



GETTING THE GROUNDWORK RIGHT

Better regulation of mines and quarries

REPORT ON THE EARTH RESOURCES REGULATION — CONTINUOUS IMPROVEMENT PROJECT

Foreword

Victoria's earth resources sector contributes significantly to our economy and provides thousands of jobs in regional Victoria and in the outer suburbs of Melbourne. Mining production boosts our exports and extractives provide raw materials for infrastructure and housing. That's why it's important for government to ensure that its regulatory framework for resource development strikes the right balance: facilitating the development of resources and the efficient operation of mines and quarries while ensuring that this activity is consistent with Victoria's environmental planning, heritage and local community regulations.

In July, the Treasurer directed me to undertake a Continuous Improvement Project with the Earth Resources Regulation branch (ERR) to support the implementation of ongoing reforms; to identify immediate opportunities for improvements in how the regulator operates and its regulatory arrangements; to improve the interaction between ERR and other regulatory authorities; and to make recommendations for the future.

This report sets out actions already underway and outlines recommendations for consideration in the short and medium term. Some of the actions and recommendations involve the operations of regulators other than ERR. These have been canvassed with the relevant agencies.

The implementation of these recommendations will help to secure the sustainable development of Victoria's earth resources sector within a framework of best practice regulation and industry and community engagement.

Consultation with industry has been vital to ensure that the report focusses on issues which impact on its operations and sets a practical and effective pathway going forward. I would like to thank all industry members who attended meetings and provided feedback for their time and patience. The co-operation of regulatory agencies across government throughout this project has been commendable and my appreciation goes to all who participated in discussions for their valuable insights.

My work on this report was supported by a small and enthusiastic team from the Department of Economic Development, Jobs, Transport and Resources (DEDJTR). I would particularly like to thank Nick Ford, whose excellent analytical and drafting skills played a significant role in ensuring that the final report is useful and well-written, and Kirsty Henry, whose leadership of the project team enabled us to achieve our objectives against tight timelines. Other team members — Elpiniki Emmanuel, Don Hough, Elle Kruze, Alex Luk and Doris Zhang — deserve my thanks too in recognition of their hard work and commitment to the project.

Anna Cronin

Commissioner for Better Regulation

COMMISSIONER FOR BETTER REGULATION

Need to know

- This Continuous Improvement Project was commissioned in July 2017 to identify practical steps for improving regulation of the earth resources sector in Victoria.
 - The goal is better regulation: ensuring that regulatory standards are upheld and meet community expectations, while minimising regulatory burdens on industry.
- DEDJTR's Earth Resources Regulation branch (ERR) is the principal regulator of mines and quarries, but many other agencies also regulate in this space.
- The trigger for this project was delays and uncertainty in regulatory approvals processes. The approvals 'backlog' leads to significant industry frustration and holds up investment.
 - The number of applications that ERR has on hand has fallen by 25 per cent since July. More staff, better processes and clearer guidance are helping.
- To address the major pain points for industry, this report focuses on improvements to approvals processes for work plans the main instrument for regulating works on site.
 - Changes in December 2015 introduced a risk-based approach to approvals of work plans. This report confirms there is no requirement for older work plans to 'transition' to the new model, and any variations to work plans can be assessed against a risk framework targeted to the proposed change in works.
 - The process for preparing a work plan can be greatly simplified: a standard risk
 management plan will enable operators to apply standard controls to manage
 risks on site. This will focus regulatory effort on how operators propose to
 manage specific, more complex risks.
 - Interaction between ERR approvals and the planning system also requires greater guidance: a Planning Practice Note would clarify the respective roles of ERR and local councils in their decision making.
- A range of other changes are included in this report. These will enhance ERR's capability, improve regulatory coordination and deliver better outcomes for the community.
- Most of the changes outlined in this report can be achieved within existing legislation and regulation: they involve changes to practice and process.
 - Delivery on these requires sufficient capacity and capability for implementation.
 Change management is not incidental, but central to enduring reform.
- The success of this project depends on close engagement among staff in ERR, DEDJTR and other regulators, as well as the support and goodwill of industry.
 - The collaboration to date has been outstanding. Ongoing commitment from all
 parties will underpin continuous improvement over the long term.

Actions already underway

The Continuous Improvement Project has identified several specific actions that will make a difference to the operation of the regulatory system. Work on the following actions has already commenced, and they are outlined in greater detail in the report.

