

Regulatory Impact Statement

Proposed Mineral Resources (Sustainable Development)
(Mineral Industries) Regulations 2019

March 2019



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Regulatory Impact Statement

Mineral Resources (Sustainable Development) (Mineral Industries) Regulation 2019

In accordance with the *Victorian Guide to Regulation*, the Victorian Government seeks to ensure that proposed regulations are well-targeted, effective and appropriate, and impose the lowest possible burden on Victorian businesses and the community.

The Regulatory Impact Statement (RIS) process involves an assessment of regulatory proposals and allows members of the community to comment on proposed regulations before they are finalised. Such public input provides valuable information and perspectives and improves the overall quality of regulations.

The Mineral Resources (Sustainable Development) (Mineral Industries) Regulations 2019 (the proposed Regulations) replace the Mineral Resources (Sustainable Development) (Mineral Industries) Interim Regulations 2018 (the current Regulations). A copy of the proposed Regulations is published with this RIS.

Public comment is invited on the proposed Regulations and RIS. Please note that all comments and submissions received will be treated as public documents.

Comments and submissions should be received by the Department of Jobs, Precincts and Regions no later than **5.00 pm, 23 April 2019**.

The Engage Victoria website is the preferred method for receiving submissions. Submissions can also be received by post, marked 'Mineral Resources (Sustainable Development) (Mineral Industries) Regulations 2019' and addressed to:

Director, Policy and Legislation
Earth Resources Policy and Programs
Department of Jobs, Precincts and Regions
GPO Box 4509
Melbourne VIC 3001

Copies of the RIS and proposed Regulations can be obtained from the Engage Victoria website at <https://engage.vic.gov.au/mineralindustries>

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Abbreviations

'the Act' – *Mineral Resources (Sustainable Development) Act 1990*

'the current Regulations' – Mineral Resources (Sustainable Development) (Mineral Industries) Interim Regulations 2018

'the proposed Regulations' – Mineral Resources (Sustainable Development) (Mineral Industries) Regulations 2019

'the department' – Department of Jobs, Precincts and Regions (prior to 1 January 2019 known as the Department of Economic Development, Jobs, Transport and Resources)

CBA – cost-benefit analysis

ERR – Earth Resources Regulation

EES – Environment Effects Statement

GSV – Geological Survey of Victoria

HMS – Heavy mineral sands

ISOU – Infringements System Oversight Unit

JORC – Joint Ore Reserves Committee

MCA – Multi-criteria Analysis

METS – Mining Equipment, Technology and Services

OCBR – Office of the Commissioner for Better Regulation

Penalty unit – equivalent to \$161.19 for the year 2018–19.

PV – present value. Present value 'discounts' the value of money in future years to allow it to be valued in today's terms.

RIA – regulatory impact assessment

RIS – Regulatory Impact Statement

RRAM – Resource Rights Allocation Management System

r. – regulation

s. – section

SARC – Scrutiny of Acts and Regulations Committee

VGR – Victorian Guide to Regulation

Executive summary

Mineral Industries Regulatory Reform

The Victorian Government is engaged in a major program of reform for earth resources regulation informed by the report of the Commissioner for Better Regulation, *Getting the Groundwork Right* and the reports of the Hazelwood Mine Fire Inquiry. In August 2018 the Government released its *State of Discovery: Minerals Strategy for 2018–2023*. The proposed Regulations include improvements to the regulatory framework in response to these reports and further the Government's commitment to a modern, fit-for-purpose regulatory regime built around increased investment and community confidence. The proposed Regulations are attached at **Attachment A**. The Office of the Chief Parliamentary Counsel has provided a letter of settlement on the proposed Regulations, see **Attachment B**.

In response to these reports, the Victorian Government also plans to amend the *Mineral Resources (Sustainable Development) Act 1990* (the Act). The Mineral Resources (Sustainable Development) Amendment Bill 2018 was introduced into the Victorian Parliament in August 2018, but lapsed owing to the November 2018 election. This legislative proposal sought to establish a Mine Land Rehabilitation Authority, clarify rehabilitation, and post-closure obligations, and set up a post-closure fund. The Government intends to re-introduce the Bill into Parliament in 2019.

Background – Minerals Strategy

The Victorian minerals sector is built on more than 160 years of exploration, with a rich mining heritage and highly-skilled workforce. Victoria's minerals are a source of jobs, wealth and opportunity for all Victorians and mining operations are the backbone of many regional towns.

The Victorian Government released its *State of Discovery: Mineral Resources Strategy 2018-2023* to deliver a whole-of-government approach across the mining life cycle. The strategy sets a path for improving the administration and enforcement of Victoria's regulatory framework for managing the social, environmental and economic performance of industry. Priorities for the strategy include reducing costs and red-tape for the minerals sector while maintaining high standards of performance.

The Government is committed to growing the minerals sector responsibly, in a way that keeps Victoria clean and safe, while meeting community expectations. The Government aims to facilitate the targeting of significant mineral discoveries through increased private sector mineral exploration investment over the next decade under a more modern, proportionate and robust regulatory system. The Government's policy settings seek to underpin the long-term development of socially and environmentally responsible mineral exploration and mining in regional Victoria. Responsible minerals exploration and development will bring jobs and economic development, particularly in regional Victoria.¹

Objectives of regulation

The objectives of the legislation are to encourage mineral exploration and economically viable mining industries which make the best use of, and extract the value from, earth resources in a way that is compatible with the economic, social and environmental objectives of the State.² These objectives are met in accordance with the principles of sustainable development. The Act establishes a regulatory framework that, among other things, provides for:

- an efficient and effective system for the granting of licences and other approvals;

¹ Adapted from Victoria's Mineral Resources Strategy. Reference: State of Victoria, *State of Discovery: Mineral Resources Strategy 2018-2023*, Minister for Resources, pp. 1-2

² Section 1 of the Act

- a process for co-ordinating applications for related approvals;
- an effective administrative structure for making decisions concerning the allocation of mineral resources for the benefit of the public and the approval of work under a licence;
- risks to the environment, members of the public, land, property or infrastructure to be identified and eliminated or minimised as far as reasonably practicable; and
- rehabilitation of land which has been mined.

The objectives of the proposed Regulations are to create an efficient framework for the collection of information to allow for the effective management of the economic and environmental risks and to increase public confidence in mining activities in Victoria.

The regulations seek to do this by prescribing information to operationalise the Act for:

- various procedures, details, royalties, fees, forms, rents, information required in documents and other matters authorised by Act;
- the requirements relating to survey of licence areas;
- prescribe certain offences as infringement offences; and
- the requirements relating to declared mines.

Options

The *Subordinate Legislation Act 1994* (‘the Subordinate Legislation Act’) requires a RIS to consider “other practicable means of achieving those objectives, including other regulatory as well as non-regulatory options”.³ The regulations cover five areas that support operationalizing the Act, and are the subject of this RIS:

- licence applications;
- work plans;
- rehabilitation (which form a part of the work plan);
- advertising; and
- reporting requirements.

Recognising the regulatory burden on the minerals sector and the objectives of the Act, multiple options were identified for these areas:

Assessment of options – decision tool

The regulatory impact assessment (RIA) process seeks to ensure that proposed regulations are well-targeted, effective and appropriate, and impose the lowest possible burden on businesses and the community. The keystone of this process is to compare the options of each proposal to assess which has the highest net-benefit. Typically, costs imposed on business are relatively straightforward to assess, while other societal costs and benefits can be more difficult to estimate in monetary terms. In this RIS efforts are made to identify the monetary costs to business of the options and provide a reasonable estimate of the regulatory cost imposed on business for elements of the regulations.

Overall assessment of the regulations was completed with a multi-criteria analysis (MCA) decision tool. An MCA assigns and aggregates scores to a range of criteria and compares the results across different options. MCA is used where it is not possible to assign monetary values to all the impacts.

Each option has been assessed by balancing its relative benefits and costs. Under this analysis, each option is scored on a scale from -10 to +10 for its:

- effectiveness in achieving the objectives of the Act; and
- costs – both to industry and, cost to government) relative to the base case.

³ Subordinate Legislation Act, s. 10

Preferred option

Table 1: Regulatory options considered (preferred option in bold)

Regulatory burden	Options	MCA Net Score
Licence application	Option A.1 – Status quo	+2.0
	Option A.2 – Proposed amendments	+2.65
Work plan requirements	Option B.1 – Status quo	+1.5
	Option B.3 – Proposed amendments	+2.55
Rehabilitation requirements	Option C.1 – Status quo	+0.2
	Option C.2 – Proposed amendments	+2.45
Advertising requirements	Option D.1 – Status quo	+2.3
	Option D.2 – Proposed amendments	+3.15
Reporting requirements	Option E.1 – Status quo	+2.35
	Option E.2 – Proposed amendments	+2.8

Once the preferred options were assessed, the current regulations were examined for clarity and ease of compliance. The regulations were redrafted to be streamlined and simplified. The preferred options are incorporated in the attached draft Regulations – the Mineral Industries (Sustainable Development) (Mineral Industries) Regulations 2019.

In 2017-18, mining and prospecting licences reported production with a sale value of \$825.9 million. In this period the estimated costs imposed by the current Regulations were \$63.8 million. The difference between these figures does not represent the costs and benefits of the regulation but illustrates the appropriate order of magnitude of these figures.

Small business impact & competition assessment

Small businesses may experience disproportionate effects from regulatory requirements for a range of reasons, including limited resources to interpret compliance requirements, or to keep pace with regulatory changes and the cumulative effect of different requirements.

For the preferred option the proposed Regulations have features to provide flexibility that may assist small businesses. In the first instance, the proposed regulations have been significantly simplified and streamlined compared with the current regulations. Thirty schedules have been reduced to eighteen, and the Department Head will be able to prescribe forms. This will enable more user-friendly form design and avoid confusion caused by drafting conventions. Other elements in the proposed Regulation that should provide small businesses with flexibility include: discretion to alter date of payment or date for submission of returns, reduced licence application and work plan requirements, and replacement of 'risk management plan' in the information required in work plans (the requirement for a 'risk management plan' is highly prescriptive and difficult for small businesses to implement has been removed).

Any regulatory proposal needs to be scrutinised carefully to assess whether it is having an adverse impact on the ability of firms or individuals to enter and participate in the market. In line with the Victorian Guide to Regulation, new legislation (both primary and subordinate) needs to demonstrate that it will not restrict competition, unless benefits of the restriction outweigh the costs, and the objectives of the legislation can only be achieved by restricting competition.

Where restrictions on competition have been identified. In these instances, it has been assessed that the benefits of the restriction outweigh the costs, and the objectives of the legislation can only be achieved by restricting competition. For example, a licence grants exclusive property rights over a Crown resource which restricts

competition This restriction is outweighed by the benefit for an explorer of gaining an exclusive right, which reduces investment risk and prevents the 'free rider' problem.⁴

Fees & Royalties

This RIS does not assess the current level of fees, rents, royalties or levies. The level of fee units will continue at their current rates (subject to annual indexation) for at least two years. While the examination of fees under the Victorian Cost Recovery Guidelines⁵ would be a normal part of the RIS process, this has been done for this RIS. This is in line with the recommendation of the Commissioner for Better Regulation in the Getting the Groundwork Right report, which recommended the department begin to increase cost recovery for ERRs regulatory activities no earlier than 1 July 2020. This delay will allow the department to:

- bed down the improvements to the regulatory system currently being implemented; and
- consult with industry and other stakeholders on the right model for cost recovery to establish a clear baseline on the efficient cost base.⁶

Following the above, amending regulations will be made to implement a preferred model for cost recovery. These amendments will include an examination of the royalty methodology and establish fees that reflect an efficient cost base.

Public consultation

The Department welcomes feedback from all interested members of the public on any matters they feel would improve the proposed Regulations.

The consultation period for this RIS will be for 28 days, with written comments required by **5.00pm, 23 April 2019**.

As noted above, the draft regulations have not been finally 'settled' and improvements or changes may be made as a result of public comments. While members of the public are free to comment on any matters concerning the proposed Regulations, the Department would be particularly interested in hearing from stakeholders about:

⁴ The free rider problem is a market failure that occurs when people take advantage of being able to use a common resource, or collective good, without paying for it. Often governments correct this problem by creating 'excludability').

⁵ Department Treasury and Finance, Cost Recovery Guidelines, January 2013, Incorporating the information formerly published in the Guidelines for Setting Fees and User-Charges Imposed by Departments and Central Government Agencies, Melbourne

⁶ Commissioner for Better Regulation, 2017, Getting the Groundwork Right: Better Regulation of Mines and Quarries, State of Victoria, Melbourne, p. 65

Table 2: Summary of major changes – Proposed Mineral Resources (Sustainable Development) (Mineral Industries) Regulations 2019

Area of regulations	Current state	Change	Policy objective	Impacts
Information requirements: licence applications, licence renewals, work plan approvals, annual reporting.	<p>Differential survey requirements for mining and retention licences may cause a competitive disadvantage to those applications</p> <p>Information obligations spread across regulations and schedules (complex and difficult to manage). Forms prescribed in Schedules are legalistic and inflexible</p>	<p>Mining and retention licence applications only required to include a survey when the Department Head is satisfied it is necessary</p> <p>Information spread across regulations and Schedules consolidated in the regulations.</p> <p>Level of prescription reduced where possible</p> <p>Forms to be set by Department Head</p>	<p>Applications for licences should only collect information which is relevant to the decision to issue a licence and the amount of information collected should be proportionate to the type of licence which is being applied for.</p> <p>Improve regulatory practice and industry compliance:</p> <ul style="list-style-type: none"> • simplify processes • sharpen risk focus • provide clear and timely information. <p>(Action Area 5: <i>Mineral Resources Strategy</i>)</p>	<p>Reduction in cost for mining and retention licence applicants</p> <p>Reduction in administrative burden to industry</p> <p>Reduction in length and complexity of regulations (fewer schedules)</p> <p>Greater flexibility gives scope for Department to design user friendly forms and process.</p> <p>Easier to interpret and administer</p>
Work Plan – Risk Management Plan	<p>Stakeholder and regulator feedback suggest that the current Regulations are overly prescriptive and lack necessary flexibility to allow operators and the regulator to respond to obligations in a timely, cost effective way</p> <p>Not scalable</p> <p>Implementation has caused delays and uncertainty</p>	<p>Regulations clarify risk management plan requirements and allow parties to meet obligations to manage risk by either:</p> <ul style="list-style-type: none"> • complying through a code of practice made under Part 8A of the Act; or • providing a risk management plan that is consistent with any guidelines issued by the Minister under section 120A of the Act; or • a risk management plan which incorporates elements from the code of practice and the guidelines. 	<p>Outcomes-based and risk-based approaches (<i>Getting the Groundwork Right</i>)</p> <p>Compliance for industry and regulatory effort proportionate to risk</p>	<p>Reduced regulatory burden</p> <p>Risks are managed effectively and proportionately</p> <p>Major change for ERR to ensure:</p> <ul style="list-style-type: none"> • code of practice and guidelines are developed • expectations are transparent • work plans contain information required by referral authorities • decisions are consistent

Area of regulations	Current state	Change	Policy objective	Impacts
Rehabilitation plan	<p>The rehabilitation framework in the Act is largely conceptual, with vague requirements that are difficult to apply and measure consistently, which poses the following issues:</p> <ul style="list-style-type: none"> information required for a rehabilitation plan is unclear, with limited context, scope or clarity for the prescribed components, compliance standards, and basis for certification of completed rehabilitation; no assessable parameters for progressive rehabilitation; and long-term risks arising from rehabilitated land are included only vaguely under the work plan requirements. <p>Current approach criticised as ineffective by <i>Hazelwood Mine Fire Inquiry</i>.</p>	<p>Creates requirements for new or varied work plans that a rehabilitation plan must:</p> <ul style="list-style-type: none"> identify a post-mining land use and achieve a safe, stable and sustainable rehabilitated land form capable of supporting that use; set out objectives and completion criteria that will be used to measure rehabilitation success (how a safe, stable and sustainable land form will be achieved); set out rehabilitation milestones; and identify risks arising from a rehabilitated land form that will not be self-sustaining and set out a management plan for those risks. 	<p>Strengthen rehabilitation, post-closure and engagement obligations (<i>Mineral Resources Strategy</i>)</p> <p>(<i>Hazelwood Mine Fire Inquiry</i>)</p>	<p>Strengthened risk management</p> <p>Potential increase in industry compliance costs for new or varied work plans.</p>
Licence Advertising/Notice Requirements	<p>Prescriptive requirements to advertise in a specific way (specified newspapers on specific days)</p>	<p>More flexibility for the Department Head to permit alternative approaches licence applicants to choose how they will advertise</p>	<p>Ensure interested parties are informed and able to express their views on potential mineral exploration and development projects, while providing industry with the flexibility to avoid unnecessary costs by adopting alternative methods for advertising.</p> <p>(<i>Mineral Resources Strategy</i>)</p>	<p>Reduces compliance and administrative costs without compromising community engagement</p>

Area of regulations	Current state	Change	Policy objective	Impacts
Reporting Requirements	<p>Information obligations for reporting spread across regulations and schedules (complex and difficult to manage)</p> <p>Forms prescribed in schedules legalistic and inflexible</p>	<p>Reporting requirements streamlined and simplified where possible</p> <p>Rehabilitation reporting requirements updated to align with new definitions of progressive rehabilitation and rehabilitation milestones</p>	<p>Reporting requirements are the minimum required to permit the Government to efficiently and effectively administer the Act</p> <p>Greater flexibility to design user friendly forms and processes (<i>Mineral Resources Strategy</i>)</p> <p>Information for informed decisions on rehabilitation progress and liabilities (bonds)</p>	<p>Reduces compliance and administrative costs.</p>
Infringements	<p>Infringements not available for some statutory offences</p> <p>Infringements not available to enforce some key regulations. In these cases, an offence exists, whose penalty and enforcement mechanism may not be proportional to the activity without an infringement (e.g. failure to report a reportable event).</p>	<p>Added infringements to cover issues raised by compliance.</p>	<p>Proportionate penalties to encourage compliance</p> <p>(Attorney-General's Guidelines to the Infringements Act 2006: Policy and Legislation)</p>	<p>Compliance with Attorney-General guidelines</p> <p>Supports ERR compliance and enforcement strategy</p>

1 Background

1.1 Regulatory Impact Statement process

The Mineral Resources (Sustainable Development) (Mineral Industries) Interim Regulations 2018⁷ are made under the Act and due to sunset on 30 June 2019. New regulations are needed to replace them.

The remaking process provides an opportunity to revisit whether regulations are still needed, and if so, whether there are ways to improve them.

Before new regulations are made, the *Subordinate Legislation Act 1994* requires:



In recent years the regulatory framework for the minerals industry sector has come under scrutiny, particularly in response to the reopened Hazelwood Mine Fire Inquiry (2016) and the Commissioner for Better Regulation's report *Getting the Groundwork Right – Better regulation of mines and quarries* (2017). Common in the recommendations is a call for modern responsive, outcome-based regulation. This approach is articulated in the Government's Mineral Resources Strategy, *State of Discovery* (see **Appendix 1: Regulatory reform programme** for further details on the Government's regulatory reform program).

The department subsequently undertook a targeted consultation process with parties likely to be directly affected by the proposed Regulations during 2018 and early 2019. The department has now prepared the proposed Regulations for affected parties to review. Affected parties will have 28 days to consider the proposed Regulations and may make submissions to the department by 23 April 2019.

To assist parties with review and comment on the proposed Regulations, the *Subordinate Legislation Act 1994* requires the preparation of a RIS for any regulations that impose a significant economic or social burden on a sector of the public, to be made available with the proposed Regulations. A RIS is also useful to support good decision making.

A RIS must include:

- a statement of the objectives of the proposed Regulations;
- a statement explaining the effect of the proposed Regulations;
- a statement of other practicable means of achieving those objectives, including other regulatory as well as non-regulatory options;
- an assessment of the costs and benefits of the proposed Regulations and of any other practicable means of achieving the same objectives; and
- the reasons why the other means are not appropriate.

⁷ The Minister revoked the Mineral Resources (Sustainable Development) (Mineral Industries) Regulations 2013 and replaced them with the Mineral Resources (Sustainable Development) (Mineral Industries) Interim Regulations 2018, which operate until 30 June 2019.

While the proposed Regulations have been streamlined and simplified where possible, analysis prepared by ACIL Allen Consulting⁸ confirms that the Regulations impose a 'significant burden' overall.

The Commissioner for Better Regulation provides an independent assessment of RISs, which are assessed against the *Victorian Guide to Regulation*. The Commissioner has determined that this RIS meets the requirements of the Subordinate Legislation Act.

Following consideration of all submissions received in response to the proposed Regulations, a notice of decision and statement of reasons will be published. Once the Regulations are made, copies of all submissions are provided to the Parliament's Scrutiny of Acts and Regulations Committee (SARC). SARC examines these submissions to check that the Department has considered the views of stakeholders.

The scope of this RIS includes an assessment of regulatory options for the minerals industry associated with licence applications, work plans, rehabilitation, and advertising and reporting requirements. It does not include an assessment of fees, royalties or levies in the current Regulations – these will be assessed separately not sooner than 1 July 2020 (see Section 2.6). Finally, this RIS will not examine the extractives industry – this covered by a separate set of regulations which will be reviewed by 2020.

1.2 Authorising provision

Section 124 of the Act establishes the authority to make regulations to operationalise key elements of the Act.⁹

1.3 Victoria's earth resources

The minerals sector is an important segment in Victoria's economy, particularly its regional economy. There were 435 active mineral licences as at 30 June 2018, a 5.8 per cent increase compared to 411 in 2016-17, while the number of new mineral licences granted and renewed increased from 68 to 140 in 2017-18. The amount spent on exploration increased by 51 per cent from \$44.3 million to \$67.0 million. The production of gold remained high with a further increase of 16.7 per cent from 312,229 to 364,225 ounces. The production of coal decreased by 19.7 per cent from 56 to 45 million tonnes.

In 2017-18, a total of \$102.3 million was payable from industry in royalties and fees under the relevant Acts. This was an increase of 18 per cent (\$15.7 million) compared to \$86.6 million payable in 2016-17. This increase was mainly attributable to an adjustment in the royalty rate for brown coal from \$0.0776 per gigajoule to \$0.2324 per gigajoule, which came into effect on 1 January 2017.¹⁰

Against this background, there is increasing interest in Victoria's earth resources and considerable efforts have been made by the Victorian Government to reduce red tape and reform the regulatory process to facilitate growth in the sector.

The Sector is made up of 'minerals' (including coal, gold and heavy mineral sands) and 'extractives' (e.g. quarrying stone). The Act defines 'minerals' as meaning any substance that occurs naturally as part of the earth's crust, including gold, oil shale and coal (and hydrocarbons and mineral oils contained in oil shale or coal or

⁸ ACIL Allen Consulting, 2018, *Red Tape in the Victorian Earth Resources Sector: Analysis of Regulatory Costs as at 31 October 2018*, Final Report

⁹ Section 124 of the Act includes the authority to make regulations with respect to: the rate or method of assessment, and the times of payment, of royalties; applications for a licence and renewal of a licence; the advertisement of applications for licences; the manner of marking out and surveying the boundaries of land and the time within which it must be done; the information to be contained in a work plan or in a notice of variation of an approved work plan; applications for a miner's right; applications for a tourist fossicking authority; the mining register and prescribing documents that may be registered; the method by which the amount of a mine stability levy is determined; prescribing infringements; requirements with respect to the disclosure of interests by persons to whom section 118 applies; requiring the payment of fees for anything done under the Act or the regulations and prescribing those fees; prescribing forms, and any other matter or thing required or permitted by this Act to be prescribed or necessary to be prescribed to give effect to the Act.

¹⁰ State of Victoria, 2018, *Earth Resources Regulation 2017-218 Annual Statistical Report*, Department of Jobs, Precincts and Regions

extracted from oil shale or coal by chemical or industrial processes), and specified minerals (i.e. bentonite, fine clay, kaolin, lignite, minerals in alluvial form including those of titanium, zirconium, rare earth elements and platinum group elements, quartz crystals, and zeolite. Water, peat, petroleum or stone, however, are not considered minerals for the purposes of the Act. With respect to 'stone',¹¹ the regulations do not cover the 'extractive industry' – these are covered by the Mineral Resources (Sustainable Development) (Extractive Industries) Regulations 2010. This industry involves the extraction or removal of stone from land if a primary purpose of the extraction or removal is the sale or commercial use of the stone or the use of the stone in construction, building, road or manufacturing works.

