.</li> <li>A mine plan with scaled plan(s) must be provided if multiple minerals are proposed to be mined or multiple resources are planned for extraction. For an underground mine situation, this could be done by showing the development and production activities proposed in (for</li> </ul>	
example) each area for each year of the plan period.  Section 317J(2)(c) - for each mineral the applicant proposes to mine under the proposed mining lease, each of the following:  Section 317K(2)(c) - for each mineral the holder proposes to mine under the mining lease during all of the relevant term, each of the following:		
Section 317J(2)(c)(i) - the location and an estimate of the resources of the mineral in all of the area, or proposed area, of the proposed mining lease;  Section 317K(2)(c)(i) - the location and an estimate of the resources of the mineral in all of the area of the mining lease;	<ul> <li>A mine plan detailing the extent and tonnage of the resource area (a polygon or aerial) and an estimate of tonnage and grade or volume of recoverable reserves within each of the resource areas.</li> <li>Where mining method varies, (for example, open cut, underground) the reserve/resource information should be provided for each distinct area.</li> <li>Include a sufficiently detailed mine scaled plan for each mineral showing resource/reserve limit parameters (for example, thickness, depth, overburden, structure).</li> </ul>	
Section 317J(2)(c)(ii) - the standards and procedures used to make the estimate;  Section 317K(2)(c)(ii) - the standards and procedures used to make the estimate;  Section 317J(2)(c)(iii) - the rate and	<ul> <li>Resources and reserves estimates by confidence category.</li> <li>The estimate(s) should be prepared in accordance with the requirements of the current 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves the JORC Code 2012' or with reference to the another code such as the Canadian NI 43-101 code.</li> <li>Tonnes to be produced for each year of the plan.</li> </ul>	
amount of the proposed mining;  Section 317K(2)(c)(iii) - the rate and amount of the proposed mining;	<ul> <li>Mineral quality information for the resources being extracted for each year of the plan.</li> <li>Average extraction cost per ROM tonne of mineral produced.</li> <li>Estimate of mineral that is not planned to be mined.</li> </ul>	

<sup>&</sup>lt;sup>19</sup> proposed mining lease also includes 'new prescribed mining lease'.

Legislative requirement – relevant to proposed initial development plan	Information to be provided
Section 317J(2)(c)(iv) - approximately when the proposed mining is to start; This requirement does not apply to existing leases	<ul> <li>Anticipated start date and, where applicable, a brief explanation if any extended delay is expected or proposed.</li> <li>(for new prescribed mineral mining leases, mining would have already commenced so put the original date of commencement)</li> </ul>
Section 317J(2)(c)(v) - a schedule for the proposed mining during the plan period.  Section 317K(2)(c)(iv) - a schedule for the proposed mining during the plan period.	Mine plan document(s) showing the timing of proposed mining. This is to be a tabular and graphical representation of the information provided at section 317J(2)(c)(iii).
Section 317J(2)(d) – maps or other documents that show the matters mentioned in paragraphs (b) and (c)(i), (iii) and (iv)  Section 317K(2)(d) – maps or other documents that show the matters mentioned in paragraphs (b) and (c)(i), (iii) and (iv)	Attachment of maps and shapefiles
Section 317J(2)(e) - if the proposed mining lease is to be part of a mining project and the plan does not relate to 1 or more of the mining leases that comprise the project—how the overview of activities mentioned in paragraph (a) relates to the activities proposed to be carried out under those leases during the remainder of their terms	Provide information about relationships with other leases if part of project but not in a project development plan
Section 317K(2)(e) - if the mining lease is part of a mining project and the plan does not relate to 1 or more of the mining leases that comprise the project—how the overview of	
activities mentioned in paragraph (a) relates to the activities proposed to be carried out under those leases during the remainder of their terms;	
Section 317J(2)(f) - any other information relevant to the criteria mentioned in section 317N of the MRA;  Section 317K(2)(f) - any other	<ul> <li>Matters only need to be addressed if applicable.</li> <li>The amount of detail required will depend on the nature of the resource and whether there are any resource sterilisation or optimisation issues to be discussed.</li> </ul>
information relevant to the criteria mentioned in section 317N of the MRA;	<ul> <li>In summary, most of the requirements of section 317N of the MRA are intended to identify:</li> <li>the impact of development of one resource on the other,</li> <li>the relative value of each resource, and the benefit to the State from the development of each resource.</li> </ul>