- Backlog reduction: better allocation and prioritisation system (pp. 11-13)
 - ERR has introduced a new internal system to allocate and prioritise regulatory applications (licences and work plans) as they are received.
- Backlog reduction: increased capacity (pp. 13-14)
 - ERR has added new staff and support (technical and administrative) to reduce approvals on hand.
- Standard operating procedures (SOPs) for staff (pp. 14-15)
 - ERR has commenced a stocktake of its SOPs, with a view to updating and developing SOPs as required. Industry will be consulted during this project.
- Consolidation of work plans (pp. 17-19)
 - ERR is developing an internal administrative process to consolidate each work plan lodged or approved prior to 8 December 2015 — and all associated variations to work subsequently approved — into a single document.
 - Consolidation will not change any regulatory requirements on operators or cause existing rights to be amended or revoked.
- Processing changes to work plans (pp. 19-22)
 - ERR is adopting a risk-based approach to processing changes to work plans.
 - There is no general requirement for work plans lodged or approved prior to 8 December 2015 to 'transition' to the risk-based approach.
 - In dealing with variations to older work plans, ERR will assess only the
 proposed new or changed works on site past approvals for the whole site
 will not be re-assessed.
- Development of standard risk management plans (pp. 26-27)
 - Standard risk management plans will outline standard controls to manage standard risks for mining and extractives operations.
 - For low-risk operations, the standard risk management plan can be applied as the default — minimising cost and effort for the operator.
 - Where an operator has more complex risks to manage, or proposes to apply alternative controls, they will identify where their risk management plan adds to or varies from the standard.

• ERR will develop standards in consultation with industry, and in partnership with other regulators that act as referral authorities for ERR approvals.

• Standard licence and work authority conditions (p. 28)

• ERR is refreshing its standard conditions for licences and work authorities, to ensure they are up to date and facilitate compliance.

Case managers for approvals (pp. 30-31)

• ERR is introducing case managers to act as approvals contact points for strategically significant and complex earth resources projects.

Linking with Invest Assist (pp. 31-35)

 DEDJTR's facilitation role for new and expanded investments in earth resources is to be undertaken by Invest Assist. DEDJTR will allocate staff with relevant industry knowledge and experience to this facilitation role.

• Guidance to local councils (p. 35)

 ERR is refreshing its guidance to local councils and will increase its engagement with councils to improve their understanding of the ERR approvals processes.

• Establishment of the Earth Resources Approvals Co-ordination Group (pp. 44-46)

- The Earth Resources Approvals Co-ordination Group comprises senior executives from relevant regulatory authorities, and has responsibility for:
 - addressing logiams in the approvals system
 - providing strategic advice to government about the development of particular projects
 - delivering further streamlining of approvals across government.
- The Group has met twice, and will continue to meet on a quarterly basis.

Industry and community engagement (p. 57)

- ERR has committed to improve its stakeholder engagement capabilities across the organisation. This includes how ERR:
 - shares guidance about ERR policy and operational changes to industry and the community
 - supports compliance and educates industry on regulatory obligations
 - receives and manages industry feedback.
- ERR can build on these efforts with better communication practices across multiple channels — from face-to-face contact through to social media and online platforms.

- Building up engineering, regulatory and other technical expertise at ERR (pp. 49-52)
 - As part of its ongoing recruitment efforts, ERR is boosting engineering, regulatory and technical expertise among ERR staff.
 - ERR will offer internships to students and build closer links with universities and TAFEs to bolster industry skills and regulatory capability in the long term.
- Improvements to the Resource Rights Allocation and Management (RRAM) system (pp. 53-54)
 - ERR is drawing on DEDJTR's business systems expertise to deliver practical improvements to RRAM greater functionality and user-friendliness.
- Transparency about status of applications (pp. 53-54)
 - ERR has started sending weekly emails to provide operators with a status update on the progress of applications they have submitted to ERR.
 - This is a first step to delivering real-time tracking of applications in RRAM.

Recommendations

Building on the actions underway, the Continuous Improvement Project is recommending a suite of further changes. Most of these recommendations involve work that can commence and be substantially progressed over the next 12 months. Others will need to be informed by the implementation of the regulatory improvements contained in this report, and should be considered longer term.