The State's largest mines are in the coal sub-sector. Lignite is used solely for electricity generation. Exploration activity, however, is centred in the gold sub-sector and for other minerals including base metals.

Table 3: Expenditure on mineral exploration and mining by commodity 2017-18 (A\$ million)

Mineral	Exploration	Mining	Total
Coal	0.5	359.1	359.6
Gold	43.8	237.7	281.5
Mineral Sands	6.9	12.6	19.5
Other	15.8	44.7	60.5
Total	67.9	654.1	722.0

Source: Earth Resources Regulation Statistical Report 2017-18, Table 2.8.

Note: 'Other' includes industrial minerals and cases where there is more than one primary mineral.

There are currently 433 licences under the Act as at 31 October 2018, made up of 201 Exploration Licences, 153 Mining Licences, 58 Prospecting Licences, 20 Retention Licences (Table 4).

Table 4: Mineral resource licences, as at 31 October 2018

Tenement type	Coal	Gold	Minerals	Total
Exploration licences	1	92	108	201
Mining licences	8	75	69	153
Prospecting licences	0	39	19	58
Retention licences	2	4	14	20
Total	11	210	210	433

Source: Department of Jobs, Precincts and Regions; Prepared by ACIL Allen Consulting.

Note: 2 exploration licences, 1 retention licence and 1 work authority were approved after 31 October 2018. These have been kept in the figures. Expired tenements have been excluded from the figures.

Most of Victoria's mining production is sourced from deposits found many years ago. While there has been little large-scale investment in new mines in recent years, the number of exploration licences issued based on significant discoveries at Fosterville and opportunities identified at Stavely are promising. Consequently, most licences in the sector are greater than ten years old and new licence applications make up only a small proportion of total licences. There were 164 new applications, renewals and applications pending renewal in the regulatory process in the period from 31 October 2017 to 31 October 2018 for the earth resources sector (Table 5).

Table 5: New applications, renewals and renewals pending

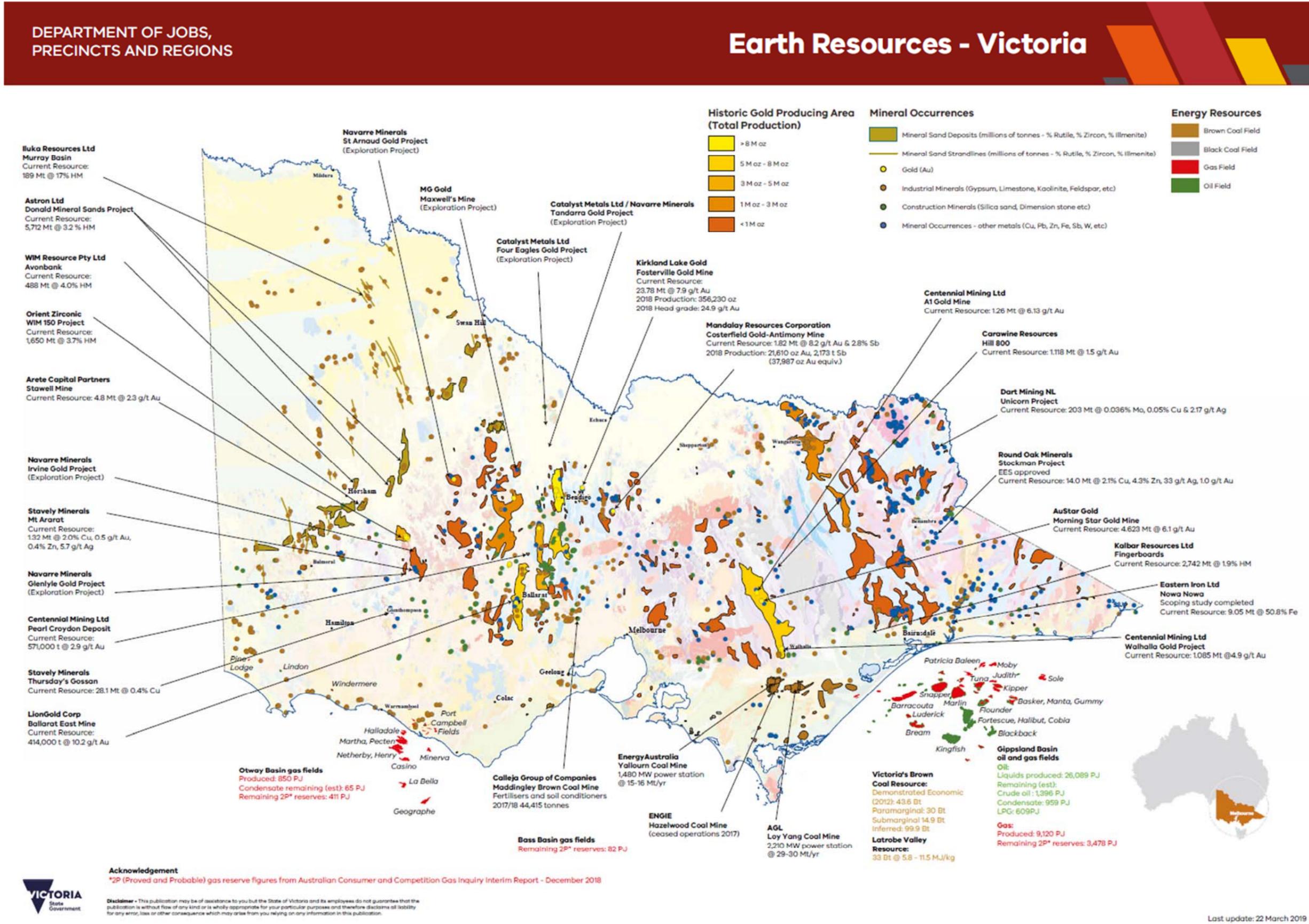
¹¹ Under the Act 'stone' means: sandstone, freestone or other building stone; basalt, granite, limestone or rock of any kind ordinarily used for building, manufacturing or construction purposes; quartz (other than quartz crystals); slate or gravel; clay (other than fine clay, bentonite or kaolin); peat; sand, earth or soil; or other similar materials.

Tenement type	Coal	Gold	Minerals	Total
Exploration licences	1	92	108	201
Mining licences	8	75	69	153
Prospecting licences	0	39	19	58
Retention licences	2	4	14	20
Total	11	210	210	433

Source: Department of Jobs, Precincts and Regions

The main sub-sectors of Victoria's minerals sector and its geographical distribution are illustrated in Figure 1 below.

Figure 1: Distribution of mineral resources in Victoria



1.3.1 Coal

Victoria has one of the largest brown coal (lignite) deposits in the world, with a total estimated resource of around 430 billion tonnes. More than 80 per cent of the resource is in the Latrobe Valley, with around 65 billion tonnes of measured resource identified.

Brown coal is produced primarily at large, open-cut mines in the Latrobe Valley (Loy Yang and Yallourn) to provide fuel for electricity generation, currently around 75 per cent of Victoria's electricity. The Hazelwood power station closed in March 2017 and the Hazelwood Mine is being rehabilitated. Outside of the Latrobe Valley, the Anglesea open cut brown coal mine supplied coal for electricity generation for the Port Henry aluminium smelter until the smelter's closure in August 2014. A smaller brown coal mine at Bacchus Marsh extracts coal for fuel and soil conditioning.

It is not economically viable to export Victorian brown coal at scale due to its high moisture content, subsequent high cost of transport and its volatility (high likelihood of spontaneous combustion).

1.3.2 Gold

The largest three gold mines by production in Victoria are the Fosterville Gold Mine, owned and operated by Kirkland Lake Gold, Ballarat East, owned and operated by LionGold, and the Costerfield gold and antimony mine, owned and operated by Mandalay Resource Corporation. Fosterville is the largest producer, with 356,230 ounces in 2018.¹² There are another 25 mines in Victoria that account for the remaining three per cent of gold production. Each produces less than 5,000 ounces of gold per annum.

Optimism in the Victorian gold sector has been boosted in recent years following the discovery of new reserves worth an estimated \$1.1 billion at the Fosterville Gold Mine and the recent acquisition and reopening of the Stawell Gold Mine by Arete Capital in 2017.¹³ It is anticipated that gold production at Stawell will recommence in early 2019.

1.3.3 Mineral sands

Heavy mineral sands (HMS) include zircon, rutile, leucoxene, ilmenite and monazite. Ilmenite, rutile and leucoxene are used for the manufacture of pigments. The bulk of the HMS resource is in the Murray Basin in western Victoria, which is considered a major HMS province. Exploration is also occurring in the Gippsland and Otway basins. Iluka Resources' Murray Basin operation was the largest HMS producer in Victoria. As part of a consolidation of their mining operations in south-eastern Australia they suspended mining in Victoria in March 2017.

There are several other significant HMS proposals at various stages of development including the: WIM150, Avonbank, Wedderburn and Bungalally projects, being developed by WIM Resources in the Murray Basin; the Fingerboards Mineral Sands Project at Glenaladale in East Gippsland, being developed by Kalbar Resources and currently completing an Environment Effects Statement; and the Donald Mineral Sands Project, owned by Aston Ltd in the Murray Basin.

1.3.4 Base metals

Base metals occur throughout Victoria with particularly strong prospectivity in the State's east and west. Base metal deposits present in Victoria contain copper, lead, zinc, molybdenum, nickel, tin, and antimony. The Geological Survey of Victoria (GSV) has recently identified several large prospective areas that could contain significant base metal deposits.

In western Victoria, GSV studies have identified a belt of rock types and alteration consistent with the presence of large, disseminated resources, potentially similar in type to those found in base metal-rich areas of South

¹² <https://www.klgold.com/assets/operations-and-projects/australia/operations/fosterville-mine/default.aspx>, accessed 13 February 2019.

¹³ Media Release, The Hon Tim Pallas, Minister for Resources, Stawell Mine Reopens as Mineral Sector Booms, 28 August 2018

America. The region is prospective for both porphyry and volcanic-hosted massive sulphide copper-gold systems. In October 2018 the Minister for Resources announced that six companies had successfully progressed through the tender process for six blocks released as part of the Stavelly initiative.

In the far west of the State there are geological characteristics that directly correlate to adjacent areas in South Australia that host base metal deposits. This represents a significant new exploration opportunity in far west Victoria for copper, zinc, lead and silver. In the east of the State recent studies indicate an extension of Macquarie Arc rocks into Victoria from NSW, where the rocks host large copper-gold porphyry deposits.

1.4 Legislative framework

The Minister for Resources is responsible for administering the *Mineral Resources (Sustainable development) Act 1990*. The purpose of the Act is to encourage economically viable mining and extractive industries that make the best use of resources, compatible with the economic, social and environmental objectives of the State. The Act seeks to do this by encouraging and facilitating minerals exploration and fostering the establishment and continuation of mining operations by providing for an efficient and effective system for the granting of licences and other approvals, as well as a process for co-ordinating applications for related approvals. It also seeks to establish an economically efficient system of royalties, rentals, fees and charges.

The Act is the primary legislative instrument that regulates the mineral resources sector. It does this by establishing a legal framework aimed at, among other things, ensuring:

- mineral and stone resources are developed in ways that minimise adverse impacts on the environment and the community;
- consultation mechanisms are effective and appropriate access to information is provided;
- land which has been mined is rehabilitated; and
- conditions in licences and approvals are enforced.

The Act defines what is a mineral and makes minerals the property of the Crown. It is an offence to explore for or mine minerals without an authorisation to do so.¹⁴ The centrepiece of the Act is the licensing regime it establishes for the Crown to assign its rights to explore for and develop minerals to private parties.¹⁵ The four main types of mineral licence prescribed under the Act are:

- exploration licences;
 - › The holder may carry out mineral exploration activities on the land covered by the licence. These are limited to 5-year terms, with up to 2 renewals permitted.
- mining licences;
 - › The holder may carry out mining, exploration, construction and any other activities incidental to mining on the land covered by the licence. These are limited to 20-year terms unless otherwise determined by the Minister.
- retention licences; and
 - › The holder may retain the rights to a mineral resource that is not currently economically viable to mine, but may be in the future, and to explore and carry out other work to establish the economic viability of mining. Retention licences are limited to 10 years and may be renewed twice.
- prospecting licences.
 - › The holder may prospect or explore for minerals, carry out mining activities and other activities that are incidental to mining. Prospecting licences may not be issued for more than five years,¹⁶ cannot be renewed and apply to an area of no more than five hectares.

¹⁴ Act, s. 8

¹⁵ *ibid*, s. 11

¹⁶ Note the 2019 Bill proposes to increase the allowable term of prospecting licences to seven years.

The Act also allows for a miner's right to facilitate recreational prospecting and tourist fossicking authorities for use by commercial tour groups.

Section 124 of the Act establishes the authority to make regulations. The Mineral Resources (Sustainable Development) (Mineral Industries) Interim Regulations 2018 operationalise key elements of the Act. For example, the head of power to apply for a licence is contained in the Act. The Act also requires that an application must be submitted in accordance with the information prescribed in the Act. Other provisions of the Act require that information be prescribed in the regulations to:

- prescribe various procedures, details, royalties, fees, forms, rents, information required in documents and other matters authorised by the Act;
- set out requirements relating to survey of licence areas;
- prescribe certain offences as infringement offences; and
- set out requirements relating to declared mines.

The Act and regulations together establish processes to assign rights in an economically efficient manner that provides the maximum benefit to the public and ensures those rights are utilised effectively. This is chiefly regulated through licensing and reporting.

Further, the Act and regulations manage risks posed to the environment, to members of the public, or to land, property or infrastructure by work being done under a licence or extractive industry work authority, so those risks are identified and are eliminated or minimised as far as reasonably practicable, and land is rehabilitated. This is chiefly regulated through 'work plans', which detail the precise works a licensee will undertake and how risks will be eliminated or minimised as far as reasonably practicable.¹⁷ A licensee is not permitted to undertake works without an authorised work plan.¹⁸ Work plans regulate risks related to the operation of quarries and establish requirements for rehabilitation. As there is some overlap with matters considered under the *Planning and Environment Act 1987*, coordination is required. Under the Act, referral authorities identified in planning schemes can be requested to provide input on the suitability of draft work plans. Statutory endorsement of a work plan by the earth resource regulator is required before a planning permit application can be made.

In addition to the regulations, there are two other forms of subordinate instrument made under the Act – Ministerial guidelines and codes of practice. The department also publishes a considerable amount of (non-statutory) guidance material.

The Act empowers the Minister to make guidelines relating to any of the objectives or purposes of the Act.¹⁹ Currently the only guidelines that have been made by the Minister relate to the description of a mineral resource under s. 15(1BB) of the Act. Applicants for a retention or mining licence must provide a description of a mineral resource consistent with these guidelines. The Act also empowers the Minister to make codes of practice.²⁰ Codes of practice have been issued for low impact minerals exploration, and for low risk mines as defined in the Act.²¹ These activities are exempted from the requirement for a work plan. Where an activity is conducted under a code of practice, compliance is made compulsory through licence conditions. For example, small mines may operate under a work plan or a Code of Practice, depending on the nature of the operation. The mining licence conditions state that the licensee must comply with either an approved work plan or the Code of Practice (made under Part 8A of the Act).

¹⁷ Work plans are also aimed at ensuring that there is support for the efficient use of assigned resources. When a work plan is submitted the regulator will consider whether the proposed program of work is consistent with the expenditure conditions in the licence. Reporting requirements (especially relating to exploration) are focussed on expenditure and production.

¹⁸ An exception is made for small operations or low impact exploration works as defined in the Act. See s. 40(2).

¹⁹ Act, s.120A

²⁰ *ibid*, Part 8A

²¹ There is also a Code of Practice for small quarries, which is relevant to the Extractives Regulations and out of scope of this RIS.

1.5 Earth Resources Regulation (ERR)

The Minister and Department Head have powers under the legislation to administer the Act. Earth Resources Regulation acts as their operational delegate and in practice ERR is responsible to regulate Victoria's mining, quarrying and petroleum extraction sectors. ERR is a unit in the Department of Jobs, Precincts and Regions. ERR roles include licensing, work plan approvals, risk management, enforcing compliance and stakeholder engagement. Much of ERR's focus over the past few years has been on implementing a risk-based approach to regulation; particularly through approvals processes.

ERR operates under several Acts and regulatory instruments and has the following responsibilities:

- allocating rights to explore and mine for minerals through licensing and tenders;
- authorising mining exploration, production and other activities (e.g. retention);
- assessing and approving licensee operations works and rehabilitation (through work plans);
- compliance and enforcement activities; and
- other functions such as stakeholder engagement and education.

Departmental officials in ERR perform functions delegated by the Minister and Department Head. ERR has an annual recurrent budget of approximately \$7 million.

The regulations also seek to ensure a high level of probity among public officers who administer the Act. An officer who has an interest exceeding \$1,000 in value derived from exploration or mining operations in Victoria and which might appear to raise a conflict with the officer's responsibilities, must disclose the interest or income source in accordance with the Regulations. Since these regulations do not impose a burden on the minerals sector, they will not be formally assessed in this RIS.

1.6 Analysis of base-line regulatory costs

In October 2018, the department engaged ACIL Allen Consulting (ACIL Allen) to analyse regulatory costs imposed by the minerals and extractive industry regulations. This report provided a benchmark from which improvements or reductions in regulatory burden could be measured. As part of ACIL Allen's consultation, stakeholders identified several causes they considered added to the regulatory cost burden, including the prescriptive nature of the regulations and duplicative reporting. They considered possible regulatory improvements could include a 'simplification of regulations with a focus on outcomes and performance' and improved guidance to industry.

ACIL Allen found that the per annum regulatory burden imposed by the minerals and extractive regulations was \$63.8M on the minerals sector and \$10.3 million on the extractives sector. The per annum burden imposed by the current minerals regulations represents approximately 25 per cent of the overall regulatory burden (\$259.2 million in total) imposed upon the sector. Regulatory burden imposed outside these regulations includes planning system requirements and native vegetation offsets. This red tape cost information has informed the proposed Regulations and the development of this RIS.

Table 6 below summarises the regulatory costs across the mining industry:

- administrative costs refer to costs associated with reporting to government, e.g., licence applications, reportable events, annual activity and expenditure returns; and
- substantive compliance costs refer to costs incurred because of complying with the regulations, e.g. advertising requirements, costs of surveying a mining area, preparation of work and rehabilitation plans.

Table 6 shows that administrative costs imposed by the regulations are considerably higher than substantive compliance costs (reporting requirements for mining are mostly contained in the regulations, rather than the legislation). Substantive compliance costs are mostly contained in the Act and through other legislative requirements, such as native vegetation obligations and the local government planning scheme. Table 7 below shows these costs per mining tenement.

Table 6: Annualised regulatory cost by tenement type – minerals industry (\$ thousand)

Tenement type	Costs imposed by the regulator		Costs imposed by other regulatory frameworks		Total
	Administrative costs	Substantive compliance costs	Administrative costs	Substantive compliance costs	
Mining tenements:					
Coal (8)	9,400	15,100	-	6,100	30,600
Gold (75)	21,400	1,500	1,200	86,100	110,200
Minerals (69)	8,100	2,600	1,000	87,700	99,400
Exploration tenements (201)	3,100	1,300	-	4,700	9,100
Retention tenements (20)	500	100	-	5,700	6,300
Prospecting tenements (58)	600	100	800	2,100	3,600
Total (431)	43,100	20,700	3,000	192,400	259,200

Source: ACIL Allen

Table 7: Annualised regulatory cost by tenement type – per minerals tenement (\$ thousand)

Tenement type	Costs imposed by the regulator		Costs imposed by other regulatory frameworks	
	Administrative costs	Substantive compliance costs	Administrative costs	Substantive compliance costs
Mining tenements:				
Coal (8)	1,175	1,890	-	765
Gold (75)	285	20	15	1,150
Minerals (69)	120	40	15	1,270

Source: ACIL Allen

While these figures provide a useful indication of the areas of regulation that impose regulatory burden, they should be viewed with caution. The input data was self-reported and there is some evidence that industry found it difficult to differentiate between costs imposed by the regulations and costs imposed by other legislation. Nevertheless, the costing analysis provides a very useful reference point to target possible reform areas where the regulatory burden appears high.

2 The nature and extent of the problem

While the objectives of the Act are to encourage mineral exploration and economically viable mining in a way that is compatible with the economic, social and environmental objectives of the state, the regulations' purpose is operationalise provisions in the Act.

The Crown owns all minerals in Victoria, subject to some minor exemptions.²² However, the Crown is not in a strong position to realise the economic value of these assets on behalf of the public. The private sector has greater expertise in mining compared with the government, mineral exploration is inherently risky, and it is not considered appropriate for taxpayers to bear this risk. The probability of success is low and economic mineral deposits are very rare. For example, the conversion rate is one in 300, at best, from first exploration to a mine development. From 1993–2017, it has taken 440,000 metres of exploration drilling in Victoria, on average, to make a discovery.

The Act establishes a system where rights to Crown-owned minerals are allocated to private parties. A person can only search for minerals, carry out mineral exploration or mine on Victorian land in accordance with a licence, a miner's right or a tourist fossicking authority.^{23,24}

2.1 Licence Applications

Part 2 of the Act, which deals with mineral exploration, mining, prospecting and retention licences, sets out the nature and extent of activities permitted by each type of licence²⁵ and the processes by which these licences may be granted, renewed and changed. Licences may be granted following a licence application by an explorer,²⁶ direct allocation of licences for coal,²⁷ or through a tender process.²⁸

Before granting a licence, the Minister must be satisfied the applicant is a fit and proper person who will comply with the Act and has the capability to undertake appropriate work for the licence type.²⁹ Additional requirements apply to retention and mining licences, such as evidence of a mineral resource and its economic viability.

Part 5 of the Act sets out the nature and extent of activities that are permitted under Miner's rights and Tourist Fossicking Authorities and the process for granting these authorities. Miner's rights must be granted to an applicant if the application is made 'in accordance with the regulations.'³⁰ The Department Head has the power to grant tourist fossicking authorities to any person who applies 'in accordance with the regulations.'³¹ The Department Head may grant a tourist fossicking authority subject to any terms and conditions specified in the authority.

²² Act, s. 9

²³ *ibid*, s. 8

²⁴ The full range of minerals licences and authorities available under the Act are: Miner's right, Tourist Fossicking Authority, Prospecting Licence, Exploration Licence, Mining Licence, Retention Licence.

²⁵ Act, Part 2, Division 1—General licence provisions

²⁶ *ibid*, Part 2, Division 2—Licence process

²⁷ *ibid*, Part 2, Division 3—Licence process for direct allocation of licences relating to coal

²⁸ *ibid*, Part 2, Division 5—Tenders for licences

²⁹ Act, s. 15(6)

³⁰ *ibid*, s. 57

³¹ *ibid*, s. 60

The current Regulations enable the collection of information necessary for the Minister to make decisions on granting licences and which the Act expressly requires to be prescribed in legislation. However, the industry has raised issues about the requirement for a survey to be included in all mining and retention licence applications when the Act allows for a discretion about whether to require a survey.³²

The licence application requirements in the current Regulations spread the information required in licence applications across regulations and schedules (see Table 9), creating complexity. The forms are prescribed in Schedules, which is inflexible and can lead to confusion.

2.2 Work plans

Much of the work done during mineral exploration, resource development and mining has potential to cause harm to the environment, to members of the public, to land, property and infrastructure. The Act seeks to mitigate these risks of harm by requiring an approved work plan with processes to be put in place that eliminate or minimise these risks. Most licence holders cannot begin work under the Act without a work plan.³³ Low impact mine work plans also establish frameworks for consultation processes and rehabilitation plans (discussed separately in Section 2.3). Under the current arrangements the preparation and approval of work plans can be time consuming and costly for applicants and may involve external consultants.