Legislative requirement – relevant to proposed initial development plan	Information to be provided
Section 317J(2)(g) - reasons why the plan is considered appropriate; Section 317K(2)(g) - reasons why the plan is considered appropriate;	The reasons are to include (but are not limited to):  that the development will not adversely impact on the development of current or future petroleum resources,  support for the proposed production commencement day,  outline whether the resource will be recovered in the most efficient and economically viable way.
Section 317J(2)(h) - another matter prescribed under a regulation.  Section 317K(2)(h) - another matter prescribed under a regulation.	There are currently no matters prescribed under regulation. Refer to the Office of the Queensland Parliamentary Counsel website ( <a href="https://www.legislation.qld.gov.au">https://www.legislation.qld.gov.au</a> ) for the latest version of the Mineral Resources Regulation 2013 for confirmation when submitting your plan.
Section 317J(3) – must state its period  Section 317K(3) – must state its period  Section 317J(4) –  • if the term sought for the mining lease is 5 years or more—5 years from the start of the term; or  • otherwise—the term of the mining lease.  Section 317K(4)  • if the relevant term <sup>20</sup> of the mining lease is 5 years or more—5 years; or	State plan period DD/MM/YY to DD/MM/YY.
otherwise—the relevant term of the mining lease.  Section 317J(5) - the proposed plan must comply with any requirements about the form of a development plan prescribed by regulation.  Section 317K(5) - the proposed plan must comply with any requirements about the form of a development plan prescribed by regulation.	There are currently no matters prescribed under regulation. Refer to the Office of the Queensland Parliamentary Counsel website ( <a href="https://www.legislation.qld.gov.au">https://www.legislation.qld.gov.au</a> ) for the latest version of the Mineral Resources Regulation 2013 for confirmation.

# Later development plan requirements

Guides for the preparation of a proposed later development plan, for a Prescribed Mineral ML, are set out in <u>Table 2</u>, below.

<sup>&</sup>lt;sup>20</sup> Relevant term means (a) if a proposed initial development plan is included with an application for renewal of a mining lease—the term of the renewed mining lease; or (b) otherwise—the remaining term of the mining lease.

#### Table 2- Guide to content of proposed later development plans

Legislative requirement - relevant
to proposed later development
plan - prescribed mineral ML

#### Information to be provided

A proposed later development plan should include a table of contents referencing where each of the statutory requirements is addressed.

In addition to the proposed later development plan, a 'mid-term mine plan' should accompany the proposed later development plan. Note that mid-term mine plans should reflect the proposed later development plan period.

#### Section 317Q(1)(a) - comply with the initial development plan requirements

The proposed initial development requirements are detailed in <u>Table 1</u>. The information to be provided in a proposed initial development plan must also be provided in a proposed later development plan.

**Section 317Q(1)(b)** - highlight any significant changes from the current development plan for the mining lease

and

**Section 317Q(3)** - if the effect of the proposed plan is to significantly change an activity provided for under the current development plan, the proposed plan must also state reasons for the change.

- The ML holder should highlight the difference(s) between the current approved development plan and the proposed later development plan for the ML.
- Examples of significant changes from a current approved development plan could include:
  - a cessation of activities in all or part of the deposit, or a reduction in the rate of mining.
  - significant changes in rate of proposed mining,
  - additional infrastructure to be constructed,
  - production or mining from a different area,
  - significant changes in rates of disposal of waste product or overburden in an area or its disposal location that is different from that shown in the approved plan (for example, if an additional out-of-pit spoil dump is different from those already planned),
  - proposed changes in production technique or mining method,
  - substantial change to the level or coverage of drilling and other exploratory activities,
- The reasons for the changes to the approved development plan must be justified.