The regulations prescribe the detailed information to be included in work plans. Without the regulations, applicants would not know the type or details of information to be provided to permit the government to assess an application. This may result in multiple iterations of applications, delays, and inconsistency across applications. Poor quality or variable information would also make it difficult to administer.

Given that many risks faced by applicants are similar, there is scope to make the information requirements more streamlined and simpler to follow, reducing administrative and delay costs.

2.3 Rehabilitation plan

Communities and government expect mined land to be rehabilitated to a safe, stable and sustainable landform that supports future land uses and leaves a positive legacy. Where effective risk management and rehabilitation does not occur, mining can result in significant negative impacts on the environment and communities. In Victoria today, there are still areas adversely affected by historical mining operations. Mining can impose costs on the environment: it can disrupt native flora and fauna, affect aquifers and waterways, and may result in disturbances to the earth (e.g., tailings, mullock heaps). When these costs are not 'internalised' by the operator through rehabilitation and post-closure management, they are imposed on the community. This is a type of market failure known as an 'externality'.³⁴

Acknowledging the role of government in addressing this externality, the Act obligates licensees to rehabilitate mined land in accordance with the approved rehabilitation plan, which is a component of the work plan.

Various government processes and authorities have found the existing regulatory framework for rehabilitation to be inadequate and unclear. The Hazelwood Mine Fire Inquiry, the Commissioner for Better Regulation and the Latrobe Valley Rehabilitation Commissioner have all made findings that the Act and its supporting Regulations do not adequately require or encourage adequate rehabilitation planning, nor regulate or enforce a licensee's

³² *ibid*, s.15(1BH)

³³ Section 42(1)(a), *Mineral Resources (Sustainable Development) Act 1990*. Section 40(2) exempts small low risk mines and prospecting licences engaged in mining activities defined as low risk, who must comply with a binding Code of Practice rather than submit a work plan. A similar exemption applies to holders of exploration licences whose exploration activities are defined as low risk.

³⁴ Previous edition, *Victorian Guide to Regulation*, April 2007, page 2-2. The *Victorian Guide to Regulation* has described externalities as follows: External costs and benefits, commonly referred to as externalities or spillovers – which occur when an activity imposes costs (which are not compensated) or generates benefits (which are not paid for) on parties not directly involved in the activity. Without regulation, the existence of externalities results in too much (where external costs or negative externalities occur) or too little (where external benefits or positive externalities arise) of an activity taking place from society's point of view. Pollution is the most common example of a negative externality.

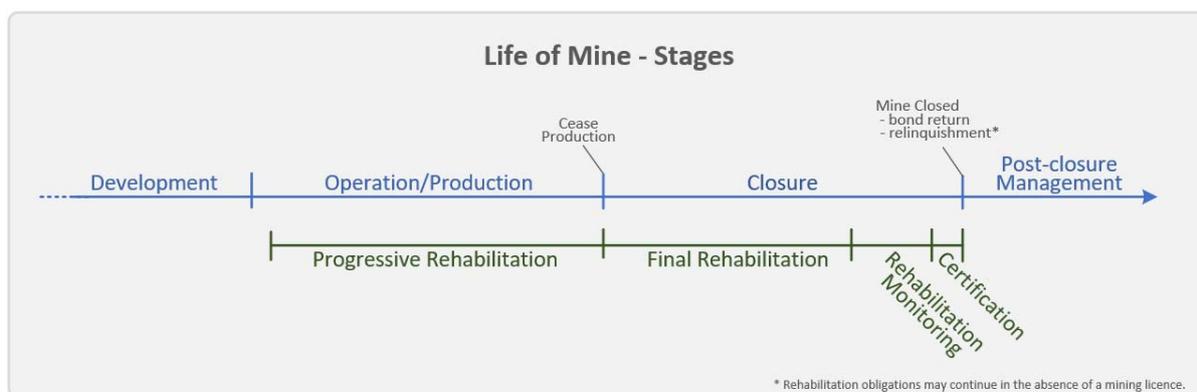
obligation to rehabilitate. This exposes the State to significant economic, social and environmental risk, contrary to the purposes, objectives and principles of sustainable development under the Act.

The key problems with the existing regulatory framework are that:

- the requirements relating to rehabilitation planning and execution lack clarity and do not provide certainty to licence holders or regulators regarding key decisions, and
- the legislation fails to sufficiently address residual risks that endure after rehabilitation is complete, such as where a final land form requires ongoing monitoring and maintenance or generates other safety, stability or sustainability issues.

The Act currently regulates rehabilitation through a general obligation to rehabilitate land, in accordance with conceptual elements under a rehabilitation plan; and a general obligation to undertake that rehabilitation progressively (while doing work). Figure 2 is a simplified representation of the final stages of a typical mine life. It provides a set of terms used to describe the stages and activities as referred to in this document the regulatory framework. There are also rehabilitation requirements under exploration licences that occur earlier in the mine life not represented in Figure 2. However, they are typically smaller scale, low risk operations relative to rehabilitation activities associated with a productive mine.

Figure 2: Rehabilitation – Ideal process for life of mine stages



Under the Act, the rehabilitation plan requirements are largely conceptual, which make them difficult to interpret, administer and measure consistently:

- information required under a rehabilitation plan is unclear, with no context, scope or clarity for the prescribed components; to what standard they must be achieved; or on what basis ERR will assess them for operational compliance and certification that rehabilitation is complete.
- progressive rehabilitation cannot be effectively measured or enforced as the information requirements in the regulations set no assessable parameters.
- requirements to identify and plan for the management of long-term risks arising from rehabilitated land to ensure rehabilitation outcomes are retained are included only vaguely under the work plan requirements.

Rehabilitation bonds provide a mechanism to ensure rehabilitation costs do not fall to the taxpayer and encourage industry investment in mine rehabilitation. Licensees are required to provide a rehabilitation bond, which the Minister determines based on estimates of rehabilitation liabilities assessed based on the approved rehabilitation plan. Where rehabilitation plans are inadequate, it is difficult to assess rehabilitation costs. Subsequently, rehabilitation bonds may be insufficient to incentivise rehabilitation and protect the state from the costs of rehabilitation in the event of default by the licensee.

Efforts to incentivise progressive rehabilitation through linking bonds to liability assessments have proven ineffective, likely due to the inadequacy of current rehabilitation bonds and lack of understanding of how progressive rehabilitation reduces overall rehabilitation liability. The Hazelwood Mine Fire Inquiry found that the level of bonds was manifestly inadequate for the Latrobe Valley coal mines, which exposed the State to rehabilitation costs and did not incentivise progressive or final rehabilitation. Bonds are calculated based on a point-in-time assessment of rehabilitation liability, which is estimated via information contained in the licensee's rehabilitation plan. The current rehabilitation plan requirements are conceptual, rather than measurable, and do not facilitate enough level of detail to support an accurate assessment of overall rehabilitation liability. Due to difficulties pricing uncertainty in the assessment, the liability assessments likely reflect only a portion of the true costs to rehabilitate, resulting in under-bonding and a significant financial risk to the state.

This issue manifested in the mid-1990s when the Benambra Mine went into receivership and the Victorian Government was left with rehabilitation responsibilities and associated costs. The licensee's rehabilitation plan did not contain sufficient detail, which contributed to government holding a bond amount that did not cover rehabilitation costs. Post-closure risks and costs were also poorly understood, and government was left with responsibility for ongoing management of the rehabilitated site.

In general terms, the current framework does not facilitate compliance certainty, best-practice rehabilitation planning, or allow government to make an informed, consistent assessment of rehabilitation plans, including a final assessment of whether rehabilitation is complete. This compromises risk management of mined land and reduces industry incentives to invest in mine rehabilitation planning and execution.

2.4 Advertising of licence applications

The Act establishes a legal framework to ensure that consultation mechanisms are effective and appropriate, and that access to information is provided to public. This is done to address the information imbalance, where applicants know more about mining activity than the community. This can lead to an imbalance of power in the transaction or cause ill-informed or bad decisions to be made. To solve this an applicant needs to provide adequate information to the community, which permits informed participation in decision making, leading to better decisions.

In the absence of advertising regulations, the objectives of the Act cannot be met as the Act itself does not articulate what licence applicants need to do to satisfy the obligation to advertise. Without advertising regulations, it is unlikely the public would be aware of a mining proposal. Therefore, the Act places an obligation on the party seeking approval to provide members of the public with an opportunity to become aware of their intentions, and states regulations will prescribe how the advertising will take place. These provisions enable parties to send objections to the Minister if they so choose, and to have the Minister consider these as part of a decision to grant or refuse a licence application.³⁵

There is evidence that some members of the public use this information. In the financial year 2017-18 for example, 40 licences attracted 289 separate objections.³⁶ It is unlikely that many, or perhaps most, of these objections would have been made had the licence applications not been advertised.

2.5 Reporting requirements

The information repository on the nature of the State's geology is a significant public asset with a value in the order of several billions of dollars. Information provided by mineral exploration and mining businesses to the government serves several purposes, consistent with the objectives of the Act. Information provision under the Act informs the public and specifically ensures that existing licensees meet licence obligations and report risks.

Within Government, the information is used both by ERR and by the GSV. GSV is the State's custodian of over 160 years of geological information. GSV delivers geoscience information and data through several mechanisms, including the GeoVic website (and associated corporate data system), an online publication repository and the GSV drill core library in Werribee.³⁷ These sources of data and information record a significant volume of traffic from a variety of clients. As this body of publicly available information serves a public good, the costs of maintaining it are met by Government, rather than cost recovery from industry or the public.

Much of the published information comes from mining and exploration businesses and is generated during work plan activities on mineral licences. The Act creates a requirement for licensees to supply prescribed information at the time and in the form set by regulations. Without regulations, there would be no regular reporting requirements to support the objectives of the Act.

³⁵ *ibid*, s. 24

³⁶ Resource Rights Allocation Management System (RRAMS), 26 September 2018

³⁷ See <http://earthresources.efirst.com.au>

Improving information can improve the operation of markets. Therefore, the regulatory problem to be corrected relates to:

- the provision of information of certain events, and
- the public good aspect of information.

In the first instance, licensees may be unwilling to disclose certain events, such as those with occupational health and safety implications. In the second instance, there are no private market incentives for licensees to provide data or information to government; in fact, there are disincentives, since withholding information may confer commercial advantages.

2.6 Fees, rents, royalties and levies

This RIS does not assess the current level of fees, rents, royalties or levies. The level of fee units will continue at their current rates (subject to annual indexation) for at least two years. This is in line with the recommendation from the Commissioner for Better Regulation in the *Getting the Groundwork Right* report, which recommended that the department begin to increase cost recovery for ERR's regulatory activities no earlier than 1 July 2020. This will allow the department to:

- embed improvements to the regulatory system currently being implemented;
- consult with industry and other stakeholders on the right model for cost recovery; and
- establish a clear baseline on the efficient cost base for ERR.³⁸

Once these actions are completed, the intent is to make amending regulations to implement the preferred model for cost recovery, including examining the royalty methodology, and establish fees that reflect the efficient cost base.

Section 124 of the Act establishes the authority to make regulations with respect to, amongst other things, the rate or method of assessment and the times of payment of royalties, and for the payment of fees for anything done under the Act or the regulations and prescribing those fees. The rates for royalties and fees are prescribed in the current Regulations.

³⁸ Commissioner for Better Regulation, 2017, *Getting the Groundwork Right: Better Regulation of Mines and Quarries*, State of Victoria, Melbourne, p. 65

3 Objectives of the regulations

3.1 Legislative purpose and objectives

The purpose of the legislation is to encourage mineral exploration and economically viable mining and extractive industries which make the best use of, and extract the value from, earth resources in a way that is compatible with the economic, social and environmental objectives of the state.³⁹ The Act came into force in 1990 and has undergone incremental amendment over the years to reflect changes in the expectations of society, such as the inclusion of the principles of sustainable development and community consultation in 2006 and risk-based work plans in 2015. In summary, the Act establishes a regulatory framework that provides for:

- an efficient and effective process for licensing and approvals; co-ordinating applications; rights allocation decision-making for mineral resources; and economically efficient royalties, rental, fees and charges; and
- a legal framework aimed at ensuring:
 - › risks to the public, environment and infrastructure are identified and eliminated or minimised as far as reasonably practicable;
 - › consultation mechanisms are effective;
 - › mined land is rehabilitated;
 - › appropriate compensation is paid for the use of private land for exploration or mining;
 - › conditions in licences and approvals are enforced; and
 - › dispute resolution procedures are effective.

3.2 Government policy

In August 2018, the Government released *State of Discovery – Mineral Resources Strategy 2018-2023* (strategy). The strategy states that the Government is committed to responsibly growing the minerals sector in a way that keeps Victoria clean and safe while meeting community expectations. This strategy is targeting significant mineral discoveries through increased mineral exploration investment over the next decade under a more modern, proportionate and robust regulatory system. The strategy provides settings to underpin the long-term development of socially and environmentally responsible mineral exploration and mining in regional Victoria.⁴⁰

This strategy also highlights:

... a whole-of-government approach across the mining life cycle. It sets a path for improving the administration and enforcement of our regulatory framework for managing the social, environmental and economic conditions of industry. The strategy highlights our priorities for investment in pre-competitive geoscience, **the reduction of costs and red-tape for the minerals sector** and leveraging Victoria's world-leading business conditions, infrastructure, corporate connectedness, educational excellence and workforce preparedness. [emphasis added]

Further amendments to reform the rehabilitation and post-closure regulatory framework and improvements to the approval framework, and its interaction with the planning regime, are planned in future. Many of these improvements arise from the Government response to the findings in the *Hazelwood Mine Fire Inquiry Report 2015/2016 Volume IV – Mine Rehabilitation*.

In July 2017, the Treasurer directed the Commissioner for Better Regulation to undertake a Continuous Improvement Project with ERR. The project was tasked with identifying practical steps for improving regulation of the earth resources sector in Victoria. In December 2017 the Department established the Regulatory Transition

³⁹ Section 1 of the Act

⁴⁰ State of Victoria, *State of Discovery: Mineral Resources Strategy 2018-2023*, Minister for Resources, p.1

Taskforce (RTT) to give effect to the Commissioner's recommendations and to drive further improvements to regulatory arrangements.

In May 2018, ERR released *Statement of Operating Change: Our New Approach to Earth Resources Regulation* (statement). This statement focuses on outcomes that minimise costs to businesses, meet community expectations and support government objectives. Specifically, the statement includes a plan that will:

- progressively implement the actions approved by the Victorian Government in response to the Commissioner for Better Regulation's recommendations in *Getting the Groundwork Right - Better Regulation of Mines and Quarries*;
- apply a proportionate approach in regulating sites by focusing on what matters the most to eliminate or minimise risks to people, the environment and infrastructure;
- build confidence in the regulatory system by developing clear approvals guidelines and assessment steps for our staff, referral authorities and industry, so each application is considered, and the process is understandable; and
- simplify the regulatory requirements and processes to apply to undertake or vary the work the sector undertakes. We are streamlining and simplifying the approvals process and improving guidance on application requirements.

3.3 Objectives of the proposed Regulations

The objectives of the proposed Regulations are to create an efficient framework for the collection of information to allow for the efficient and effective management of the economic and environmental risks and to increase public confidence in mining activities in Victoria.⁴¹

The regulations seek to do this by prescribing information to operationalise the Act for:

- various procedures, details, royalties, fees, forms, rents, information required in documents and other matters authorised by the Act;
- the requirements relating to survey of licence areas;
- prescribe certain offences as infringement offences; and
- the requirements relating to declared mines.

⁴¹ Every three years the CSIRO conducts a national survey *Australian Attitudes to Mining* which surveys Australians' sentiments toward the mining industry. The most recent survey was conducted in 2016-17. In May 2018, DEDJTR engaged CSIRO to analyse Victorian respondent data from this survey and provide a report *Victorian attitudes to Mining*.

4 Options

The *Subordinate Legislation Act 1994* requires a RIS to consider “other practicable means of achieving those objectives, including other regulatory as well as non-regulatory options.”⁴² In addition, the Subordinate Legislation Act Guidelines note that, “In most cases, when a responsible Minister is considering making a statutory rule or legislative instrument, the authorising Act or statutory rule will dictate what kind of instrument may be created. For example, where the authorising legislation provides for fees to be prescribed in statutory rules, there may be no discretion to set those fees by another method.”⁴³

This guidance is relevant for several options considered in this RIS. For example, the Act states that, “An application for a licence is ineffective, and must not be accepted by the Minister, if it does not contain all of the details required by the regulations for an application for that type of licence.”⁴⁴ This provision limits the options for applications to the design aspects of information required for applications.

Base case – What will happen if the regulations are not remade

The base case is the situation where the regulations were to sunset, and the Act would remain in place—becoming the sole regulatory instrument. It provides the basis against which options can be assessed and compared. In the absence of any government action, the base case would be represented by the following positions. While the base case provides a set of options, these are not desirable because problems have been identified that require some form of regulatory intervention (see Section 3).

Table 8: Base case – Regulatory position if the regulations are not remade

Regulation	Base case
Licence applications	In the absence of regulations, the intent of the Act (i.e., to encourage and facilitate exploration for minerals, mining, prospecting and fossicking) would be frustrated. This is because the Act specifically indicates licence applications, renewal applications, tenders and applications for authorities are to be made ‘in accordance with the regulations’ ⁴⁵ or must contain ‘the information required by the regulations.’ ⁴⁶ Applicants for mining, prospecting or retention licences must survey the boundaries of the land proposed to be covered by the licence ‘in the manner required by the regulations.’ ⁴⁷
Work plans	The requirement for work plans would be limited to the provisions of the Act, which do not specify the form, or detail the content of work plans. More importantly, without the regulations there would be no prescription or clarity about what work plans would be approved by the Department Head. The absence of prescription on the form of work plans would likely lead to an increase in administrative effort by both industry and government, lengthen approval times, and lead to inconsistent regulatory decision-making. The Minister may issue guidelines relating to any of the Act’s objectives, purposes, or its subordinate regulations (s. 120A). In the absence of regulations, this power has little capacity to add clarity to the minimum standard for approved work plans.
Rehabilitation	In the absence of regulations, the requirements for rehabilitation are limited to provisions set out in the Act:

⁴² SLA, s. 10

⁴³ Office of the Chief Parliamentary Counsel Victoria, *Subordinate Legislation Act 1994 Guidelines*, paragraph 51

⁴⁴ Act, s. 15(1C)

⁴⁵ *ibid*, ss. 15, 26AD, 26AJ, 29

⁴⁶ *ibid*, s. 27

⁴⁷ *ibid*, ss. 15 and 26AR.

Regulation	Base case
	<ul style="list-style-type: none"> all licensees must rehabilitate disturbed land (s.78); mining and prospecting licensees must rehabilitate in accordance with a rehabilitation plan approved by the Department Head (s.78); and exploration and retention licensees must rehabilitate in accordance with their licence conditions; a rehabilitation plan (where required) must consider any special characteristics of the land; the surrounding environment and any potential long-term degradation; land stability; and the desirability of returning former agricultural land to its pre-mining state (s. 79); if the land is private, the rehabilitation plan must be prepared after consultation with the landowner (s. 79), and rehabilitation must be undertaken in the course of doing work under the licence; and must be completed as far as practicable before cessation of the licence, or otherwise as expeditiously as possible thereafter (s. 81). <p>The Minister may issue guidelines relating to any of the Act's objectives, purposes, or its subordinate regulations (s. 120A). In the absence of regulations, this power has little capacity to add clarity to the minimum standard for rehabilitation, particularly specificity around the rehabilitation plan, as the purposes and objectives are overarching.</p>
Advertising	<p>In the absence of advertising regulations, the objectives of the Act cannot be met as the Act itself does not articulate what licence applicants need to do to satisfy the obligation to advertise. Without advertising regulations, it is unlikely the public would be aware of a mining proposal.</p> <p>Without active effort by government to alert the public to this information, affected parties may not notice it in time to lodge an objection.</p>
Reporting	<p>In the absence of reporting requirements, the objectives of the Act cannot be met as the Act itself does not articulate what information licensees need to provide or set any timeframes for regular reporting. Without reporting regulations, it is unlikely that the department would have enough information for regulating the sector.</p> <p>Under the base case (no regulations), licensees are unlikely to supply information about their operations, risk and compliance. For example, 'reportable incident' data is not readily available, and an operator may argue that such information was commercial in confidence.</p>

A. Options for licence applications

Option A.1 – Status quo

Under this option, the processes and information required for applications for new and renewed licences and other authorities would remain broadly the same as under the current Regulations. Applications for licences should only collect information which is relevant to the decision to issue a licence and the amount of information collected should be proportionate to the type of licence which is being applied for.

The current regulations require different levels of information depending on the type of licence application. Exploration licence applications require the least detail (the area is described in kilometres and boundaries are set by graticular sections).⁴⁸

More information is needed for mining, prospecting and retention licences as these enable a wider range of activities to be undertaken. Table 10 illustrates the information requirements by licence type.

⁴⁸ Graticular section means the 1000 metre interval block based on the Australian Geodetic Datum 1966, as shown on the National Topographic Map Series published by the National Mapping Council.

Table 9: Summary of application information required by licence type

Licence type	Information required
All licences	<ul style="list-style-type: none"> A. Applicant identity and authority to act⁴⁹ B. Land covered by licence (area and a map)⁵⁰ C. Native Title compliance approach (for Crown land)⁵¹ D. Proposed term and annual expenditure⁵² E. Financial and technical capability⁵³ F. Applicant's fitness to hold a licence⁵⁴ G. Details of the proposed program of work⁵⁵
Exploration licence	Items A – G above <i>plus</i> : <ul style="list-style-type: none"> • Land area in square kms and map with graticular sections⁵⁶
Mining licence	Items A – G above <i>plus</i> : ⁵⁷ <ul style="list-style-type: none"> • Land area in hectares described by cadastral survey⁵⁸ • Map showing boundaries of private and Crown land agricultural land • Owner/ occupier identity • Licence holder (if application over land covered by another licence type) • Proposed term and annual expenditure (first 5 years) • Mineralisation report prepared by a competent person
Prospecting licence	Items A – G above <i>plus</i> : ⁵⁹ <ul style="list-style-type: none"> • Land in hectares described by cadastral survey (if required)⁶⁰ • Map showing boundaries of private and Crown land agricultural land • Owner/ occupier identity

⁴⁹ Current Regulations, Schedules 1 - 4 (items 1 – 3)

⁵⁰ Current Regulations, Schedules 1 - 4 (items 4 – 5)

⁵¹ Current Regulations, Schedule 1 (item 6), Schedules 2 and 3 (item 8) and Schedule 4 (item 7)

⁵² Current Regulations, Schedule 1 (items 7 and 8), Schedules 2 and 4 (items 10 and 11) and Schedule 3 (items 11-12)

⁵³ Current Regulations, Schedule 1 (items 9 - 11), Schedule 2 (items 12 and 14) and Schedule 3 (items 13-14) and Schedule 4 (items 13, 14 and 16).

⁵⁴ Current Regulations, Schedule 1 (item 12), Schedules 2 and 3 (item 15) and Schedule 4 (item 17)

⁵⁵ Current Regulations, Schedule 1 (item 13), Schedules 2 and 4 (item 17) and Schedule 4 (item 15)

⁵⁶ Current Regulations, Schedule 1 Information required in application for exploration licence (items 4 and 5)

⁵⁷ Current Regulations, Schedule 2 (Items 6 – 7, 9, 13, 14, and 16)

⁵⁸ The licence application requires a survey but must be read in conjunction with regulation 28(4) of the current Regulations which requires mining, retention and prospecting licensees to produce a cadastral survey under the e Surveying (Cadastral Surveys) Regulations 2015. Cadastral surveying is the discipline of land surveying that relates to the laws of land ownership and the definition of property boundaries. It involves interpreting and advising on boundary locations, on the status of land ownership and on the rights, restrictions and interests in property, as well as the recording of such information for use on plans, maps, etc.

⁵⁹ Current Regulations, Schedule 3 (items 6, 9, 10, 13 – 14)

⁶⁰ Current Regulations 24(2)

Licence type	Information required
	<ul style="list-style-type: none"> Licence holder (if application over land covered by another licence type) Proposed term and annual expenditure (first 2 years)
Retention Licence ⁶¹	Items A – G above <i>plus</i> : <ul style="list-style-type: none"> Land in hectares described by cadastral survey Map showing boundaries of private and Crown land and agricultural land Evidence that land may be required for mining in the future Licence holder (if application over land covered by another licence type) Proposed term and annual expenditure (for 1st 2 years) Evidence that proposed expenditure commensurate with proposed program of work Mineralisation report prepared by a competent person

Items A to G of Table 9 closely match the list of matters of which the Minister must be satisfied before granting a licence application under s. 15(6). These are that the applicant:

- is a fit and proper person to hold the licence (Table 9 items A and F);
- genuinely intends to do work (Table 9 items D and E);
- has an appropriate program of work (Table 9 item G); and
- is likely to be able to finance the proposed work and rehabilitation of the land (Table 9 item E).

The additional items for each licence type listed in Table 9 follow the Act's information requirements for the most part, for example retention licences require a mineralisation report.

The information requirements in the current Regulations are mostly fit for purpose, with two key concerns:

- Survey requirements; and
 - Under the Act, applications for mining, prospecting and retention licences must include a survey of the boundaries of the land unless the regulations provide otherwise.⁶² Under current Regulations, all mining and retention licence applications must include a cadastral survey, but prospecting licence applications do not require a cadastral survey⁶³ at the time of application, unless the Department Head thinks it is necessary.⁶⁴

This is important because the Act allocates licences to the first applicant. An application for a prospecting licence takes less time to prepare, and therefore applicants for this category of licence have an advantage over applicants for mining and retention licences.

Industry representatives have expressed concerns these differential requirements are putting commercial opportunities at risk.

Other states have similar or greater statutory discretions⁶⁵ to require surveys as in the Victorian Act, but

⁶¹ Act, s 15(1BE)

⁶² Act s15(1BH)

⁶³ A cadastral survey is a survey carried out by a qualified person which complies with the surveying requirements and standards in the Surveying (Cadastral Surveys) Regulations 2015. A cadastral survey is conducted against specified measures and therefore involves a significant amount of time if it is carried out over a large area.

⁶⁴ Under regulation 24(2) of the current Regulations the Department Head may require an applicant for a prospecting licence to survey the boundaries of the land if the Department Head is satisfied that a survey is required—(a) to ensure that the location of the application area is specified accurately; or (b) to avoid the possibility of a boundary dispute with a nearby licence.

⁶⁵ *Mining Act 1992* (NSW) s 66, *Mineral Resources Act 1989* (QLD) s407, *Mining Act 1978* (WA) ss 47, 70G and 80.

regulations in other States do not make surveys a requirement for all mining and retention licences.⁶⁶ In practice a detailed cadastral survey is only required where the boundaries of the proposed licence are at issue for example when there is an adjacent licence.

- Complexity and levels of prescription.
 - › The current Regulations spread the information required in licence applications across regulations and schedules, creating complexity (see Table 8). The forms are prescribed in Schedules, which is inflexible and can lead to confusion because of cross-referencing.

Option A.2 – Proposed amendments

This proposal is largely the same as the status quo except for the amendments to regulations to increase flexibility and simplify licence applications below:

- Only require mining and retention licence applications to include a survey when the Department Head is satisfied it is necessary.
- Prescribe the information requirements for licence applications directly in the regulations and give the Department Head the power to issue application forms including the information prescribed in the regulations.

Drafting changes have been made to the licence application regulations to clarify the information sought and simplify the regulations, moving the requirements out of the Schedules and into the body of the Regulations.

B. Options for work plan requirements

Option B.1 – Status quo

Under this option, the current prescribed content of work plans would be used in the remade regulations. The current regulations prescribe different work plan content for exploration or mining work.

Table 10: Work plan content requirements

Exploration work (Schedule 13) – Applies to exploration work under all licence types ⁶⁷	Mining work (Schedule 14) – Applies to mining work under mining and prospecting licences ⁶⁸
Description of work	Description of work
Identification and assessment of risk	Identification of mining hazards
Risk management plan	Identification and assessment of risk
Rehabilitation	Risk management plan
Consultation	Rehabilitation plan
	Community engagement plan*

* All licensees must undertake 'consultation' (s. 39A); in addition, if the licence is a mining licence or prospecting licence, the licensee must include a 'community consultation plan' that demonstrates that the licence holder will use appropriate and effective measures to consult with the community (s.40(3)(d)).

The type of information required for exploration and mining are largely similar. More detail is required for mining work, since mining entails a greater range of activities and is associated with a greater level of risk. Mining work

⁶⁶ Mining Regulation 2016 (NSW) regulation 42, Mineral Resources Regulation 2013 regulation 93, Mining Regulations 1981 (WA) regulation 118.

⁶⁷ Current Regulations, subregulations 28(1)(a) and 26(1)(b)(i)

⁶⁸ Current Regulations subregulation 28(1)(b)(ii)

also requires a community engagement plan, reflecting the Act's requirement that work plans should be proportionate to the scale of work.⁶⁹

Risk management plans

The current regulations require a risk management plan component which aims to address the Act's requirement for work plans to identify risks that work may pose to the environment, any member of the public, or to land, property, or infrastructure near the work. The current regulations require a risk management plan that includes an identification of risks that specifies what the licensee will do to address those risks as far as reasonably practicable.

Since these regulations came in to force in 2016, industry has expressed concerns that they are too prescriptive and do not enable proportionate approaches to risk management. This was supported by the ACIL Allen Regulatory Burden Assessment (December 2018) identified which industry still has concerns about the overall prescriptive nature of the regulations.

Getting the Groundwork Right found that "the costs associated with producing a risk management plan can be considerable — enough to cause operators to defer works that would trigger a variation. This conceivably includes new or changed works that would reduce risk overall or facilitate better, lower-cost compliance outcomes."

Getting the Groundwork Right recommended several operational policy changes to address these concerns including the development of standard risk management plans.

These changes are currently being implemented including:

- a Statement of operating change (addressing the issue related to variations); and
- the release of guidelines on risk assessment and work plan preparation. *Preparation of Work Plans and Work Plan Variations – Guideline for Mining Projects*⁷⁰ provide guidance on the preparation of work plans, work plan variations, and work plan notifications for minerals industry projects to meet the requirements of the Act and associated regulations.

Option B.2 – Proposed amendments

In recognition of the issues raised by the sector above, the department proposes to amend work plan regulations relating to risk management plans by:

- clarifying that the risk management plan should express performance standards;
- allowing parties to meet obligations to manage risks by incorporating performance standards contained in a Code of Practice; and
- supporting the changes through the development of Ministerial guidelines for risk assessment.

In addition, under this option work plan information requirements would move from schedules into the regulations. This would reduce cross-referencing and simplify the regulations.

Code of Practice

Under this option, regulated parties would be given the choice to apply elements of the risk management approach contained within a Code of Practice for risk management, which would be issued by the Minister under Part 8A of the Act. The Code of Practice would provide suitable measures to address hazards as well as performance standards that these measures would need to achieve.

⁶⁹ Under s. 40 of the Act a work plan must: be appropriate in relation to the nature and scale of the work proposed to be carried out; identify the risks that the work may pose to the environment, to any member of the public, or to land, property or infrastructure in the vicinity of the work; specify what the licensee will do to eliminate or minimise those risks as far as reasonably practicable; include a plan for consulting with the community; include a rehabilitation plan for the land proposed to be covered by the licence; and contain the prescribed mine stability requirements and processes.

⁷⁰ January 2019, Department of Jobs, Precincts and Regions

If the 'standard' measures provided for in the Code of Practice proved unsuitable to the operator, or inadequate to address the risks arising from hazards, they would need to manage risks by developing and providing their own risk management plan or alternatively elements of a plan. This approach would give parties flexibility in specifying suitable measures, to manage risks and related performance.

The proposed changes will contribute to an outcomes-based regulatory approach for certain hazards by setting relevant performance standards in the Code. This will enable the pathways for compliance to fit with the complexity and risk posed by exploration and mining work under the licence. In so far as the Code of practice covers relevant hazards, adoption of a suite of suitable measures will provide flexibility for operators in meeting performance standards.

Larger mine operators may want or need more flexibility in how they manage complex site hazards and risks, with the assistance of significant expertise and experience.

More straightforward or smaller mine operations may incur significant cost in developing tailored risk management plans including treatments for each mining hazard. For these operators, there are efficiencies to be gained by codifying the industry standard and widely used measures for managing common mining hazards, as a menu of options.

The department recognises that the proposed Code of Practice, and supporting Ministerial Guidelines for risk assessment, would need to be developed in consultation with the sector. An initial outline of what a Code of Practice may contain can be found at **Attachment C**. If this option is pursued, it is expected that the Code of Practice would come in to force by 1 January 2020.

C. Rehabilitation requirements

Option C.1 – Status quo

The current Mineral Industries Regulations set out rehabilitation plan requirements under Regulation 27(1)(ii) and (iii), which stipulates that a work plan must contain a rehabilitation plan, consistent with the requirements set out in Schedule 14, Part 1, 5.1.

The schedule requires licensees to incorporate elements into their rehabilitation plan, stipulating the plan must:

- address concepts for end land use after mining;
- include proposals for progressive rehabilitation, stabilisation and revegetation of the site;
- include landscaping proposals to minimise the visual impact of the site; and
- include final rehabilitation and closure proposals, accounting for any long-term environmental degradation.

These requirements support the overarching rehabilitation provisions in the Act, which broadly cover a licensee's obligation to rehabilitate land in accordance with a rehabilitation plan and to undertake rehabilitation in the course of doing licensed work, sometimes termed 'progressive rehabilitation'.

The current requirements are vague and were subject to criticism in the rehabilitation report of the Hazelwood Mine Fire Inquiry, for example in relation to progressive rehabilitation the Inquiry stated:

Considering that progressive rehabilitation is a requirement of the Mineral Resources Act, the Board believes that it would be of benefit to both the Mining Regulator and the mine operators if the scope of progressive rehabilitation was clarified, and associated criteria established in the short-term.⁷¹

The inquiry made a suite of recommendations, mostly for changes to the Act. Some of the recommendations could be addressed in part by changes to the Regulations. In response, the Government committed to policy, legislative and administrative reforms to address these key issues.

⁷¹ Hazelwood Mine Fire Inquiry Report 2015/2016 Volume IV – Mine Rehabilitation, p. 110

Option C.2 – Proposed amendments

The proposed regulations more effectively support the Act by giving greater clarity about the Act's rehabilitation requirements. The proposed amendments align with the rehabilitation recommendations in the Hazelwood Mine Fire Inquiry.

The proposed regulations will establish a clear, consistent minimum standard for the approval of rehabilitation plans and the assessment of rehabilitation against its completion criteria. This will support licensees to adequately plan for, undertake, and achieve rehabilitation that is safe, stable and sustainable. The proposed amendments require rehabilitation plans to:

- identify a post-mining land use and include a rehabilitation plan that achieves a safe, stable and sustainable final land form, to support that future use. A new definition of safe, stable and sustainable is included in the proposed regulations;
- include rehabilitation objectives for each unique rehabilitation domain within the mine site, which will collectively measure whether a safe, stable and sustainable landform has been achieved. An example might relate to water quality with a specified objective to ensure it is safe, stable and sustainable and water quality is appropriate to support the post-closure land use;
- include completion criteria i.e. standards that will be used to measure whether rehabilitation is complete. An example might involve reference to water quality thresholds in the State Environment Protection Policy (Waters), or equivalent instrument, to measure whether the water quality objective(s) has been met;
- include progressive rehabilitation milestones that commit to achieving a series of significant rehabilitation steps in the course of doing work under the licence. The Act requires rehabilitation to occur "in the course of doing work" to reduce rehabilitation liabilities during the operation of the mine. The progressive rehabilitation milestones support this requirement by making it measurable and enforceable. Progressive rehabilitation is work that genuinely contributes to the advancement of the final land form and is not incidental to standard operational activities; and
- include post-closure planning to identify and plan for the long-term management of risks associated with any rehabilitated land form that is not self-sustaining.

This option is to be supported by supplementary Ministerial guidelines. The proposed new regulations set out the rehabilitation framework more concisely, linked to clear rehabilitation outcomes and criteria, providing a solid foundation for its development. A Ministerial guideline that provides additional guidance would provide industry with compliance certainty and basis for the Minister or their delegate to approve or reject rehabilitation plans and ultimately certify that rehabilitation is complete. The proposed industry guideline would be developed in consultation with industry.

Rehabilitation outcome supported by objectives and completion criteria

Rehabilitation is considered complete when the outcome (safe, stable and sustainable and supporting a post-rehabilitation land use) has been achieved. The objectives collectively amount to the achievement of the overall outcome, and completion criteria are the specific measures relating to each objective.

To support a more proportionate, outcomes-based approach to regulation, licensees will also be empowered to set their own rehabilitation objectives and completion criteria, consistent with supporting guidance, to meet the prescribed outcome of a safe, stable and sustainable land form, subject to approval via the work plan approval processes under the MRSDA.

Progressive rehabilitation

The proposed regulations would more effectively support the general obligation under s. 81 of the Act to complete the rehabilitation of the land before the end of the licence by requiring measurable and enforceable rehabilitation milestones. Progressive rehabilitation activities are those that genuinely advance the land towards its final landform (thus reducing rehabilitation liability), not incidental operational activities, such as coal coverage to prevent fire that will not form part of the rehabilitated landform.

Under the new requirements, progressive rehabilitation would be planned for, incrementally delivered, and capable of being enforced in the same manner as any other quantifiable part of the work plan. The progressive rehabilitation milestones would be capable of adapting as mining and the rehabilitation plan develops over time, to align with any developments or adjustments to the final land form(s).

The Regulations would specifically include the requirement to articulate rehabilitation milestones (including progressive rehabilitation milestones) in the rehabilitation plan.

Post-closure liability planning

Proposed regulations would more effectively support the obligation to identify and mitigate risk under ss. 40(3)(b) and (c) by stipulating that licensees:

- identify ongoing land management and maintenance risks associated with any land form rehabilitated to a condition that is not self-sustaining
- estimate the costs associated with the risks; and
- set out how the risks will need to be managed in the long term.

This type of post-closure liability typically includes land monitoring and maintenance but covers any type of reasonably foreseeable risk that would otherwise incur a cost to maintain or rectify.

The purpose of planning for and costing future land management is to assist ERR and other decision-makers to understand the long-term risks and known costs that would remain at the determined end-point of rehabilitation to inform decisions on appropriate rehabilitation objectives and completion criteria. Licensees would not be responsible for delivering the ongoing land management under the MRSDA (but may have some responsibility if they are the land owner under other laws after the mining or prospecting licence has ceased).

For the State to better understand the long-term implications of approving the work and the rehabilitation plan, licensees must provide information on the extent to which their proposal will require ongoing management following rehabilitation. Responsibility for delivery of the land management would depend on the land tenure arrangement and does not form part of this RIS. As part of this option, Ministerial Guidelines would be issued under s. 120A of the MRSDA to clarify and enhance the information requirements as part of the proposed new rehabilitation plan regulations.

D. Advertising requirements

The Act requires applicants to advertise an application for a licence to make the public aware of:

- the existence of the application;
- rules that apply, rights and obligations of all parties (applicant, government, community);
- what course of action is available to them at this stage;
- how long they have to act; and
- where to get further information.

Option D.1 – Status quo

Under this option, the current prescribed requirements for advertising of licence applications would be used in the remade regulations. The current regulations prescribe different work plan content for exploration or mining work.

Every accepted application must advertise. This includes prospecting, mining, exploration and retention licences. An average of 63 licences are issued per annum.⁷²

The current regulations prescribe several matters relating to advertising. These are shown in Table 11:

Table 11: Advertising requirements for licences and tenders

Regulation	Title
20	Advertising of exploration licence or retention licence application
21	Advertising of mining licence application
22	Advertising of prospecting licence application

⁷² Average annual licences accepted for the period 2013-2017: Exploration licence – 38; Retention licence – 15; Prospecting licence – 7; Mining licence – 3; Total – 63

Regulation	Title
23	Advertising of exploration licence, mining licence or retention licence application relating to coal on exempted land
37	Advertising and notice of accepted tenders

Regulations 20, 21 and 22 impose essentially the same requirements on exploration, retention, mining and prospecting licence applicants. These requirements include:

- the advertisement must contain the information prescribed in schedules 7 or 8;
- it must be advertised in a Wednesday edition⁷³ of a newspaper circulating generally in Victoria; and one newspaper circulating in each location of the licence application area; and
- the information must be publicly available for at least 21 days afterwards on an internet site maintained by the applicant; or,
- if an internet site is not available – by including the information in notice or by another method approved by the Department Head on application by the applicant.

Types of advertising

Newspaper advertising

The current regulations prescribe newspaper advertising to notify the public of an application for a minerals licence because traditionally newspapers have reached a broad public. Although the growth of the internet and mobile devices has led to a worldwide decline in newspaper circulation Victoria's newspapers continue to reach a broad audience.⁷⁴

Table 12: Readership of newspapers circulating throughout Victoria

Paper	Readership – weekday
The Australian	299,000
Australian Financial Review	184,000
Herald Sun	690,000
The Age	526,000
Weekly Times ⁷⁵	390,000

Comparable figures are not available for individual websites maintained by mining businesses. However, it is assumed that readership of such sites would be significantly lower compared to newspaper readership and limited to parties who were already aware of the proposal.

The current advertising requirements pose some compliance costs to applicants - the cost of advertising in newspapers and on a website. The cost of newspaper advertisements depends on the paper and the size of the advertisement.

In the ACIL Allen review of red tape in the earth resources sector, the average advertising costs were reported as \$2,730, with a range of between \$1,650 to \$4,030.

⁷³ The *Weekly Times* has been published on Wednesday since 1942.

⁷⁴ Source: Roy Morgan. Australian Newspaper Readership <http://www.roymorgan.com/industries/media/readership/newspaper-readership> accessed on 1 March 2019.

⁷⁵ Source: NewsCorp Australia <https://www.newscompastralia.com/brand/the-weekly-times> accessed on 17 Sep 2018

Website advertising

Firms are expected to advertise only on their own web site. The marginal cost of placing a small amount of new content on an existing website is expected to be small.

Alternative methods of advertising

The current regulations enable applicants to use an alternative method of advertising for the information on the proposed program of work if that is approved by the Department Head. However, the process prescribed in the regulations restricts the use of this option because:

- The applicant must seek the approval of the Department Head within 3 business days after the applicant has been notified that the application has been given the highest ranking (which means that it can go to the Minister for approval).
- The Department Head may only approve another method if satisfied that the method will ensure the information will be readily accessible to communities in the locality of the licence application area, for the period during which a person may submit an objection to the licence being granted.
- The Department Head must notify the applicant of his or her approval or rejection within 3 business days after receiving the applicant's request for approval.

Only a small number of applications have been advertised using alternative methods under current regulations.

Content of advertisements

The required content of advertisements is set by schedules 7 and 8 of the regulations. Part 1 of both Schedules contains the details of the application. Part 2 contains details of the proposed program of work on the licence.

Table 13: Requirements to be advertised in a mining licence

Schedule 8	
	Name and address of the applicant(s)
	Contact details
	Internet site where further information is published
	The application number
	The locality of the land to which the application relates
	The approximate area of land to which the application relates, in hectares
	The date of the application
Part 1 ⁷⁶	An outline of the proposed program of work
	The term of the licence applied for
	The date authority to enter granted (if applicable)
	A statement that a person may object within 21 days, and how they may do this
	A map of the proposed licence area (for local papers only)
	A statement that, if granted, the licensee acquires certain rights
	A statement that further information regarding statutory requirements that must be complied with prior to work being undertaken is available from the Department's website

⁷⁶ Part 1 refers to the required content of the newspaper advertisements.

Schedule 8

	Details of the proposed program of work
Part 2 ⁷⁷	Description of the applicant's systems for managing impacts of the proposed work on the community and the environment
	An outline of how the applicant intends to meet a licensee's obligations under the Act to consult with the community

Objections

In the financial year 2017-18, 40 licences attracted 289 separate objections. Some applications attract more objections than others; one recently advertised mine attracted over 60 objections. On this measure, the newspaper advertising appears to be reaching stakeholders.

There are a limited number of matters which can inform a Ministerial decision to grant or refuse a licence (see discussion of licence application Option A1 Status Quo above). ERR observes that a significant number of the objections address matters which are outside this scope or reflect concerns over risks which are not realistic given the protections afforded to landowners and the community by the Act or other legislation. On this measure therefore, the current framing of prescribed advertising content does not appear to be optimal.

Consideration of advertising provision by government

The MRSDA legislation is clear that the onus is firmly on the applicant to advertise. This limits the ability for Government to support community participation through providing a platform for advertising or placing advertisements itself.

Option D.2 – Proposed amendments

This option is the same as the Status quo, except with greater flexibility on advertising approaches.

Applicants would be able to advertise by adopting:

- the method prescribed in the current regulations; or
- an alternative method which the Department Head would publish in guidelines for that purpose.⁷⁸

Departmental guidelines would contain a list of alternative media that are available and specify necessary characteristics. As information technologies are rapidly changing, the use of guidelines would allow the Department to change them with greater frequency, based on need.

The desired outcome of this approach is to provide stakeholders with information, while ensure greater flexibility for license applicants to use alternative approaches to advertising, providing that they maintain the same level of community reach. Under this approach, the content of advertisements would still be prescribed, to ensure necessary information about the proposal is provided to the public.

The overall outcome of this approach is consistent with the status quo in ensuring that parties that are most likely to be impacted by a proposal are informed.

This would enable the current newspaper media system were used but complemented with other media platforms as media changes. For example, social media, radio, Facebook, and Instagram.

⁷⁷ Part 2 refers to the required content of the website.

⁷⁸ Note this option is permitted in the current regulations but is currently limited to Part 2 of schedules 7 and 8—matters to be advertised on an internet site.

E. Reporting requirements

Option E.1 – Status quo

The current regulations require licensees to supply information about their operations, expenditure, risk and compliance, and ensure regular reporting. This type of information is information that businesses create and record in the course of their operations. This information is used by the Department in regulating the sector.

Currently the regulations prescribe that mining licence holders (rr. 9, 29, 31), exploration licence holders (rr. 29,31, 32) and declared mines (r. 42) must report on the following matters:

Table 14: Reporting requirements

Regulations	Description	Applies to
9	Production and royalty return	Mining and prospecting licences (mining of gold excluded)
29	Reportable events	All licence types
31	Annual activity and expenditure return	Separate Schedule for each licence type
32	Technical report of exploration	All licence types (if exploration is undertaken)
42	Reporting relating to declared mines	Declared Mines ⁷⁹

Reporting on rehabilitation activities in the expenditure and activities return is limited by a narrow definition of 'rehabilitated' that does not support informed decisions regarding changes to rehabilitation liabilities and bonds or on all rehabilitation undertaken 'in the course of doing work.'

The current form of prescription for each of these items, and its costs and benefits, are discussed below.

Production and royalty return

Currently the form for this return is prescribed by the Department Head. In practice this means ERR needs to maintain, and make businesses aware of, separate Departmental documents.⁸⁰ Because they are separate documents, ERR is at greater liberty to alter them than if they were incorporated into the regulations. In practice, variations to the production and royalty return templates are infrequent. Regulation 9 (3) obliges businesses to retain copies of these returns for five years for inspection purposes.

Reportable event

The current regulations prescribe events that operators must report. A reportable event is a serious event that may result in significant impacts on public safety, the environment or infrastructure. It includes such events as an explosion or major outbreak of fire, slope failure, an injury to a member of the public caused by the carrying out of mining or associated operations, or an uncontrolled outburst of gas.

Reportable events are infrequent, and most operators will not experience one during their entire licence period. Costs would be limited to the administrative effort in compiling existing information and submitting it to the Chief Inspector. Therefore, the total costs associated with reportable events reporting are expected to be immaterial. The benefits are that information about major adverse events is captured and can therefore inform enforcement action and future risk management.

⁷⁹ The current declared mines are: (a) mining licence No. 5003 (Yallourn mine), (b) mining licence No. 5004 (Hazelwood Mine), (c) mining licence No. 5189 (Loy Yang Mine). Declared on 3 September 2010, Victoria Government Gazette No. S 366 Wednesday 8 September 2010.