**Section 317Q(1)(c)** - state whether the current development plan has been complied with;

and

Section 317Q(1)(d) - if the current development plan has not been complied with—state the details of, and the reasons for, each noncompliance.

• State where the current approved development plan has not been followed and justifications for departure from the plan.

# Other requirements

# **General map requirements**

When providing a map please follow these requirements:

- Digital data ('shapefiles') should be uploaded into MMOL when lodging a development plan.
   Please see the Shapefile Guide for more information. If this is unavailable please submit an Excel CSV (Comma delimitated) file, and use the supplied converter tool to create a shape file to submit with your development plan.
- Maps should be provided at a scale between 1:20 000 to 1:30 000 depending on the size and scale of the mining operation. A scale, scale bar and either AMG or geographic coordinates graticule must be included on each map.
- Maps should be provided at a common scale within the development plan to allow for comparisons between them.
- The legend on all maps is to clearly identify all colours, symbols, front/line styles used.
- At least one of the maps must show background topographic information (creeks, rivers), other significant cultural features (dwellings, town extents, roads) and pipelines (including proposed pipelines).
- All mining tenements relevant to the project/mine are to be shown on all maps.

### Resource map and section requirements:

- Geology and mineral extent(s) (for example, prospect-scale surface geology with mineralised portions clearly annotated and at least 2, 3D views of the prospective geology to the base of information).
- Location and type of all boreholes (for example, cored, partly cored, non-cored), the location
  of any geophysical surveys and the location of any other points of observation relevant to
  each estimate.
- Extent of mineral resources estimated for each mineral to be mined including each confidence category in accordance with the Joint Ore Resources Committee (JORC) Code or other relevant code, (for example, measured, indicated).
- Location of any part of the deposit that will not be mined or where partial recovery is planned.
- Geological section(s), at scale, referenced to the map showing the geometry of the resource.
   At least one section along strike and sections across dip for representative parts of the deposit.

# Mining and infrastructure layout:

- The location of mine-related infrastructure or facilities. For example, access roads, Run Of Mine Pad, tailings dams, waste dumps, stockpiles, ore processing facilities, water run-off drainage and retention and for underground infrastructure, ventilation shafts, adits/declines/portals, shafts, underground drives, stopes, panels, caves, draw points, etc.
- Planned extent of mining for each type of mining method proposed (for example, open-cut, underground) incorporating the 'shells/outlines' of planned pits, mining blocks, and panels.
- Proposed mining schedule for the whole of the life of mine, with additional details for each year in the proposed initial development plan period.
- For each year of the proposed development plan period and for each mineral to be mined, show each block, or group of blocks, to be mined.

- An estimate for each block or group of blocks (either by reference to a tabulation included in the text, a text block placed on the maps supplied or similar method of presentation) incorporating information that provides:
  - the resource base in each block or group of blocks from which each reserve estimate has been made;
  - the geological parameters and other assumptions used in deriving the reserve estimate;
  - location of any part of the deposit that will not be mined and why this is not being mined.

### **Document information**

**Availability and location:** External – Business and Industry Website **Owner and approver:** Deputy Director-General, Georesources Division

Review date: September 2024

Related documents: Shapefile Guideline

Contacts: For help and information about this policy, please contact the Mineral Assessment Hub on

(07) 4447 9230 or email mineralhub@resources.qld.gov.au.

For technical support please contact the MinesOnline Helpdesk on +61 7 3199 8133 or email myminesonline@resources.qld.gov.au 8:30 – 4:30 Monday – Friday (excluding public holidays)