⁸⁰ ERR maintains several different production and royalty return forms—one for prospecting licences, and several for mineral licences based on the type of mineral mined (coal, gypsum, mineral sands, other).

Annual activity and expenditure return

General activities

Exploration, Mining, Prospecting and Retention Licences granted under the Act include standard conditions requiring:

- work and rehabilitation undertaken under a licence; and
- expenditure.⁸¹

The expenditure information is collected to enable the Department to assess whether licensees are meeting expenditure requirements under the Act. Failure to maintain the required expenditure may contribute to a decision to cancel a licence.⁸²

The annual activity and expenditure return requirements in the current regulations comprise:

- the reporting period;
- the due date for lodgement after a reporting period; and
- specific data fields (set out in Schedules 15 to 18).

The data sought in an annual expenditure and activities return varies depending the type of licence held. The schedules seek less information in relation to Prospecting Licences and more information for Exploration and Retention Licences (where there are more specific expenditure and activity obligations in the Act and standard licence conditions).

A functioning mining business of the type licensed would be expected to hold the prescribed information if it was carrying on exploration or mining absent any regulatory obligation.

Rehabilitation

The Mineral Industries Regulations currently use a narrow definition of 'rehabilitated' land in the context of requirements in expenditure and activities returns for activities carried out under a mining licence. Regulation 31, Schedule 16 (11)(c) requires licensees to report on areas that have been 'rehabilitated' over a given period. In this context, 'rehabilitated' means land-forming is complete and planting has been undertaken, noting that further land management may be required. While these elements satisfy the reporting requirements, they do not represent the obligation to rehabilitate in its totality. Under the Act, rehabilitation has a broader application than simply 'land forming complete and planting undertaken', as it must also be safe, stable and sustainable to align with the objectives of the Act and the principles of sustainable development and must satisfy the Minister that it is likely to be successful. The narrow definition of 'rehabilitated' areas in the Regulations relating to reporting requirements may create regulatory confusion against the broader concept of rehabilitation.

Reporting period

The Regulations prescribe different reporting periods for different licence types. For mining and prospecting licences, the reporting period is at financial year end on 30 June, to align with annual royalty returns. For exploration and retention licences, it is one of four set dates, aligning to June, September, December and March quarters. This was intended to spread the administrative effort, but in practice most licensees choose to submit reports in the June quarter.

⁸¹ Section 26(1)(e) enables the Minister to impose expenditure condition in licences. Schedule 20, Condition No 3 for Exploration Licences, Schedule 21, Condition No. 4 for Mining Licences and Schedule 23, Condition No.5 for Retention Licences. The annual expenditure requirement for in Exploration Licences and Mining Licences is calculated from rates set by the Department of Economic Development, Jobs, Transport and Resources (refer to the department's booklet A Guide to Compliance). The annual expenditure requirement condition for Retention and Prospecting Licences is set based on the Department's assessment of a proponent's estimated costs.

⁸² Gypsum mining licences do not include a minimum annual expenditure condition, due to the intermittent nature of these operations.

Technical report of exploration

Under the current Minerals Regulations holders of an exploration, mining or retention licence⁸³ must submit an annual technical report to the Minister in relation to exploration activities undertaken under the licence in addition to the Annual Activity and Expenditure Return. Regulation 32, and schedule 19, prescribe details of the technical report of exploration. These comprise:

- the reporting period;
- the due date for lodgement after a reporting period; and
- specific data fields (set out in Schedule 19) require technical information on exploration activities with explicit reference to prevailing industry standards.

As with annual activity and expenditure returns, the reporting period varies by licence type: for mining licences, the reporting period is a financial year ending 30 June; for exploration and retention licences it is the date that is specified in the licence or licence renewal as the reporting date.⁸⁴

Declared mine stability report

Under the Act, The Minister for Resources can declare mines if they present significant geotechnical or hydrogeological risks of harm to public safety, the infrastructure and the environment. Declared mines are required to have additional mine stability plans to manage the ongoing risks they present. The regulations prescribe the content of declared mines stability report. At present, the only declared mines are the three Latrobe Valley coal mines, Hazelwood, Loy Yang and Yallourn. These mines were declared because the mine sites posed risks related to ground stability.⁸⁵

Each declared mine licensee must report every 6 months on mine stability⁸⁶ and this report must include outcomes of risk assessment and monitoring undertaken under that mine's work plan.⁸⁷ The 6-month period was chosen to reflect the higher risks associated with declared mines and to allow ERR to assess these reports on a more frequent basis.⁸⁸

Option E.2 – Proposed amendments

This option represents the status quo, with the following amendments proposed to the regulations on activities returns and technical reports.

Reporting requirements streamlined and simplified

Information requirements are incorporated in to the body of the regulations, where previously they were spread across numerous schedules and regulations. This approach reduces duplicated requirements and cross-referencing.

⁸³ Mining licences (section 14(1)(a)) and Retention Licences (section 14C(1)(b)) empower their holders to undertake exploration.

⁸⁴ This must be one of the four set dates, aligning to the June, September, December and March quarters established for Exploration and Retention Licences, regulation 32(4).

⁸⁵ Act 1990 s. 7A

⁸⁶ *ibid* s41AB, Mineral Resources (Sustainable Development) (Mineral Industries) Interim Regulations 2018, regulation 42, Schedule 14.

⁸⁷ Mineral Resources (Sustainable Development) (Mineral Industries) Interim Regulations 2018. Regulation 41 Mine stability requirements for declared mines and Schedule 14, Part 2.

⁸⁸ The power to declare mines and the associated regulatory obligations including the six-monthly reporting period were established in 2010 in response to the recommendation of an Inquiry into the Yallourn Batter failure. The 2007 batter collapse at Yallourn was a result of 'block sliding.' Block sliding occurs when a block of coal slides horizontally across the mine floor.

Coal is a buoyant substance. It is prone to sliding in certain conditions, Latrobe Valley lignite is particularly susceptible due to its high moisture content. The build-up of water pressure in seams that abut blocks of coal may impart enough force to shift a large block of coal and cause a land collapse. Regular monitoring was considered necessary to identify these movements.

Activities return – rehabilitation reporting

Rehabilitation requirements would be updated to align with new definitions of ‘progressive rehabilitation’ and ‘rehabilitation milestones’. The status quo Mineral Industries Regulations require licensees to report annually against:

- the area of land disturbed;
- the area of land rehabilitated; and
- and an estimate of rehabilitation liability.

The proposed amendments create additional requirements to include:

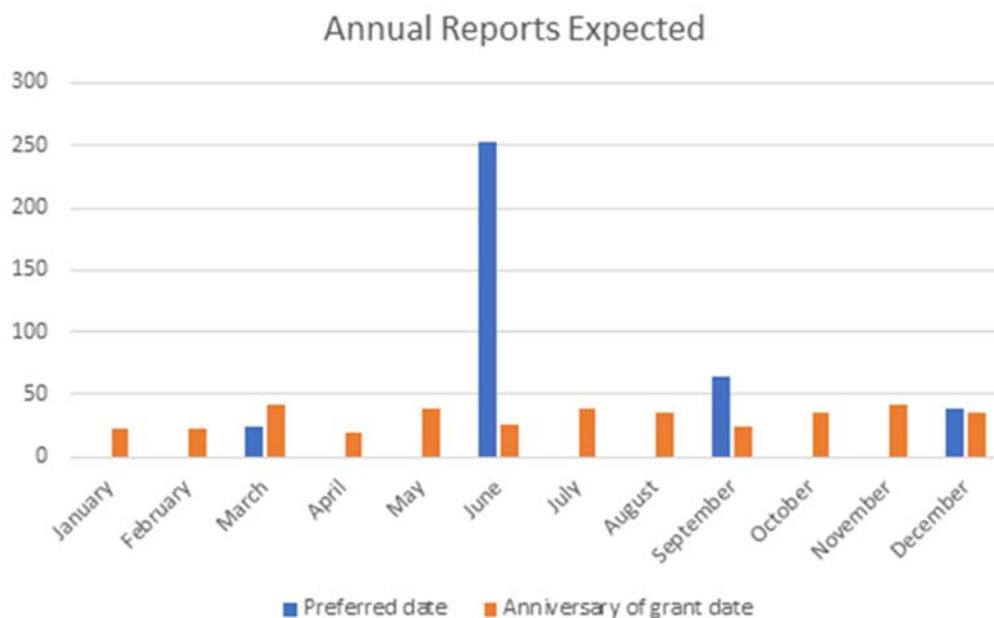
- reporting on rehabilitation (including progressive rehabilitation as defined) that specifies progress towards the achievement of rehabilitation milestones; and
- an estimation of the net change in rehabilitation liability from the previous reporting period (the balance of new land disturbance because of mining or prospecting and progressive rehabilitation).

The proposed regulations would remove the narrow definition of ‘rehabilitated’ in the current reporting requirements to align with proposed changes to work plan requirements (see option C2). This information will improve management of rehabilitation risks, and the department’s decisions regarding rehabilitation liabilities and bonds.

Timing of reporting for exploration and prospecting licences

The proposed amendments will change the reporting date for these licence types from the quarterly dates set in the regulations (they elected) to the anniversary of the date the licence was granted. This will enable the smoothing of administrative work on reports.

Figure 3: Comparison of distribution of current quarterly reporting dates for exploration and prospecting licences with proposal for reporting on an anniversary date



5 Assessment of Options

The regulatory impact assessment (RIA) process seeks to ensure that proposed regulations are well-targeted, effective and appropriate, and impose the lowest possible burden on businesses and the community. The keystone of this process is to compare the options of each proposal to see which has the highest net-benefit. Ideally, where there is data available, this would be done using a cost-benefit analysis (CBA).

Typically, costs imposed on business are relatively straightforward to assess, while other costs and benefits can be more difficult to estimate in monetary terms. In this RIS efforts are made to identify the monetary costs to business of the options. This will provide a reasonable estimate of the regulatory cost imposed on business for elements of the regulations. Given the limited availability of data to quantify benefits, the overall assessment of the regulations will be made using the multi-criteria analysis (MCA) decision tool, described below.

5.1 Assessment method

Each option has been assessed by balancing its relative benefits and costs. These are as follows:

Benefits in this document mean the effectiveness of the option to achieve the overarching objectives of the Act (to encourage economically viable mining and extractive industries that make the best use of resources, compatible with the economic, social and environmental objectives of the State), and is the criterion used to represent the benefits of the options. It encompasses the proposal's ability to give practical effect to the regulatory objectives, including by correcting any market failures.

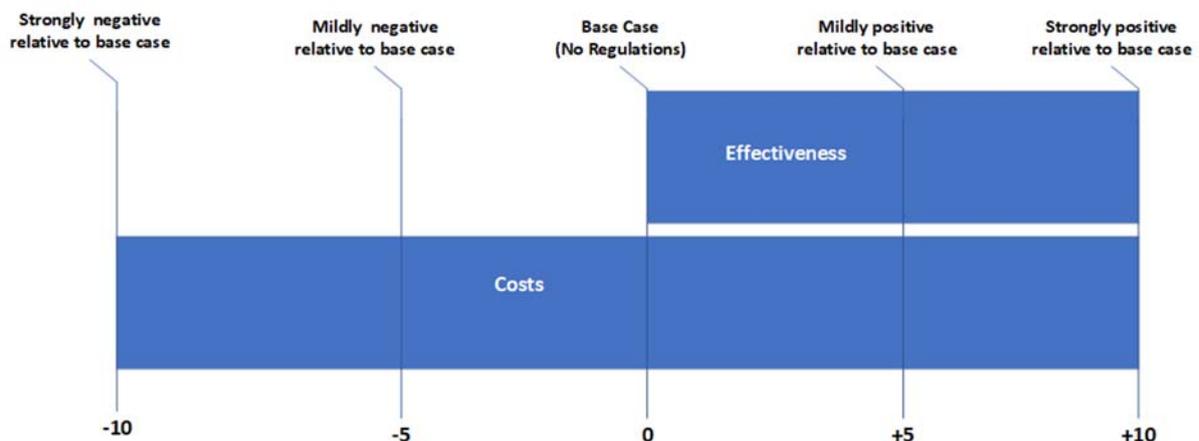
Costs in this document are of two types: those imposed on businesses in the regulated sector; and those borne by government. The former includes administrative ('red tape'), substantive compliance, and delay costs. As discussed earlier 'financial costs' (e.g. fees, royalties) are not within the scope of this RIS. The latter refers to the monetary cost to government (and taxpayer) of administering the regulations. Such funding comes from general taxation revenue. In the context of this RIS, it does not cover activities for which the government recovers costs directly from the beneficiary of those services.

5.2 Scoring

The costs of each option can theoretically be readily expressed in monetary terms. In practice, however, it is often difficult to obtain adequate data to precisely identify the costs that an option would impose, and decision makers must rely on approximate or relative cost estimates. Effectiveness for these Regulations cannot be expressed in strict monetary terms, as the objectives of the Act relate to social and environmental values. For these reasons, this document employs a multi-criteria analysis (MCA).

Under this type of analysis, each option is scored against the criteria above (effectiveness, and costs - both to industry and government) relative to the base case as illustrated below:

Figure 4: Multi-criteria analysis scale used in scoring options



Effectiveness is scored between -10 and +10. A score of 0 means that the option does not further the objectives of the Principal Act in any way, relative to the base case. A score of +10 means that the option furthers the objectives of the Act to the optimum extent possible. A negative score is not possible for effectiveness, as no option would be considered which was contrary to the objectives of the Principal Act.

Costs are scored from +10 to -10. A score of 0 means that the option does not add any regulatory costs over the base case. A score of -10 means that the option imposes costs significantly higher than the base case. A positive score would be given where the regulations reduce costs relative to the base case. This might happen in a situation where the regulations clarify what would otherwise be an ambiguous (and therefore more demanding) requirement arising from the Principal Act. While theoretically possible, it is unlikely that any option would return a strongly positive score.

Weightings

Effectiveness and costs have each been weighted equally (50 per cent). However as there are two forms of cost (one to businesses, one to government) the 50 per cent weighting for costs has been further divided into 35% for costs to business; and 15 per cent for costs to government. This reflects the relative importance government places on lowering regulatory burden on businesses. These weightings are outlined in Table 15.

Table 15: Criteria weightings

Criteria	Weighting
Effectiveness	50%
Cost to industry	35%
Cost to government	15%

Once an option has been scored on all the above criteria, these are multiplied by the above weightings. The results are then summed. The option which returns the highest value is preferred.

A. Options for licence applications

Table 16 below sets out the MCA assessment criteria for licence applications. For each licence application option, scores are assigned against each criterion. Scores are relative to the base case of no regulations.

Under the base case (of no regulations), the intent of the Act would be frustrated because the Act specifically indicates licence applications, renewal applications, tenders and applications for authorities are to be made 'in accordance with the regulations' or must contain 'the information required by the regulations.'

Table 16: Assessment criteria – Licence applications

Criterion	Description	Weighting
Benefit criteria		
Effectiveness	Effect of information provided in licence applications on the ability to make appropriate decisions concerning the allocation of mineral resources to 'fit and proper' operators to increase benefits to the State and communities, while minimising risks.	50%
Cost/burden criteria		
Cost to industry	Cost, including of time delays, to industry of obtaining licences.	35%
Cost to government	Cost to government of administering and enforcing the system, including the processing of applications.	15%

Option A.1 – Status quo

Under Option A.1, the processes and information required for applications for new and renewed licences and other authorities would remain broadly the same as under the current Regulations. The current Regulations prescribe and collect information which is relevant to the decision to issue a licence, and the department considers the amount of information collected is proportionate to the type of licence which is being applied for.

Table 17: MCA assessment of the status quo of licence applications

Criterion	Assessment	Weighting	Assigned score	Total score
Effectiveness	<p>The department considers that the current licence application requirements provide sufficient information to enable effective decision-making on licences. They have a high positive score relative to the base case as they provide clarity to applicants and the department in prescribing the form and content of information that is required to obtain or renew a licence.</p> <p>However, the current Regulations are confusing or unclear on some specific information requirements. The current survey requirements may create inefficiencies in the allocation of resources as they disadvantage applicants for mining and retention licences relative to prospecting licenses (because of different/more time-consuming survey requirements).</p>	50%	+8	+4.0
Cost to industry	<p>The current Regulations pose some compliance and administrative costs compared to the base case. Under the current system there may be also be some additional compliance and administrative costs to industry from having some confusing requirements, which can lead to further information requests and rework.</p> <p>Differential survey requirements for mining and retention licences may cause a competitive disadvantage to those applications. This can impose additional costs to industry, specifically in relation to the loss of future benefits from mining operations, however it is unclear the incidence of this problem (it mainly occurs when land becomes available after the expiry or surrender of a licence).</p>	35%	-4	-1.4
Cost to government	<p>The current Regulations pose some administrative cost to government over the base case (where no applications can be made). Some additional administrative cost may be posed because of additional information requests and rework due to confusing regulations.</p>	15%	-4	-0.6
Total				+2.0

Option A.2 – Proposed amendments

Table 18: MCA assessment of proposed amendments to licence applications

Criterion	Assessment	Weighting	Assigned score	Total score
Effectiveness	<p>The proposed regulations improve licence allocation decisions compared to the base case and status quo by improving the information collected in applications, including:</p> <ul style="list-style-type: none"> • Only requiring detailed cadastral survey information if this is needed to address specific boundary issues that may affect licence allocation (as opposed to always requiring information that may not be necessary for the allocation decision) • Enabling development of user-friendly forms by removing the forms from the Schedules • Simplifying and clarifying information requirements 	50%	+9	+4.5

Criterion	Assessment	Weighting	Assigned score	Total score
Cost to industry	<p>The proposed regulations reduce administrative and compliance costs compared to the status quo but still impose some administrative costs compared to the base case as they:</p> <ul style="list-style-type: none"> • reduce costs of survey for mining and retention licence applications compared to the status quo. • remove competitive disadvantage for mining and retention licence applications • simplify and clarify information requirements <p>Based on the improvements outlined above, the streamlined and simplified processes enabled through the proposed regulations are estimated to achieve a 10-15% reduction in costs associated with licence applications for the sector.</p>	35%	-4	-1.4
Cost to government	<p>Reduces administrative costs due to unclear or complex regulations compared to the status quo.</p> <p>New minor administrative cost of assessing whether a survey is required for mining and retention licence applications.</p>	15%	-3	-0.45
Total				+2.65

Summary of scores

The MCA assessment indicates that Option A.2; the proposed amendments to licence applications is preferred.

Table 19: Licence applications – Summary of scores

Option	Net score
Option A.1 – Status quo	+2.0
Option A.2 – Proposed amendments	+2.65

B. Options for work plan requirements

Table 20 below shows the MCA criteria used to assess options of work plans. The criteria reflect the objectives in the Act for work plans.

Under the base case, the requirement for work plans would be limited to the provisions of the Act, which do not specify the form or detail the content of work plans. More importantly, the regulations prescribe the substantive contents of a work plan – without the regulations, irrelevant or inadequate information may be provided. Absence of guidance on form would likely increase the administrative effort and length of approval times because information would be submitted in widely varying formats. It is also possible that the discretion accorded to licensees under this approach may result in plans that the department was not satisfied with, resulting in unnecessary iterations and delays. In theory ERR could minimise this by issuing guidelines (under s. 120A).

Table 20: Assessment criteria – Work plan requirements

Criterion	Description	Weighting
Benefit criteria		
Effectiveness	Effect of information provided in work plans to support appropriate government decisions that ensure work done under a licence does not pose a risk to the environment, members of the public, land property or infrastructure.	50%

Criterion	Description	Weighting
Cost/burden criteria		
Cost to industry	Cost, including time delays, to industry of preparing work plans and having them approved.	35%
Cost to government	Cost to government of administering and enforcing the system, including in relation to the process to approve work plans.	15%

Under the base case, the requirement for work plans would be limited to the provisions of the Act, which do not

Option B.1 – Status quo

Taking the status quo position, the current prescribed content of work plans would be used in the remade regulations. This is similar for exploration work plans, and mining work plans, as shown below:

Table 21: MCA assessment of the status quo of work plan requirements

Criterion	Assessment	Weighting	Assigned score	Total score
Effectiveness	Relative to the base case (of no regulations) the current Regulations are a significant improvement as they provide greater clarity on the content of work plans than the Act alone. The work plan information requirements in the current Regulations elicit information from the regulated parties to enable workplans to be approved in accordance with the objectives of the Act. The approval of work plans addresses the risks posed to the community, and the environment by mining and exploration under the Act. In relation to risk management plans, there are industry concerns that the requirements are not aligned with the Act's stated intention that work plans are proportionate to the nature and scale of work.	50%	+6	+3.0
Cost to industry	The work plan approval information requirements in the current Regulations impose compliance and administrative costs to industry compared to the base case because they require information on other matters that are not specified in the Act e.g. they require the identification of sensitive receptors and mining hazards. The current Regulations may pose additional costs to licensees because there is uncertainty about what is required and what standards are to be met.	35%	-6	-2.1
Cost to government	The work plan requirements in the current Regulations reduce the costs to Government compared to the base case, because the Regulations prescribe information relevant to the decision to approve work plans (that is not specified in the Act). However, this is not strongly positive because the current Regulations do not provide clear guidance to industry about what is required in getting an approved work plan, creating a level of additional unnecessary cost to government in approving work plans (particularly in relation to risk management plans and variations).	15%	+4	+0.6
Total				+1.5

Option B.2 – Proposed amendments

In recognition of the issues raised by the sector above, the department proposes to amend work plan regulations relating to risk management plans by:

- clarifying that the risk management plan should express performance standards;
- allowing parties to meet obligations to manage risks by incorporating performance standards contained in a Code of Practice; and
- supporting the changes through the development of Ministerial guidelines for the minerals sector (consistent with the work already undertaken for the extractives sector).

Table 22: MCA assessment of proposed amendments to work plan requirements

Criterion	Assessment	Weighting	Assigned score	Total score
Effectiveness	<p>Compared to the base case, the proposed amendments will ensure that information is available to support the approval of work plans that address risks posed to the community, and the environment by mining and exploration under the Act.</p> <p>The proposed regulations are more strongly positive in meeting the objectives of the Act than the status quo because they are better aligned with the Act's stated intention that work plans should be proportionate. This enables licensees to develop work plans that are fit for purpose for the size and nature of their organisation and allows for multiple pathways to achieve a compliant risk management component of a work plan.</p> <p>Issuing a code of practice for risk management containing objective standards will create transparency on expected performance outcomes for common hazards. As the development of a code of practice requires public consultation, the performance standards that it establishes are more likely to reflect community concerns. This will improve transparency about what information is required compared to the base case.</p>	50%	+8	+4.0
Cost to industry	<p>The proposed regulations and risk management Code of Practice should create lower administrative and compliance costs than the base case or status quo because they:</p> <ul style="list-style-type: none"> • reduce complexity, avoiding delay in preparing work plans • increase certainty as to regulator expectations on what risk management plans will be approved work plan <p>Noting the limited data availability on specific instances of regulatory burden, the department estimates that streamlined and simplified processes enabled through the proposed regulations are likely to achieve a 10-15% reduction in costs associated with preparing work plans for the sector.</p>	35%	-5	-1.75
Cost to government	<p>The work plan requirements in the proposed amendments reduce the costs to Government compared to the base case in so far as they require relevant information available to assist in approval of work plans. This is likely to result in fewer iterations of work plans to be considered by the Government prior to approval, as decision makers have greater clarity. The proposed regulations and risk management Code of Practice should reduce further reduce costs compared to the base case because it will guide the regulator in assessing and approving work plans and ensuring greater consistency in decision-making.</p>	15%	+2	+0.3
Total				+2.55

Summary of scores

The MCA assessment indicates that Option B.2; the proposed amendments to work plan requirements is preferred.

Table 23: Work plan requirements – Summary of scores

Option	Net score
Option B.1 – Status quo	+1.5
Option B.2 – Proposed amendments	+2.55

C. Rehabilitation requirements

Table 24 below shows the MCA criteria used to assess options for rehabilitation plans. The criteria reflect the objectives in the Act for rehabilitation.

In the absence of regulations, the requirements for rehabilitation are limited to provisions set out in the Act:

- all licensees must rehabilitate disturbed land (s.78);
- mining and prospecting licensees must rehabilitate in accordance with a rehabilitation plan approved by the Department Head (s.78); and exploration and retention licensees must rehabilitate in accordance with their licence conditions;
- a rehabilitation plan (where required) must consider any special characteristics of the land; the surrounding environment and any potential long-term degradation; land stability; and the desirability of returning former agricultural land to its pre-mining state (s. 79);
- if the land is private, the rehabilitation plan must be prepared after consultation with the landowner (s. 79);
- rehabilitation must be undertaken in the course of doing work under the licence; and
- must be completed as far as practicable before cessation of the licence, or otherwise as expeditiously as possible thereafter (s. 81).

Table 24: Assessment criteria – Rehabilitation requirements

Criterion	Description	Weighting
Benefit criteria		
Effectiveness	Effect of information provided in rehabilitation plans to support appropriate government decisions that ensure mined land is rehabilitated and risks to the environment, members of the public, property and infrastructure are managed.	50%
Cost/burden criteria		
Cost to industry	Costs, including time delays, to industry of preparing rehabilitation plans, having plans approved, and of complying with government regulation of rehabilitation works.	35%
Cost to government	Cost to government of administering and enforcing the requirements, including the processing of approvals.	15%

The MCA assessment outlined below indicates that Option C.2; the proposed amendments to increase rehabilitation plan information requirements is preferred because the changes better support government to assess rehabilitation plans in line with the objectives of the Act, and better understand ongoing costs and risks to the environment, community and State.

Option C.1 – Status quo

The status quo position means that the current requirements prescribed for rehabilitation plans would be returned in new regulations.

The current Mineral Industries Regulations include requirements for rehabilitation plans to support the overarching rehabilitation provisions in the Act relating to a licensee’s obligation to rehabilitate land in accordance with an approved rehabilitation plan. Rehabilitation plan requirements set out in Schedule 14 of the Mineral Industries Regulations introduce additional concepts for inclusion, such as:

- concepts of end land use after mining;
- proposals for progressive rehabilitation, stabilization and revegetation;
- landscaping proposals to minimize visual impact of the site; and
- final rehabilitation and closure proposals, accounting for any long-term environmental degradation.

Table 25: MCA assessment of the status quo of rehabilitation requirements

Criterion	Assessment	Weighting	Assigned score	Total score
Effectiveness	<p>Status quo option provides some clarity (relative to the base case where the Act is the only regulatory instrument) on information to be included in rehabilitation plans. The Act requires several concepts to be considered in a rehabilitation plan but does not provide any outcomes or specifications</p> <p>The status quo rehabilitation plan requirements do not adequately elicit information from the regulated parties to ensure that rehabilitation plans can be approved in accordance with the objectives of the Act. The HMFI report found that plans under the current regulations did not adequately ensure that land that had been mined would be rehabilitated to a safe and stable condition.</p> <p>Current regulations do not require rehabilitation plans to identify the post-closure risks arising from rehabilitated land (e.g. known costs and foreseeable risks associated with ongoing land management for a rehabilitated land form, government may approve works without understanding the ongoing risks and costs to the community, environment, and the State. This is more likely to be an issue for larger or more-complex mining operations.</p> <p>The current regulations do not include progressive rehabilitation milestones and it is difficult to give practical effect to the requirement in the Act that rehabilitation should occur in the course of doing work.</p> <p>The benefit posed by returning the status quo regulations, compared to the base case, is the capacity to issue a Ministerial Guideline under s120A to give clarity to the conceptual rehabilitation plan requirements. This provides certainty to industry and facilitates better rehabilitation outcomes compared to the base case.</p>	50%	+2	+1.0
Cost to industry	<p>The department considers that compliance and administrative costs related to the preparation of rehabilitation plans are not excessive compared to the base case, because they do not require significant additional information provision relative to what is specified in the Act. However, the information requirements are vague under the current system, which may create additional unnecessary costs to industry, for example requiring multiple revisions of a proposed rehabilitation plan before it is approved.</p>	35%	-1	-0.35
Cost to government	<p>The current work plan requirements provide insufficient information to government relative to the base case—to ensure that when approving rehabilitation plans, that</p>	15%	-3	-0.45

Criterion	Assessment	Weighting	Assigned score	Total score
	<p>approved plans will be adequate to meet the objectives of the Act.</p> <p>As rehabilitation plans may be inadequate, it is currently difficult to assess rehabilitation costs. Subsequently, rehabilitation bonds may be insufficient to incentivise rehabilitation and protect the State from the true costs of rehabilitation. This is more likely to be a material issue for larger or more-complex works. This manifested in the mid-1990s when the Benambra Mine went into receivership and the Victorian Government was left with rehabilitation responsibilities and associated costs. The licensee's rehabilitation plan did not contain sufficient detail, which contributed to government holding a bond amount that did not cover rehabilitation costs. Post-closure risks and costs were also poorly understood, and government was left with responsibility for ongoing management of the rehabilitated site.</p>			
Total				+0.2

Option C.2 – Proposed amendments

The proposed amendments require rehabilitation plans to:

- identify a post-mining land use and construct a rehabilitation plan that achieves a safe, stable and sustainable final land form, to support that future use. A new definition of safe, stable and sustainable is included in the proposed regulations;
- include rehabilitation objectives for each unique rehabilitation domain within the mine site, which will collectively measure whether a safe, stable and sustainable landform has been achieved. An example might relate to water quality with a specified objective to ensure it is safe, stable and sustainable and water quality is appropriate to support the post-closure land use;
- include completion criteria i.e. standards that will be used to measure whether rehabilitation is complete.
- include progressive rehabilitation milestones that commit to achieving a series of significant rehabilitation steps in the course of doing work under the licence. Progressive rehabilitation is work that genuinely contributes to the advancement of the final land form and is not incidental to standard operational activities. The Act requires rehabilitation to occur 'in the course of doing work'⁵ to reduce rehabilitation liabilities during the operation of the mine. The progressive rehabilitation milestones support this requirement by making it measurable and enforceable; and
- include post-closure planning to identify and plan for the long-term management of known costs and reasonably foreseeable risks associated with any rehabilitated land form that is not self-sustaining.

Table 26: MCA assessment of proposed amendments to rehabilitation requirements

Criterion	Assessment	Weighting	Assigned score	Total score
Effectiveness	<p>Through the increased information requirements in the proposed amendments relating to rehabilitation plans, the government will obtain sufficient information to approve rehabilitation plans that adequately meet the objectives of the Act. In doing so the proposed regulations reduce risks to the community and environment from mining operations, by requiring a safe, stable and sustainable final land form; supported by rehabilitation objectives and completion criteria.</p> <p>These inclusions significantly improve the effectiveness of the framework compared with the status quo option, which introduces new rehabilitation concepts rather than clarifying those established in the Act.</p>	50%	+8	+4.0

Criterion	Assessment	Weighting	Assigned score	Total score
	<p>The overall risks to government and the community are significantly reduced. The improved information requirements will lead to more effective regulation of rehabilitation works and rehabilitation bonds that better reflect the true cost of rehabilitation, ensuring the State (and community) are protected from rehabilitation costs that rest with the operator.</p> <p>The inclusion of progressive rehabilitation milestones will give practical effect to the requirement in the Act that rehabilitation must occur during mining. This is not achieved under the status quo option.</p> <p>The proposed regulations require rehabilitation plans to identify the post-closure liability of rehabilitated land (e.g. ongoing land management associated with rehabilitating to a condition that is not self-sustaining), this assists government to better understand the ongoing risks and costs of mining works to the community, environment and State when approving and enforcing rehabilitation plans. These proposals maximise the opportunities to clarify rehabilitation requirements within the confines of the legislative framework set by the Act. The Status quo option does not require information relating to post-closure risks be included in rehabilitation plans.</p>			
Cost to industry	<p>There may be a greater cost to prepare rehabilitation plans under the proposed regulations, compared to the base case and status quo, because they require more specific information because of clarifying the rehabilitation plan requirements in the Act. However, the costs that industry will face under this system are proportionate to their regulatory obligations under the Act.</p> <p>This cost will only impact new or varied rehabilitation plans.</p> <p>The scoring reflects the net cost to industry, as it considers both increased compliance costs and the administrative efficiencies in the longer term from certainty provided by a clarified and consistent framework.</p> <p>Changes to costs to industry will vary depending on the scale and complexity of projects and rehabilitation approaches as the outcomes-based approach is proportionate and scalable. Changes to compliance costs will also vary relative to the detail of information in currently approved rehabilitation plans.</p> <p>Noting the limited data availability on specific instances of regulatory burden, the department estimates that the net increase in costs to industry of implementation of and compliance with rehabilitation plan requirement clarifications is likely to be in the order of 20-30%.</p>	35%	-4	-1.4
Cost to government	<p>Administrative costs to government may increase under the proposed amendments compared to the base case and status quo option with the requirement to assess rehabilitation plans as they are varied to include the clarified information requirements. Administrative costs may also increase in the short-term as ERR adjusts to assessment of plans against their ability to achieve rehabilitation 'outcomes'.</p>	15%	-1	-0.15

Criterion	Assessment	Weighting	Assigned score	Total score
	However, the overall risks and costs to government are significantly reduced as the improved information requirements will lead to more effective regulation of rehabilitation works and rehabilitation bonds that better reflect the true cost of rehabilitation, ensuring the State (and community) are protected from taking on rehabilitation liabilities that rest with the operator.			
Total				+2.45

Summary of scores

The MCA assessment indicates that Option C.2; the proposed amendments to rehabilitation requirements is preferred.

Table 27: Rehabilitation requirements – Summary of scores

Option	Net score
Option C.1 – Status quo	+0.2
Option C.2 – Proposed amendments	+2.45

D. Advertising requirements

The Act establishes a legal framework aimed at ensuring that consultation mechanisms are effective and appropriate and that access to information is provided to the public. The Act also provides for members of the public to lodge objections to licence applications.⁸⁹ In the absence of advertising regulations, the objectives of the Act cannot be met as the Act itself does not articulate what licence applicants need to do to satisfy the obligation to advertise. Without advertising regulations, licence applicants and the government would face greater uncertainty as both parties would have difficulty in determining whether licence applicants had met their regulatory obligations. The absence of regulations would increase the likelihood that the public would be unaware of a mining proposal.

As such there is little likelihood that a member of the public would be aware of the intention of a proponent to seek a licence unless there were some form of notification. The criteria in Table 28 are used to provide an MCA assessment of the options below.

Table 28: Assessment criteria – Advertising requirements

Criterion	Description	Weighting
Benefit criteria		
Effectiveness	Effect on mineral resources allocation that is consistent with community interests.	50%
Cost/burden criteria		
Cost to industry	Costs, including time delays, to industry of advertising.	35%
Cost to government	Cost to government of administering and enforcing the advertising requirements and ensuring that licensees meet their regulatory obligations.	15%

⁸⁹ Act, s. 24

Option D.1 – Status quo

Under this option, the current prescribed requirements for advertising of licence applications would be used in the remade regulations. The current Regulations require an applicant to either:

- place newspaper advertisements providing information that identifies the licence application area etc. (Schedules 7 and 8, Part 1) and publish information on a website about the proposed program of work under the licence (Schedules 7 and 8, Part 2); or
- use an alternative method of advertising the information in a program of work, as approved by the Department Head (Schedules 7 and 8, Part 2).

The total annual cost of the current regulatory arrangements for advertising were estimated at \$172,000 for compliance and administration costs for all licence types (63 businesses x costs of \$2,730) by the ACIL Allen regulatory burden assessment.

Table 29: MCA assessment of the status quo of advertising requirements

Criterion	Assessment	Weighting	Assigned score	Total score
Effectiveness	The advertising requirements in the current Regulations appear to be effective compared to the base case because objections are being submitted in response to advertisements. The number of objections currently received by the Government suggests that newspapers are an effective media for advertising.	50%	+7	+3.5
Cost to industry	Under the current Regulations industry faces the costs, which consist of buying advertising and administrative costs compared to the base case. Under the status quo these costs are likely to be in the order of \$2,700.	35%	-3	-1.05
Cost to government	Under the current Regulations the Government faces only limited costs compared to the base case. These are to: <ul style="list-style-type: none"> • monitor advertisements and check them for compliance • approving individual applications to use alternative methods of advertising but these are rare. 	15%	-1	-0.15
Total				+2.3

Option D.2 – Proposed amendments

This option is the same as the status quo, except with greater flexibility on advertising approaches.

Applicants would be able to advertise by adopting:

- the method prescribed in the current regulations; or
- an alternative method which the Department Head would publish in guidelines for that purpose.⁹⁰

Departmental guidelines would contain a list of alternative media that are available and specify necessary characteristics. As information technologies are rapidly changing, the use of guidelines would allow the department to change them with greater frequency, based on need.

Table 30: MCA assessment of proposed amendments to advertising requirements

⁹⁰ Note this option is permitted in the current regulations, but is currently limited to Part 2 of schedules 7 and 8—matters to be advertised on an internet site.

Criterion	Assessment	Weighting	Assigned score	Total score
Effectiveness	<p>The intent is that the Department Head will select alternative options that are at least as effective as existing methods in reaching interested parties, so effectiveness compared to the base case should be slightly higher to that of the status quo.</p> <p>Compared to the status quo, this option creates some flexibility and future proofing for the regulation should change in media use continue to affect newspaper circulation and distribution alternative methods may be necessary to achieve reach.</p>	50%	+8	+4.0
Cost to industry	<p>This option is costlier than the base case because it requires industry to advertise. The costs to industry will be less than the status quo because:</p> <ul style="list-style-type: none"> alternative methods could be used without an individual application to the Department Head; and alternative methods may have lower costs than advertising in newspapers. <p>The impact of these cost reductions will be limited compared to the current average cost of \$2,700 per application.</p>	35%	-2	-0.7
Cost to government	<p>There may be some one-off administrative costs to the Department Head in establishing guidelines on alternative methods of advertising. These will be offset because once the guidelines are in place the Department Head would not face the administrative costs of approving alternative methods for individual applications.</p>	15%	-1	-0.15
Total				+3.15

Summary of scores

The MCA assessment indicates that Option D.2; the proposed amendments to advertising requirements to provide greater flexibility to licensees in meeting their regulatory consultation obligations is preferred.

Table 31: Advertising requirements – Summary of scores

Option	Net score
Option D.1 – Status quo	+2.3
Option D.2 – Proposed amendments	+3.15

E. Reporting requirements

The Act creates a general power for the Minister to require licensees to provide information in the prescribed form and at the prescribed times. The regulations ensure that the Minister and the Department Head have enough information to administer the Act and enforce the conditions in licences and approvals.

Table 32: Assessment criteria – Reporting requirements

Criterion	Description	Weighting
Benefit criteria		
Effectiveness	Effect of information provided in reports on the ability for government to make appropriate regulatory decisions and act to maximise benefits to the State and communities, while minimising risks.	50%

Criterion	Description	Weighting
Cost/burden criteria		
Cost to industry	Costs to industry of reporting prescribed information to the Government.	35%
Cost to government	Cost to government of administering and enforcing the legislative and regulatory requirements.	15%

Option E.1 – Status quo

The current regulations require licensees to supply information about their operations, expenditure, risk and compliance, and ensure regular reporting. This information is used by the department in regulating the sector. As the information sought is prepared by licensees in the course of their operations the costs imposed on licensees by asking for the information in the formats established by the Schedules are administrative and driven by the time required to compile and send existing information to ERR. This analysis assumes that these costs will be as follows, based on an hourly rate of \$69.40⁹¹ for an administrative assistant:

Table 33: Administrative costs

Licence type	Hours/form	\$/form	Total no. licensees	Total cost
Mining licence	2	\$139	162	\$22,486
Prospecting licence	2	\$139	54	\$7,495
Exploration licence	3	\$208	180	\$37,476
Retention licence	3	\$208	135	\$28,107
Total				\$95,107

Table 34: MCA assessment of the status quo of reporting requirements

Criterion	Assessment	Weighting	Assigned score	Total score
Effectiveness	<p>The current regulations prescribe information that assists the government in making decisions about future licence allocation, enforcing existing licences and managing risks to the public.</p> <p>This is superior to the base case of no reporting because without this data society would not benefit from appropriate regulation of mineral resource development.</p> <p>The current approach to reporting of rehabilitation work under a licence (including a specific definition of 'rehabilitated' that is not used elsewhere) may create regulatory confusion against the broader concept of rehabilitation, limiting effectiveness.</p>	50%	+7	+3.5
Cost to industry	<p>The current regulations are complex, with requirements spread across schedules and this has resulted in duplication of reports being provided by licensees.</p> <p>The current approach imposes costs on industry compared to the base case because it imposes information requirements that regulated parties must comply with. The average cost was estimated at \$23,776 per annum.</p>	35%	-2	-0.7

⁹¹ Based on average weekly earnings, May 2018.

Criterion	Assessment	Weighting	Assigned score	Total score
Cost to government	This option has higher administrative costs compared to the base case of no annual reports. Processing reports from regulated parties implies costs both in terms of staff time and in terms of capital costs for running IT systems to collect the data. There may be some cost reductions to government, as increased information will support regulation of the sector.	15%	-3	-0.45
Total				+2.35

Option E.2 – Proposed amendments

This option represents the status quo, with the following amendments proposed to the regulations on activities returns and technical reports.

- Reporting requirements streamlined and simplified.
- The rehabilitation information required to be reported in an activities and expenditure report will be updated to:
 - › align with new definitions of 'progressive rehabilitation' and 'rehabilitation milestones';
 - › remove the narrow definition of 'rehabilitated' in the current reporting requirements to align with proposed changes to work plan requirements (see option C2);
 - › specify progress towards the achievement of rehabilitation milestones; and
 - › require an estimation of the net change in rehabilitation liability from the previous reporting period (the balance of new land disturbance as a result of mining or prospecting and progressive rehabilitation).
- The proposed amendments will change the reporting date for these licence types to their grant anniversary date.

Anniversary-based annual reporting cycles

Moving the reporting cycle for exploration and retention licences to one based on a twelve-month period, commencing from the grant or starting date of the licence, would reduce the number of reports a given business would need to provide over the life of its licence.

Table 35: MCA assessment of proposed amendments to reporting requirements

Criterion	Assessment	Weighting	Assigned score	Total score
Effectiveness	Like the status quo approach to reporting, the proposed amendments provide an effective means of collecting information to inform service delivery and government decision making. Moving the reporting cycle for exploration and prospecting licences to one based on a twelve-month period would smooth administrative work in processing reporting information increasing efficiency.	50%	+9	+4.5
Cost to industry	The average cost of preparing annual reports compared to the base case would be like the status quo cost because the overall information requirements do not change with the exception of alignment of reporting on rehabilitation with rehabilitation plan requirements (the impact of these changes has been captured in the rehabilitation requirements section). There are likely to be minor cost reductions to industry from incorporating the reporting requirements into the body of the regulations, where previously they were spread across numerous schedules and regulations will reduce duplicated requirements and cross-referencing.	35%	-4	-1.4

Criterion	Assessment	Weighting	Assigned score	Total score
Cost to government	Moving the reporting cycle for exploration and prospecting licences to one based on a twelve-month period would smooth administrative work in processing reporting information increasing efficiency.	15%	-2	-0.3
Total				+2.8

Summary of scores

The MCA assessment indicates that Option E.2; the proposed amendments to reporting requirements is preferred.

Table 36: Advertising requirements – Summary of scores

Option	Net score
Option E.1 – Status quo	+2.35
Option E.2 – Proposed amendments	+2.8

6 Preferred options

The proposed regulations will make several changes to the current regulations as described in Section 4, including:

- consolidating licence application requirements into the regulations from the Schedules;
- requiring licence applications to include cadastral surveys only when necessary;
- enabling parties to meet obligations to manage risks by incorporating performance standards contained in a Code of Practice;
- Requiring rehabilitation plans to:
 - › identify a post-mining land use and construct a rehabilitation plan that achieves a safe, stable and sustainable final land form, to support that future use;
 - › include rehabilitation objectives which will collectively measure whether a safe, stable and sustainable landform has been achieved;
 - › include completion criteria i.e. standards that will be used to measure whether rehabilitation is complete; and
 - › include progressive rehabilitation milestones that commit to achieving a series of significant rehabilitation steps in the course of doing work under the licence.
- enabling licence applicants to advertise by adopting an alternative method which the Department Head would publish in guidelines for that purpose; and
- streamlining and simplifying annual activity and expenditure reporting requirements and requiring more specific reporting on rehabilitation (including progressive milestones defined).

6.1 Expected impacts of the proposed regulations

The expected impacts of the proposed regulations include:

- Simplifying and clarifying information requirements for licence applications and annual reports and returns will reduce administrative costs to industry and government whilst providing valuable information to support decision-making and risk-management.
- Issuing a code of practice for risk management containing performance standards will increase certainty as to regulator expectations on what risk management plans will be approved on expected performance outcomes for common hazards.
- Noting the limited data availability on specific instances of regulatory burden, the department estimates that streamlined and simplified processes enabled through the proposed regulations are likely to achieve a 10-15 per cent reduction in costs associated with licence applications and preparing work plans for the sector.
- Clearer rehabilitation plan and long-term risk management requirements to better address externalities and manage risks associated with mining. Information in rehabilitation plans would link to clear outcomes and include completion criteria and milestones. The clarified rehabilitation plan requirements also provide a strong basis for further clarification in Ministerial Guidelines.
- Improved information requirements for rehabilitation plans and variations will ensure the government obtains sufficient information to approve rehabilitation plans that meet the objectives of the Act.
- Improved rehabilitation plans reduce risks to the community and environment from mining operations.
- The inclusion of progressive rehabilitation milestones will give practical effect to the requirement in the Act that rehabilitation should occur during mining.
- Noting the limited data availability on specific instances of regulatory burden, the department estimates that the net increase in costs to industry of implementation of and compliance with rehabilitation plan requirement clarifications is likely to be in the order of 20-30 per cent.

6.2 Competition assessment

A RIS is required to examine whether a proposal will affect competition or place a disproportionate burden on small businesses.

Any regulatory proposal needs to be scrutinised carefully to assess whether it is having an adverse impact on the ability of firms or individuals to enter and participate in the market. As a matter of good public policy, it is a fundamental principle in Victoria that any new legislation (both primary and subordinate) will not restrict competition unless it can be demonstrated that:

- the benefits of the restriction outweigh the costs, and
- the objectives of the legislation can only be achieved by restricting competition.

A measure is likely to have an impact on competition if any of the questions in Table 37 can be answered in the affirmative.

Table 37: Competition questions

Test question	Assessment	Reason
Is the proposed measure likely to affect the market structure of the affected sector(s) – i.e. will it reduce the number of participants in the market, or increase the size of incumbent firms?	Yes	By its very nature mining is restricted to only those that hold licences. This reduces the number of participants in an industry.
Will it be more difficult for new firms or individuals to enter the industry after the imposition of the proposed measure?	Yes	The requirement for rehabilitation plans will initially apply to new applicants and may be more onerous than the current arrangements.
Will the costs/benefits associated with the proposed measure affect some firms or individuals substantially more than others (e.g. small firms, part-time participants in occupations etc.)?	Yes	Smaller businesses are disproportionately affected given their smaller administrative economies of scale.
Will the proposed measure restrict the ability of businesses to choose the price, quality, range or location of their products?	Yes	Licenses restrict the location of where mining activities may take place.
Will the proposed measure lead to higher ongoing costs for new entrants that existing firms do not have to meet?	No	The same requirements will be imposed on new entrants compared with incumbents.
Is the ability or incentive to innovate or develop new products or services likely to be affected by the proposed measure?	No	The regulations do not impose restrictions on the ability to innovate.

The Act, and by extension, the regulations contain several proposals that may restrict competition. Licensing itself restricts the eligible number of players in an industry, and licensing under the proposed Regulations also creates an exclusive property right. The licensing arrangement also specifies the type on minerals that may be mined and the location of activities.

As part of the National Competition Policy legislative review process, the Victorian Government examined the Act for competition restrictions. The review found that the main restrictions on competition contained in the legislation relate to granting licensees exclusive rights to explore or mine a given area of land. However, the review considered that the granting of licences were the most efficient means through which to secure the objectives of the legislation, one of which is “to encourage and facilitate exploration for minerals and foster the establishment and continuation of mining operations ...” The review commented that “given the risks and large-scale capital investment associated with discovery and development of mineral deposits, restricting open competition is considered entirely justified in relation to the primary objectives of the Act, providing the cancellation provisions for failure to work are diligently enforced.”⁹² The review concluded that small number of restrictions on competition contained in the legislation were necessary to achieve the objectives of the legislation and are justified in the public interest.

⁹² Department of Natural resources and Environment, National Competition Policy, *Review of the Mineral Resources Development Act 1990*: <http://ncc.gov.au>

The competition assessment above also considers the effect of the legislation. The regulations of themselves only restrict at the margin—to the extent that the regulations operationalise the Act.

It is worth noting that the proposed regulation concerning rehabilitation plans do not impose new obligations on licensees; however, they will improve compliance which will add to costs. Over time, all licensees will be required to update their rehabilitation plans, so incumbents will not have an advantage over new entrants in the longer term. The current requirements are contained throughout legislation but are difficult to follow. The proposal will consolidate these requirements, making them easier to understand and should promote compliance. While greater specificity and enhanced compliance will affect new entrants, it is proposed that all licensees review their rehabilitation plans within 5 years. There may be some marginal competition impacts in this period, when new applicants will face greater rehabilitation requirements than incumbents.

6.3 Small business impacts

In Victoria, small businesses make up approximately 97 per cent of the state's total businesses. The proportion of small businesses in the mineral resources sector is considerably lower at approximately 83 per cent.⁹³

It is Victorian Government policy to specifically consider the impact of proposed amendments to regulatory proposals on small business in RISs. Small businesses may experience disproportionate effects from regulatory requirements for a range of reasons, including limited resources to interpret compliance requirements, or to keep pace with regulatory changes and the cumulative effect of different requirements.

An assessment of the small business impacts should consider matters such as:

- variation in the compliance burden
- whether any compliance flexibility options have been considered that will assist small businesses to meet the requirements of the proposed measure
- the likely extent of compliance by small versus large business
- the distribution of benefits arising from the proposed measure, and
- the relative impacts of penalties and fines for non-compliance.

For the preferred option the proposed Regulations have features that provide flexibility that may assist small businesses. In the first instance, the proposed regulations have been significantly simplified and streamlined compared with the current regulations. Thirty schedules have been reduced to 10, and the Department Head will be able to prescribe forms. This will enable more user-friendly form design and avoid confusion caused by drafting conventions.

Other elements in the proposed Regulation that should provide small businesses with flexibility include:

- discretion to alter date of payment or date for submission of returns, e.g. r. 8 Time of Payment, r. 31 Annual activity and expenditure return, r. 32 Technical report of exploration, r. 33 Rent on a licence;
- prospecting licences;
 - › Reduced licence application requirements compared with a mining licence, e.g., r. 24 Survey of mining, prospecting or retention licence area, Schedule 3—Information required in application for prospecting licence, Schedule 2—Information required in application for mining licence, Prospecting licences – reduced licence application advertising requirements, r. 22 Advertising of prospecting licence application.
- prospecting licences and small mines;
 - › reduced work plan information requirements and lower requirements in expenditure and activities returns compared with a mining licence, e.g., Schedule 14 Information required in work plan Prospecting

⁹³ ABS define a small business as having 1-19 employees: ABS, Cat No. 8165.0 Counts of Australian Businesses, including Entries and Exits, Jun 2013 to Jun 2017 Data was not available concerning staff numbers of mineral resource businesses. For the purposes of the RIS an alternative proxy measure was used. The Australian Taxation Office defines a small business as one that has annual revenue turnover (excluding GST) of less than \$2 million. Production sales returns of mining licensees suggests that around 17 per cent are large business.

licences - reduced expenditure and activities return information requirements, Schedule 17—Information required in expenditure and activities return— prospecting licence.

- the term of prospecting licences will be lengthened from 5 to 7 years;
- prospecting licensees are not required to provide a technical report, and some small mining licences are exempted;
- advertising;
 - › Under proposed regulation 19 the Department Head will be empowered to set ongoing alternative methods for advertising in guidelines (currently individual applicants are required to request and seek Department Head's consent in a short timeframe).
- Replacement of 'risk management plan' in the Information required in work plans – The requirement for a 'risk management plan' which is highly prescriptive and difficult for small businesses to implement has been removed.

In addition, during consultations it was identified that prescribing the use of a website to meet advertising requirements would be onerous for small operators who do not have a website. This requirement has not been applied in the case of prospecting licences (where there are more small operators) and the flexibility of advertising through 'another method approved by the Department head' has also been included.

6.4 Interstate comparison

The jurisdictional analysis shows that the proposed Victorian regulatory changes are not more burdensome compared to other Australian jurisdictions. In most cases in fact, the proposed changes could be viewed as bringing Victoria in line, or making requirements less onerous, than the approaches taken elsewhere. For example, the removal of prescriptive requirements in relation to advertising the notice of application will make it less onerous to advertise in Victoria compared with the advertising requirements in other jurisdictions. Additionally, the requirement for detailed rehabilitation and closure plans is well-established in other jurisdictions, so the new requirements in Victoria will bring it in line with other jurisdictions.

The regulatory instruments used by each jurisdiction differ. Some jurisdictions laying out requirements in the Act, while in other states these powers reside in Ministerial guidelines or regulations. The mix of regulatory instruments (e.g., legislation, regulations, orders, guidelines) differs between jurisdictions, for more details concerning the arrangements in other Australian jurisdictions, please see **Appendix 2: Regulatory arrangements in Australian jurisdictions**

7 Implementation and Compliance

7.1 Implementation

Table 38: Implementation options

Area of Regulations	Regulatory materials to be produced	
	Minimal implementation	Full implementation
Overarching	Revised Delegations Revised website	NA
Work plan – Risk management plan	Revised Statement of Operating Change (to ensure clarity about when variations will be triggered) Revise Departmental Guideline <i>Preparation of Work Plans and Work Plan Variations – Guideline for Mining Projects</i> Develop Ministerial Guideline	As minimal implementation <i>plus</i> : <ul style="list-style-type: none"> Risk Management Code of Practice (incorporating material currently under development for low to medium risks)
Rehabilitation plan	Revised Work Plan Approval SOP including decision making criteria/ approach or New Rehabilitation Plan Approval SOP Revised Statement of Operating Change (to ensure clarity about when variations will be triggered) New Completion/ Bond return SOP	As minimal implementation <i>plus</i> : <ul style="list-style-type: none"> Revised Bond Policy Ministerial Rehabilitation Guideline
Community engagement plan	No new guidance	Current Departmental Guidance becomes Ministerial Guideline under s.40.
Information requirements (e.g. licence applications, licence renewals, work plan approvals, annual reporting)	Revise references to regulations and schedules in SOPs, current forms and associated guidance Operational Policy Brief—current forms approved by Department Head for use under 2019 Regulations	Re-designed forms for: <ul style="list-style-type: none"> licence applications; licence renewals; work plan approvals; and annual reporting.
Licence advertising / notice requirements	Department Head decision on alternative methods of advertising/notice	NA
Infringements	Revise references to regulations and schedules in guidance and other materials	NA
Minor and technical amendments	Revise references to regulations and schedules in SOPs, guidance and other materials	NA

7.2 Earth Resources Regulation – Compliance Strategy 2018-2020

ERR has a compliance strategy which will encourage, monitor and enforce regulatory compliance of Victorian earth resource businesses for 2018-2020. Earth Resources Regulation is committed to ensuring that robust risk assessment informs the choice of compliance activity, and to understanding the effectiveness of those activities on reducing overall risks of non-compliance. This strategy identifies eight priority risks for 2018-2020: community

impacts, fire, stability, rehabilitation and bonds, extraction without permission, water, administrative compliance and security.

In addition to these priority risks, it also focuses on the key issues identified for each of the industry sectors, as well as specific site-related risks. ERR uses community input and local knowledge to inform its compliance priorities. They also use the performance data and public feedback collected each year to annually review and improve the effectiveness of the strategy in achieving regulatory outcomes.

ERR uses several regulatory tools to encourage compliance. Typically, these range from providing advice and educational material and escalate to prosecutions with penalties attached in the order of \$100,000. ERR's hierarchy of compliance tools is shown overleaf. It will be observed that an infringement notice may be used for medium risks and interventions. Infringement notices also provide a rapid and certain response for lower level offences appropriate for infringements

In the past five years there has been one prosecution under the Act and three are currently on foot. There have also been five warnings over the past year.

Table 39: ERR compliance tool hierarchy

Compliance measure	Description
<i>Lower level of risk and intervention</i>	
Engagement and advice	Inspectors respond to requests for advice from industry, members of the public and stakeholder groups. They help affected parties access guidance materials, codes of practice and public authority holder publications. They make all parties aware of their compliance obligations under legislation.
Provision of guidance material	Guidance materials are made available and easily accessible on the DJPR website. They advise on best practice and outline compliance obligations for authority holders and members of the public.
Inspections and audits	We obtain information from authority holders for regulatory compliance purposes through site inspections and audits. Inspections determine whether the authority holder is meeting their compliance obligations and, if not, we decide on appropriate action.
Field entry and audit reports	Following inspections and audits, we prepare a report for the authority holder. The report discusses findings and actions that may be required to address any non-compliance. In addition, we record the timeframe for closing out any non-compliances, which inspectors follow up.
Warnings	We may issue warning letters or official warnings when the severity of the offence and the culpability of the offender are low.
Amendments, conditions and variations	We may require authority holders to amend existing plans, including by adding or amending conditions on authority to impose greater control (for example, increased monitoring and reporting levels) on authority holders.
Infringements and notices	We may issue an infringement or notice when an infringeable offence has allegedly occurred under the relevant legislation. The receiver may have the right of appeal, depending on the applicable legislation.
Directions	Earth resources legislation provides Earth Resources Regulation with the power to give directions that require certain actions to occur by a certain time. Significant penalties can apply if those instructions are not followed.
Suspensions and cancellations	We can respond to critical non-compliance by suspending or cancelling an Authority. A formal process must be followed when senior officers take this action, and oversight by department legal representatives is employed to support cases.
Prosecutions	We may initiate prosecution proceedings when a serious offence has allegedly occurred under Victoria's earth resources legislation. Inspectors must prepare a brief of evidence to present the case to the

Compliance measure	Description
	Magistrates Court of Victoria. The legislation provides a range of penalties for a person found guilty of an offence. For example, as of 1 July 2017, this is up to a maximum of \$158,570 under the Act and \$95,142 under the Petroleum Act.

Higher level of risk and intervention

7.3 Infringement Notices

As part of the RIS process, the department reviewed the existing infringement notices and penalties. The department also identified areas in which enforcement would be strengthened if there were infringements attached to certain acts or omissions.

Infringement notices are important part of the ERR's enforcement and compliance regime. Infringement notices seek to balance fairness (lower fine levels, convenience of payment, consistency of approach) with compliance and system efficiency (reduced administration costs, no need to appear in court, no conviction). Infringement notices also provide a rapid and certain response for lower level offences appropriate for infringements, with deterrence dependent on people being aware they are likely to be detected offending and dealt with through less severe penalties. The maximum infringement penalty for an individual should generally not exceed 12 penalty units (a penalty unit is currently \$161.19, 12 penalty units is equivalent to \$1,934), and for a corporation should not exceed 60 penalty units (\$9,671).⁹⁴

The proposed Regulations prescribe infringements for offences under the Act and prescribes infringements for offences under the regulations. Infringements prescribed by the proposed Regulations were examined by the Infringements System Oversight Unit (ISOU) within the Department of Justice and Community Safety, in line with the *Attorney-General's Guidelines to the Infringements Act 2006*. The four main principles used in assessing the suitability for new infringement offences under the Guidelines are gravity, clarity, penalty level, and consequence. The ISOU advised the department that the infringements and penalties in the proposed Regulations are suitable.

⁹⁴ Attorney-General's Department, *Attorney-General's Guidelines to the Infringements Act 2006: Policy and Legislation*, Version 1.0, 12 October 2018

8 Evaluation

The proposed Regulations will be subject to an ongoing evaluation strategy, which will focus on assessing the costs and benefits of the proposed Regulations. The evaluation strategy will consider baseline data and key performance indicators, such as reporting statistics, enforcement data and internal ERR statistics regarding activities taken according to the Regulations. Ongoing consultation with stakeholders will also take place, particularly in relation to rehabilitation plans, work plans, and community engagement plans.

Table 40: Evaluation of the proposed regulations

Evaluation	Action
Objectives of the evaluation	The overarching objective of the regulations is to encourage mineral exploration and economically viable mining which make the best use of, and extract the value from, mineral resources in a way that is compatible with the economic, social and environmental objectives of the State. The proposed statutory rules aim to contribute to this by creating an efficient, fit-for-purpose framework for collecting information from proponents and allowing government and the community to make well informed decisions.
Framework for the evaluation	Earth Resources Policy and Programs will develop an Intervention Logic Model* to assess to efficiency and effectiveness of the outcomes sought. This framework will allow the department to measure outcomes against the problem to be address in a systemic and logical manner.
Key information that will be collected to assess progress against delivering objectives	Baseline data and information collected will include: <ul style="list-style-type: none"> • work plan and variations data; • activities and expenditure data and production data; • infringement and enforcement data, including complaints and incidents recorded; • data regarding the number of reportable events that are reported, including in relation to any changes in reporting of breaches of work plan or licence conditions requirements; • rehabilitation statistics, including bond levels and number, and rehabilitation information; • data regarding objections to licences; and • data regarding any perceived efficiencies and other improvements for the administration of rehabilitation bonds. ERR will use the following key performance indicators to measure the effect of the Regulations: <ul style="list-style-type: none"> • incidents report and complaints; • investigations; and • enforcement actions (e.g. infringements, court etc.).
Responsibility for collecting, analysing and reporting on data and information	ERR will collect and analyse key performance indicator data. Much of this information is contained on the RRAM database. Complaints to the department from stakeholders will also be assessed.
Consultation Plan – Stakeholder	Evidence of the effectiveness of processes and outcomes will be tested with stakeholders when the evaluation occurs. The department plans to conduct a survey or hold a forum to seek stakeholder views within 5 years as part of the mid-term review.
Timing of evaluation	Given that the proposed regulations impose a significant burden on stakeholders, it is proposed to conduct a mid-term review of the regulations (i.e. after 5 years of operation). It could be expected that this evaluation would occur before December 2024.

Evaluation**Action**

Further, an assessment against the cost recovery guidelines in relation to fees and royalties will occur following the reform program to ERR. The review of the fees will occur after 1 July 2020.

* Intervention logic is the rationale on which many aspects of the framework are based. It supports the choices made at a lead agency level on outcome measures and targets, and the choices made by departments on their selection of activities.

The department will continue to engage with stakeholders on a regular basis to discuss the effectiveness of the Regulations and any suggestions for change. Periodic review of the data and key performance indicators may indicate changes in the overall trends and may provide indicative information about the effectiveness of the Regulations in reducing negative impacts and enhancing positive impacts of minerals industries. Earth Resources Policy and Programs staff will liaise with ERR and field staff to monitor the effectiveness of Regulations on an ongoing basis.

9 Consultation

To inform development of the proposed Regulations and the preparation of this RIS, the department conducted consultation with industry participants and other areas of government. Consultation included:

- The Department of Environment, Land, Water and Planning; Environment Protection Authority Victoria; and WorkSafe Victoria on mine rehabilitation, closure and post closure arrangements. The ISOU, Department of Justice and Community Safety, was consulted in relation to the appropriateness of the infringement notice levels.
- In October 2018 ACIL Allen undertook an analysis of red tape costs in the Victorian earth resources sector. This analysis estimated the regulatory costs imposed by the current Regulations. This costing was informed by consultation with industry associations (Minerals Council of Australia (Vic), Cement Concrete and Aggregate Australia (CCAA), Construction Material Processors Association (CMPA); the coal sub-sector (ENGIE, AGL EnergyAustralia), the gold sub-sector (Kirkland Lake Gold, LionGold, Mandalay Resources), the minerals sub-sector (Donald Mineral Sands, Kalbar Resources, WIM Resources Pty Ltd, National Gypsum Miners Association) and mining consultants.
- In February 2019, a further round of consultation was undertaken with government stakeholders and industry bodies, including:
 - › Government agencies (DELWP, EPA)
 - › Victorian Farmers Federation
 - › Minerals Council of Australia
 - › Miners and Prospectors Association of Victoria
 - › Environment Victoria
 - › Municipal Association of Victoria
 - › The Latrobe Valley coal mines (Engie, Energy Australia, AGL)
 - › Latrobe City Council; and
 - › The Latrobe Valley Mine Rehabilitation Commissioner.

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Appendices

Appendix 1: Regulatory reform programme

Since 2006, successive Victorian Governments have made sustained efforts to reduce unnecessary regulatory burdens impacting business and the Victorian community. A key consideration has been to assess whether regulatory intervention is justified and, if so, the most efficient and effective way to do it. There have been number of red tape reduction programs by governments with each program setting a target of reducing red tape by 25 per cent.

As part of this process the Government has embarked on a program to reform the earth resources regulations. This reform program is in part a response to reviews that highlighted the need to update the current legislation and improve the application and administration of the current. Recent reviews include:

- *Getting the Groundwork Right* (October 2017);
- Hazelwood Mine Fire Inquiry (May 2015);
- Victorian Auditor-General's office (VAGO) audit *Effectiveness of compliance activities: Departments of Primary Industries and Sustainability and Environment* (October 2012); and
- Economic Development and Infrastructure Committee of Parliament (EDIC) Inquiry into Greenfields Mineral Exploration and Project Development in Victoria (May 2012).

In July 2017, the Victorian Government commissioned the Continuous Improvement Project with ERR through the Commissioner for Better Regulation. The Commissioner's report, *Getting the Groundwork Right – Better regulation of mines and quarries*, identified areas to improve the regulation of the earth resources sector in Victoria. The main improvements identified in this report are to:

- simplify assessment processes for proposed mines and quarries, while strengthening the regulatory focus on the most complex risks;
- provide clearer information to industry and the community about regulatory processes and decisions;
- improve coordination across the regulatory system, including better engagement between ERR and other regulatory authorities;
- ensure laws and regulations governing the earth resources sector are fit for purpose, based on modern technologies and best practice regulatory and governance frameworks; and
- ensure staff receive appropriate training and development.

To support the implementation plan, the Victorian Budget 2018-19 included \$12.7 million for ERR. The funding will deliver a program of work that will simplify regulatory procedures and provide for an upgraded online application system.

In December 2017, the Department established the Regulatory Transition Taskforce to respond to and give effect to the Commissioner's recommendations and to drive further improvements to regulatory arrangements. The Department has issued several reports and operational policies resulting from the Commissioner's recommendations:

- *Getting the Groundwork Right – Better regulation of mines and quarries - Implementation Plan*;
- Earth Resources Regulation Statement of Operating Change (Minerals); and
- Statement of Operating Change – Our New Approach to Earth Resources Regulation.

The Government has also released the State of Discovery, its Mineral Resources Strategy 2018-2023. This strategy aims to deliver a whole-of-government approach across the mineral exploration and mining life cycle. It sets a path for improving the administration and enforcement of Victoria's regulatory framework for managing the social, environmental and economic conditions of industry. The strategy highlights the government's priorities for investment in pre-competitive geoscience, the reduction of costs and red-tape for the minerals sector and building on Victoria's world-leading business conditions, infrastructure, corporate connectedness, educational excellence and workforce preparedness.

The vision of the strategy is to grow a responsible minerals sector that is valued by the community. It aims to grow investment and jobs in Victoria's minerals sector by building community confidence in social, environmental and economic performance of mineral exploration and development, improving Victoria's attractiveness for minerals investment, and strengthening Victoria's position as a global mining and mining services centre. A key

area of the strategy is to deliver a modern, fit-for-purpose regulatory regime. This will be supported by developing a flexible outcomes-based tenure framework, increasing the transparency of work plans and release of industry exploration data, strengthening rehabilitation, post-closure and engagement obligations, and reviewing regulator governance arrangements.

The government's targets under the strategy include one million metres drilled for exploration by June 2023 (cumulative total over 5 years), exploration investment of \$220 million by June 2023 (cumulative total over 5 years), and one significant mineral resource discovery by 2028.

Because of this work, reforms to the Mineral Resources (Sustainable Development) Act 1990 are planned over the next few years and these reforms may result in changes to the Regulations.⁹⁵

In addition, the reopened 2015 Hazelwood Mine Fire Inquiry identified inadequacies in the regulatory framework for mine rehabilitation. It reported that the regulatory framework was unclear and ineffective with regards to requirements for rehabilitation planning and execution, progressive rehabilitation, financial assurance (bonds), the role of the community and managing long-term land management risks post-closure. Various recommendations were made, followed by a government commitment to develop options for, and implement, policy, administrative and legislative reforms. The first of these reforms was the establishment of the Latrobe Valley Mine Rehabilitation Commissioner through the *Mineral Resources (Sustainable Development) Amendment (Latrobe Valley Mine Rehabilitation Commissioner) Act 2017* was passed in May 2017. Professor Rae Mackay was appointed as Latrobe Valley Mine Rehabilitation Commissioner on 30 June 2017. Further amendments to fulfil the Inquiry recommendations are planned for 2019.

Several regulatory reform options having also been developed by the Department relating to rehabilitation and post-closure management. These address the Inquiry's recommendation to define certain aspects of rehabilitation and to establish criteria against which it's completion could be measured.⁹⁶ Some other options, such as defining the term 'rehabilitation' outright, were considered but not pursued as options for the regulations as they are better suited to inclusion in the primary legislation.

⁹⁵ The Mineral Resources (Sustainable Development) Amendment Bill 2018 was introduced into the Victorian Parliament in August 2018, but lapsed owing to the November 2018 election. This legislative proposal sought to establish a Mine Land Rehabilitation Authority, clarify rehabilitation, closure and post-closure obligations, and set up a post closure fund.

⁹⁶ For example, 'progressive rehabilitation' is defined specifically as rehabilitation 'during... exploration or mining... that contributes to achieving the land form set out in the licensee's work plan'. This definition is used by the new regulations to establish accountability for genuine progressive rehabilitation towards the final land form(s), not activities that occur incidentally as part of operations, helping to reduce rehabilitation risk. Similarly, the new framework requires licensees to set out 'completion criteria' in their rehabilitation plan to underpin final rehabilitation. The criteria may be based on State Environment Protection Policies, industry standards, codes of practice, guidelines or other instruments as benchmarks against which hydrogeological and geotechnical characteristics of rehabilitation are measured. The completion criteria are used to measure a series of governing objectives relating to land and water, which collectively amount to whether rehabilitation achieves a safe, stable and sustainable final landform(s), as set out in the rehabilitation plan.

Appendix 2: Regulatory arrangements in Australian jurisdictions

Table 41: New South Wales regulatory arrangements

Area of Regulations	Implementation
Work plan – Risk management plan	<ul style="list-style-type: none"> As part of the assessment process under the Environmental Planning and Assessment Act 1979, proponents are required to prepare and submit a comprehensive Environmental Impact Statement (EIS) that addresses all potential impacts of the proposal. In addition, there are further requirements under the Mining Operation Plan (MOP) in NSW. The MOP must include an Environmental Risk Assessment and a subsequent Environmental Risk Management approach which goes into more detail than the EIS. This risk assessment is to be undertaken in accordance with standard risk assessment practices outlined in AS/NZS ISO 31000:2009 Risk Management - Principles & Guidelines.
Rehabilitation plan	<p><i>Planning</i></p> <ul style="list-style-type: none"> As a condition of title, a titleholder is required to submit and comply with a MOP. The MOP is intended to fulfil the function of both a rehabilitation plan and a mine closure plan. It should document the long-term mine closure principles and outcomes whilst outlining the proposed rehabilitation activities during the term of the MOP. <p><i>Progressive rehabilitation and closure</i></p> <ul style="list-style-type: none"> During the operational phase, the operator must construct, operate and rehabilitate the mine consistent with the MOP, development consent, and mining lease. Operators must describe the rehabilitation activities proposed to be implemented over the MOP term on a domain by domain basis. They must report on their performance annually. The operator must demonstrate that the rehabilitation objectives and completion criteria have been met before the lease and security deposit can be relinquished. <p><i>Post-closure</i></p> <ul style="list-style-type: none"> There are provisions in the MOP and rehabilitation bond calculators for ongoing monitoring and maintenance of mine sites post-closure. These provisions are simple in their design and are calculated based on adding 5% to the total assessed rehabilitation bond amount. The additional contribution is intended to cover post-closure environmental monitoring for a period of up to 5 years following closure of the mine. A portion of the rehabilitation bond may be retained following relinquishment to cover post-closure management, and this amount may be assessed and recalibrated at the time of relinquishment.
Information requirements	<ul style="list-style-type: none"> Operators must have development consent and a mining lease before commencing operations. Development consent is achieved under the Environmental Planning and Assessment Act 1979. A significant part of this is the requirement for an approved EIS. Once the EIS has been approved, the decision on the mining lease is assessed by the Department of Industry, Resources and Energy under the Mining Act 1992.

Area of Regulations	Implementation
	<ul style="list-style-type: none"> The Act requires that an application for a mining lease must 'be accompanied by the required information and the application fee prescribed by the regulations. Regulations state that an application must have the environmental performance record of the applicant, information about the minerals sought, and any evidence of the applicant's ownership over the materials.
Licence advertising/notice requirements	<ul style="list-style-type: none"> The notice for an application for a mining lease must occur: <ul style="list-style-type: none"> › Within 14 days (or such other period as may be prescribed by the regulations) after lodgement. › The applicant must have the notice published in a newspaper circulating generally in the State and in at least one newspaper circulating in the locality concerned.
Reporting Requirements	<ul style="list-style-type: none"> Progress against the MOP, and environmental performance in general, is reported each year through the Annual Environmental Management Report. This report tracks progress and compliance with the commitments of the MOP, including progressive rehabilitation milestones/schedules.

Table 42: Queensland regulatory arrangements

Area of Regulations	Implementation
Work plan – Risk management plan	<ul style="list-style-type: none"> The Minister may make guidelines that provide ways of achieving an acceptable standard of risk for people working in mineral mines and quarries. Operators can manage the risk in a different way but must be able to show that the method used is at least equivalent to the method in the guideline. The Department of Natural Resources, Mines and Energy developed a risk management standard. The standard applies to formal risk management activities conducted as part of the development and application of the mine safety and health management system.
Rehabilitation plan	<p><i>Planning</i></p> <ul style="list-style-type: none"> Operator's must prepare a Progressive Rehabilitation and Closure Plan (PRCP). The main purposes of the PRCP are to require the holder of an environmental authority to plan for how and where environmentally relevant activities will be carried out on land in a way that maximises the progressive rehabilitation of the land to a stable condition. A PRCP must include: <ul style="list-style-type: none"> › Proposed post-mining land uses that are consistent with: › the outcome of consultation with the community in developing the plan › any strategies or plans for the land of a local government, the State or the Commonwealth

Area of Regulations	Implementation
	<ul style="list-style-type: none"> › for each proposed post-mining land use, state the applicant’s proposed methods or techniques for rehabilitating the land to a stable condition in a way that supports the rehabilitation milestones under the proposed PRCP schedule. › any identified risks of a stable condition for land, and how the applicant intends to manage or minimise those risks. › a detailed description, including maps, of how and where the relevant activities are to be carried out. › details of the consultation undertaken by the applicant in developing the PRCP. › details of how the applicant will undertake ongoing consultation in relation to the rehabilitation to be carried out under the plan <p><i>Progressive rehabilitation and closure</i></p> <ul style="list-style-type: none"> • The PRCP must include binding, time-based rehabilitation milestones for actions that achieve progressive rehabilitation and support the transition to the mine site’s future use. • The progress and outcomes of progressive rehabilitation activities must be monitored and reported on to demonstrate how successful operators have been in achieving progress towards the approved post-mining landform, and to inform corrective action where required. <p><i>Post-closure</i></p> <ul style="list-style-type: none"> • Has implemented a mine rehabilitation fund for dealing with the residual risks of mines. • Also has a provision in its Financial Assurance Calculator Tool for 5% of total rehabilitation costs to cover monitoring and maintenance. It is intended that this additional provision provide assurance for ongoing maintenance in cases where final rehabilitation objectives are not met. • Where rehabilitation goals are met, and the proponent seeks to relinquish their mining lease, the Queensland rehabilitation and closure policy allows for the requirement for a cash residual risk payment to cover the costs of post-closure management. • Queensland policy highlights the relationship between rehabilitation objectives and proposed final land use as well as the calculation of the value of residual risk payments. • Where higher-risk rehabilitation methods and final land forms requiring increased management are selected, the increased liability is reflected in the calculation of the residual risk payment. Generally, where more costly rehabilitation has been undertaken, a lower residual risk payment would follow.
Information requirements	<ul style="list-style-type: none"> • Companies looking for authorisation to mine need to apply for a mining resource authority from the Department of Natural Resources, Mines and Energy. They also need to apply for an environmental authority from the Department of Environment and Science. • An application for a mineral development licence must be accompanied by a proposed program of work. It should be divided into annual components, with proposed work to be carried out for each year in the application.
Licence advertising/notice requirements	<ul style="list-style-type: none"> • The applicant for a proposed mining lease must, in a newspaper approved by the Chief Executive (Planning), circulating generally in the subject land, publish a copy of the mining lease notice. • This must occur at least 15 business days before the last objection day.
Reporting Requirements	<ul style="list-style-type: none"> • Operators must submit various reports including an annual report, an expenditure statement report, as well as final reports at the end of the mining licence including a post-mining management report. • A post-mining management report for land must:

Area of Regulations	Implementation
	<ul style="list-style-type: none"> › be in the approved form › state the requirements for ongoing management of the land › propose the residual risks associated with the rehabilitation of the land. <ul style="list-style-type: none"> • Every three years under the PRCP, operators must provide the administering authority with the rehabilitation auditor's report which sets out an auditor's assessment of the performance of the operator in relation to rehabilitation milestones.

Table 43: Western Australia regulatory arrangements

Area of Regulations	Implementation
Work plan – Risk management plan	<ul style="list-style-type: none"> • WA has no fixed rules on how a mine should carry out a risk assessment. However, it recommends that the principles outlined in Australian Standard AS/NZS ISO 31000 Risk Management be followed. • All tenements that have an approved Mining Proposal on them must also have an approved Mine Closure Plan (MCP). • The risk assessment in the MCP can be qualitative, semi-quantitative or quantitative, and the outcomes can be presented in the form of a risk register, which includes the likelihood and consequence, risk ranking, mitigation measures and management of residual risk.
Rehabilitation plan	<p><i>Planning</i></p> <ul style="list-style-type: none"> • The Mining Act 1978 (The Act) states that mining proposals must have an MCP and that it must be “in the form required by the guidelines”. The Act requires these plans be reviewed and submitted for approval by the department every three years. It should be based on the theory of adaptive management whereby the level of detail in the MCP increases as the mine approaches closure. • The MCP must have: <ul style="list-style-type: none"> › The post-mining land use(s) that has been proposed/agreed with key stakeholders including regulators; › Site-specific closure objectives consistent with those land use(s), that are realistic and achievable; and › Conceptual landform design diagram(s). • Closure objectives define the closure outcomes for the project and should be realistic and achievable. These objectives must be developed based on the proposed post-mining land use(s) and be as specific as possible to provide a clear indication to Government and the community on what the proponent commits to achieve at closure. • Once agreed to, the post-mining land use(s) and closure objectives will form the basis on which approval for a Mining Proposal or an MCP are assessed. • The MCP also requires completion criteria that will form the basis on which mine closure performance is measured and reported to Government. <p><i>Progressive rehabilitation and closure</i></p>

Area of Regulations	Implementation
	<ul style="list-style-type: none"> • The MCP should contain a schedule for the progressive rehabilitation of the site showing key tasks and key milestones and approximate timing required for each task. • Mine planning and engineering decision-making processes should optimise opportunities for progressive rehabilitation consistent with the post-mining land use(s) and closure objectives. • The performance monitoring results are reported in a Triennial Environmental Report. The report must document progress against the agreed completion criteria and rehabilitation targets. • Any remedial action taken where the results are outside the agreed targets must also be reported. Where applicable, the results of rehabilitation trials should also be provided in the report, and the results used to update the MCP. • Relinquishment of a tenement requires formal acceptance from the relevant regulators that all obligations under the MCP associated with the tenement, including achievement of completion criteria, have been met. <p><i>Post-closure</i></p> <ul style="list-style-type: none"> • Under the Act, responsibility for remediation of pollution/contamination falls to the party that caused the pollution. • The surrender of a mining tenement does not transfer the liability away from the former tenement holder. • The Guidelines for developing an MCP specify that arrangements for future management and maintenance of the site have been agreed by the subsequent owners or land managers. The guidelines also state that to be recognised, any transfer of residual liability post-mining, including management of contaminated sites must be communicated, agreed to and documented to the satisfaction of the regulator. • This must include a written, legal agreement to accept mining legacy obligations and any associated costs of monitoring and maintenance. • WA has also established a Mining Rehabilitation Fund to provide assurance for rehabilitation liabilities, which tenement holders are required to contribute to. It is possible that the Fund may be used to rehabilitate land affected as a result of operations undertaken by tenement holders.
Information requirements	<ul style="list-style-type: none"> • A mining proposal is a document prepared by the proponent or tenement holder, containing detailed information on identification, evaluation and management of significant environmental impacts relevant to the proposed mining operations. • An MCP must be submitted with a mining proposal and will cover all aspects of mine decommissioning and rehabilitation. MCPs must be made publicly available. • Mining proposals must be prepared in accordance with the Guideline for Mining Proposals in Western Australia. • The EPA's formal EIA process is undertaken in a structured and transparent manner with opportunities for the public to comment. The proponent is required to produce documentation describing the proposal, the potential environmental impacts, and how these impacts would be managed. • At the completion of the assessment, the EPA prepares a report and recommendations for the Minister for Environment that is made publicly available and is open for a public appeal period.
Licence advertising/notice requirements	<ul style="list-style-type: none"> • Mining tenement applicants are no longer required to advertise their applications in a newspaper. Instead, details of the applications are advertised on the Department of Mines, Industry Regulation and Safety website.
Reporting Requirements	<ul style="list-style-type: none"> • An annual report for each tenement must be submitted each year, by the due date, where exploration has taken place. The exploration activities and data submitted in the annual report must substantiate, in detail, the expenditure claimed on the annual expenditure statement.

Area of Regulations	Implementation
	<ul style="list-style-type: none"> Under the Act, an Annual Environmental Report (AER) is required for all mining projects that have an AER condition on the relevant tenement.

Table 44: South Australia regulatory arrangements

Area of Regulations	Implementation
Work plan – Risk management plan	<ul style="list-style-type: none"> Once a tenement is granted, a Program for Environment Protection and Rehabilitation (PEPR) is required on the operation to fully document risks and to provide more specific and detailed information on management and control measures. The focus of the PEPR is to identify and demonstrate that an operator has addressed the key environmental risks associated with their operation. The PEPR guidelines are not prescriptive and operators are able to develop PEPR's that are fit for purpose. However, they must meet the minimum requirements contained in the Ministerial Determination.
Rehabilitation plan	<p><i>Planning</i></p> <ul style="list-style-type: none"> It is a requirement that mining operations be planned from the outset to ultimately return the land, after mining has been completed, to a state in which no third-party impacts are likely to occur indefinitely into the future. The PEPR guideline details the process of developing appropriate rehabilitation strategies, mine completion environmental outcomes, and completion criteria. It also assists operators in identifying issues relating to the effectiveness of closure strategies. The PEPR must contain a description of the mine site as it will be at completion (after all progressive rehabilitation has been completed). This must include: <ul style="list-style-type: none"> › potential land use options, landforms and proposed vegetation cover. › a description of progressive and final rehabilitation strategies. This means that the operator must plan for the site to be left in a safe and physically, geochemically, and ecologically stable condition with acceptable external visual amenity. Outcome measurement criteria must be developed for each of the environmental outcomes (including mine rehabilitation outcomes). Where appropriate, recognised industry standards, codes of practice or legislative provisions from other Acts can be used as criteria. Certain but reasonable and realistically achievable outcomes must be proposed. Words such as 'minimise', 'avoid', and 'manage' are generally not appropriate as they will lead to ambiguous and arguable outcomes. Outcome statements that use words such as 'no', 'all', 'maintain' 'increase/decrease', 'no more than...' are preferred. <p><i>Progressive rehabilitation and closure</i></p> <ul style="list-style-type: none"> The Mining Department expects that all possible opportunities for progressive rehabilitation are identified and implemented. The following information on the sequence of operations must be provided: <ul style="list-style-type: none"> › staging and description of progressive mining stages › scheduling and nature of progressive rehabilitation activities

Area of Regulations	Implementation
	<ul style="list-style-type: none"> • The PEPR must include a description of progressive rehabilitation activities designed to achieve the mine completion strategy. <p><i>Post-closure</i></p> <ul style="list-style-type: none"> • In South Australia, relinquishment of a mining lease and the associated transfer of liability must be applied for. The application must include a 'mine completion report' that includes: <ul style="list-style-type: none"> › A residual risk analysis and proposed post-surrender action, including arrangements for maintenance and funding. › This must include consideration of risks and liabilities associated with legislation other than the Mining Act and any requirements relevant to post surrender action in relation to them. • It is also required that the landholder sign off on the mine completion plan accepting the residual risks and the post-relinquishment arrangements, including any associated funding. • Additionally, the SA guidelines recommend the use of the NSW rehabilitation bond calculator, which contains a 5% provision for monitoring and maintenance. It is unclear if this amount is retained following the return of the bond for post-closure maintenance.
Information requirements	<ul style="list-style-type: none"> • Applications must be accompanied by a mining lease proposal. Once a tenement is granted, a PEPR is then required to be approved under the Act before mining may commence. • To assess a mining lease proposal, the Department requires detailed documentation on the proposed mining operations. The proposal must contain sufficient information to identify the major risks associated with the proposed mining operations, the environmental, social and economic outcomes that must be achieved and how they can be adequately managed. • Mining leases contain a condition that always requires the PEPR to be a public document. • The grant of a mining lease will typically take in the order of 6 months from submission to the grant date, depending on the complexity of the proposal and the completeness of the information provided. • A site inspection will be carried out by an assessment officer to ensure information provided is correct.
Licence advertising/notice requirements	<ul style="list-style-type: none"> • Pursuant to the Mining Act 1971, public comment is invited on submitted documents describing the type of operation proposed and the measures to be undertaken to rehabilitate the land. • A notice under this section must be published: <ul style="list-style-type: none"> › in the Gazette; and › in a newspaper circulating generally throughout the State; and › if there is a regional or local newspaper circulating in the part of the State in which the area of the proposed lease is situated—in the regional or local newspaper; and › on a website maintained by the department to which the public has free access.
Reporting Requirements	<ul style="list-style-type: none"> • Operators must submit a summary report, together with a detailed expenditure statement, for each six-monthly period from the granting of a licence. • Operators must also submit annually from the granting of a licence a technical report, including all results, studies and new technical data acquired during the period.

Table 45: Northern Territory regulatory arrangements

Area of Regulations	Implementation
<p>Work plan – Risk management plan</p>	<ul style="list-style-type: none"> • The risk assessment approach is not prescribed in NT. Operators are required however to identify which environmental impacts are significant using relevant risk assessment methods and must provide an overview of the risk management techniques and strategies used. • They must identify hazards that could result from activities related to the operation before ranking them. Consideration must be given to both potential short and long-term impacts, including mine closure. • Operators must commit to a regular risk assessment process that ensures that any changes to the operation are identified and assessed.
<p>Rehabilitation plan</p>	<p><i>Planning</i></p> <ul style="list-style-type: none"> • The Mining Management Plan (MMP) is the primary method for documenting environmental outcomes and goals. Within the MMP must be an Environmental Management Plan (EMP) that should include the detailed mitigation and control measures to be used to prevent or minimise environmental impacts identified from the risk assessment process. It must also include: <ul style="list-style-type: none"> › objectives and targets › management and mitigation strategies › monitoring and measurement › discussion and analysis of results › any non-conformances and corrective actions. • The MMP must also contain closure planning information, including closure criteria and engineered mine designs showing the proposed final mine design. It must also describe all disturbances and the activities required to achieve end land use objectives including a detailed costing of them. • The EMP must outline the relevant objectives and targets for environmental management. <p><i>Progressive rehabilitation and closure</i></p> <ul style="list-style-type: none"> • The MMP is expected to include a Rehabilitation Management Plan with rehabilitation schedules. • The MMP must contain, in table format, a summary of areas of current disturbance, proposed disturbance for the oncoming reporting period and area rehabilitated. • The Operational Performance Report (OPR) is an annual report that identifies all high-risk issues identified in the approved MMP. Performance against identified performance criteria, trigger levels, objectives and targets must be discussed to demonstrate that the management systems on-site are minimising impacts to the environment. • An application for a Certificate of Closure is required to be submitted when all exploration, rehabilitation and closure activities associated with an Authorisation have been successfully completed. This must be accompanied by a Rehabilitation Report. <p><i>Post-closure</i></p>

Area of Regulations	Implementation
	<ul style="list-style-type: none"> • NT introduced a levy on mining and extractive proponents to address liabilities associated with legacy mine sites. The levy is 1% of the total calculated rehabilitation liability and is paid annually. • Under the Mining Management Act, a minimum of 33% of all funds collected by the levy must be paid into the Mining Remediation Fund – to be used to minimise or rectify environmental harm caused by unsecured mining activities. • While the levy and fund are not explicit in their role to account for post-closure care costs, descriptions of fund use include “... carrying out both long and short-term remedial works required...”
Information requirements	<ul style="list-style-type: none"> • Before an operator can undertake any mining activity in the Northern Territory, they must prepare an MMP, obtain an authorisation and pay a security. They must also hold a mineral title before they can apply for an authorisation. • Before approving the MMP, the Minister must be satisfied that: <ul style="list-style-type: none"> › (a) the management system for the mining site, as detailed in the plan › is appropriate for the mining activities described in the plan; and › will, as far as practicable, operate effectively in protecting the environment. › (b) the mining activities described in the plan will be carried out in accordance with good industry practice. • The MMP must include the following information: <ul style="list-style-type: none"> › details of the mineral title for the site, and who owns it › a description of the organisational structure for the mining operation › a description of proposed mining activities › plans of current and proposed mine workings and infrastructure › details of environmental management systems › a plan and costing of closure activities › other information or plans required by the department.
Licence advertising/notice requirements	<ul style="list-style-type: none"> • The Minister must publish, in a newspaper circulating throughout the Territory, a notice stating that the application for a mineral title has been made. • Landowners have at least 30 days after the day on which the notice is published to object.
Reporting Requirements	<ul style="list-style-type: none"> • The OPR is required annually in years 2, 3 and 4 after the submission and approval of the full MMP. A full MMP is required every fourth year in place of the OPR. • The Minister has the discretion to ask operators for an environmental mining report at specified intervals. It is a report about an operator's environmental performance in carrying out activities for mining minerals, considering: <ul style="list-style-type: none"> › the commitments given by, and the obligations imposed on, the operator in relation to an environmental assessment under the Environmental Assessment Act; and › the obligations of the operator under the management system for the mining site.

Table 46: Tasmania regulatory arrangements

Area of Regulations	Implementation
Work plan – Risk management plan	<ul style="list-style-type: none"> • Under the <i>Mineral Resources Development Act 1995</i>, operators must develop a mining plan that among other things must provide a description of the potential geological and environmental risks associated with mining operations under the lease. • The mine operator must ensure that risk management processes and procedures including risk assessments are implemented at the mine. • Risk management processes and procedures must be included in the Safety Management System (SMS).
Rehabilitation plan	<p><i>Planning</i></p> <ul style="list-style-type: none"> • A Decommissioning and Rehabilitation Plan (DRP) is a plan approved by the Director, Environment Protection Authority (EPA), that formally recognizes and sets out an agreed documented environmental management strategy for the decommissioning and rehabilitation (D&R) of an activity (e.g. mine) prior to and after the cessation of the activity. • Rehabilitation plans must consider any special characteristics of the land, the surrounding environment, the need to stabilise the land and, in the case of mining on agricultural land, the desirability or otherwise of returning the land to a state that is as close as reasonably possible to its former state before the mining lease was granted. • Operators in Tasmania must also operate consistent with a Mining Plan. This must include among other things: <ul style="list-style-type: none"> › the program features likely to affect the environment, timing of the work and precautions taken to limit impact; › the proposed methods and extent of rehabilitation to be completed progressively and prior to abandonment. • The DRP should contain a Rehabilitation Management Plan that should consider the long-term land use for the site as well as the control of weeds, visual aspects and how the landform will be stabilised to reduce the potential for erosion and/or the discharge of pollutants. • The applicant must arrange for an inspector to assess the tenement to determine the amount of the security deposit to be paid, as well as assessing whether special conditions should be applied to the lease. <p><i>Progressive rehabilitation and closure</i></p> <ul style="list-style-type: none"> • The Mining Plan must also provide for rehabilitation of land disturbed by mining in the Environmental Management Plan (EMP). Staging of progressive rehabilitation is generally required. • Rehabilitation works should be carried out progressively in conjunction with mining or exploration activities and must, as far as practicable, be completed prior to the expiry of the tenement. • While the EMP in the Mining Plan covers the environmental performance during the operational phase of a mine, the Decommissioning Rehabilitation Plan (DRP) of the Mining Plan covers it during the closure phase. • Rehabilitation work is monitored by inspectors who may advise lessees on techniques and procedures. Applicants are required to provide environmental impact information which includes planned rehabilitation practices.

Area of Regulations	Implementation
	<ul style="list-style-type: none"> • Security deposits are held to ensure compliance with reporting, environmental and rehabilitation obligations. The return of a security deposit is conditional on clearance from Departmental officers, who must be satisfied that rehabilitation has been carried out in accordance with the rehabilitation plan, and that it is likely to be successful. <p><i>Post-closure</i></p> <ul style="list-style-type: none"> • A Trust Fund was established to fund rehabilitation of land affected by former mining or exploration activities. • The Minister for Mines may: <ul style="list-style-type: none"> › cause any abandoned mining land or land affected by former exploration activities to be rehabilitated; and › enter into any contract relating to the environmental rehabilitation of any abandoned mining land or land affected by former exploration activities. • The fund was established after agreement with the Mining Industry to an increase in royalties, the proceeds of which would be used to repair abandoned mining lands. Under the Act, responsibility for remediation of pollution/contamination falls to the party that caused the pollution.
Information requirements	<ul style="list-style-type: none"> • The process for granting mining leases, production licences and exploration licences requires the applicant to supply details relating to their exploration, production or mining program, their technical capacity to complete the work and their financial resources. • The application for a mining lease also requires a completed Mining Plan. The Plan should include a schedule of proposed work and include plans and drawings where appropriate. • The Mineral Exploration Code of Practice is an approved Code under the Act. It is a standard licence condition that operators comply with the Code. The purpose of the Code is to provide an outline of the procedures relating to approvals.
Licence advertising/notice requirements	<ul style="list-style-type: none"> • Advertising of mining applications must be done in accordance with the Commonwealth Native Titles Act 1993 that states that the Commonwealth Minister may determine that the notice may be given: <ul style="list-style-type: none"> › in newspapers (including newspapers catering mainly or exclusively for the interests of Aboriginal peoples or Torres Strait Islanders); or › by radio broadcasts or television transmissions.
Reporting Requirements	<ul style="list-style-type: none"> • Mining lease holders are required to submit Quarterly Returns and, at the request of the Director of Mines, an Annual Report and a Final Report when the lease, or any part thereof, ceases to be in force. • The annual report must: <ul style="list-style-type: none"> › be in accordance with the reporting guidelines › specify expenditure throughout the period › give details of any work that is proposed to be undertaken in the future.



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