Short to medium-term opportunities

- ERR statement on changes to work plans (pp. 16-22)
 - ERR should issue a Statement of Operating Change to explain the change in its assessment of changes to work plans.
 - ERR will not require a risk management plan to be prepared when an operator proposes a variation to a work plan lodged or approved prior to 8 December 2015. Operators will instead describe the relevant risks on site, and how the proposed variation to works will affect those risks. The Statement should explain how this process will work.
 - ERR should also clarify what changes to work plans can be considered administrative changes (rather than variations to work).

Planning Practice Note and Ministerial Statement (pp. 37-42)

- DEDJTR should work with DELWP to develop a Planning Practice Note to clarify the respective roles and responsibilities of ERR and the planning authorities in considering approvals for earth resources activities. This would provide guidance to local councils about ERR's responsibility under the Mineral Resources (Sustainable Development) Act 1990 (MRSDA), and how these relate to decisions under the planning system.
- The Planning Practice Note could form the basis of a joint statement by the Minister for Resources and the Minister for Planning.

Concurrent pathway (pp. 39-41)

- DEDJTR should work with DELWP to enable the option of allowing an operator to submit a work plan (to ERR) and planning permit application (to local council) at the same time. This concurrent pathway option may require changes to the Victorian Planning Provisions and amendments to the MRSDA.
- Approvals in the proposed Strategic Resource Areas (pp. 42-44)
 - DEDJTR should work with DELWP to develop guidelines for making the Minister for Planning the Responsible Authority for planning approvals for projects located in Strategic Resource Areas.

• Codes of Practice (p. 28)

 The Minister for Resources should consider making Codes of Practice under the MRSDA for the standard risk management plans now being developed.

Local government projects (p. 35)

 DEDJTR should work with DELWP and local councils on local government infrastructure projects to encourage councils to source construction materials from local quarries.

• Earth Resources website (pp. 55-56)

- DEDJTR should revamp the Earth Resources website to improve its usability and relevance. The website should:
 - include clearer information about the approvals processes for mining and extractives operations
 - offer coordinated mapping and regulatory information from across government, including for geology and prospectivity, land use and planning, biodiversity, water, native title and Aboriginal heritage.

• Staff induction and training (pp. 49-52)

ERR should refine and extend its induction and training programs for staff.
 These programs should cover ERR's role and regulatory functions, its relationships with other regulators, and the relevant processes across the regulatory system.

Joint training and secondment opportunities (pp. 46-47)

 ERR should collaborate with other regulatory authorities and policy development areas within DEDJTR and DELWP on joint training and secondment programs.

• Stakeholder engagement (pp. 49-52)

- ERR should work with industry groups to arrange site visits and industry information sessions so that all ERR staff have practical experience of the nature of extractives and mining operations.
- ERR should offer training to staff on best practice regulation, including objective decision making, and stakeholder and community engagement.

Implementation and change management (p. 58)

 DEDJTR should ensure that ERR has sufficient resourcing to enable the implementation of changes outlined in this report. This includes resourcing for the dedicated implementation team and ERR's strategic capability.
 Implementation will require ongoing reporting on performance and delivery.

The longer term – from 2019

- Legislative reform (pp. 59-61)
 - The Victorian Government should consider the legislative framework with a view to developing a new Act. This would provide a stronger foundation for:
 - the earth resources sector in economic development and jobs creation for a sustainable economy
 - an efficient and effective regulatory framework, implemented in a way that is consistent, transparent and delivers timely outcomes
 - risk-based and outcomes-based approaches, including clear accountability for operators to meet community expectations and satisfy social and environmental regulatory objectives
 - the whole-of-lifecycle from initial geoscience to rights allocation and works approvals, through to operation, closure and post-closure land use
 - fair, inclusive and transparent processes to build confidence and social licence.

• Governance (pp. 61-63)

- The Government should assess whether ERR's structure and governance arrangements are sufficiently robust to support leading regulatory practice.
- DEDJTR should examine alternative approaches: establishing ERR as a statutory authority is one option, to be considered once the regulatory improvements outlined in this report are bedded down.

• Cost recovery (pp. 64-65)

- The Government should consult with industry to ensure that its cost recovery principles are reflected in the regulator's operations and fees charged to industry.
- Any changes should not take effect before 2020.

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1 Why this report?

Regulation of Victoria's earth resources sector is a complicated story.

- The sector comprises distinct industries mining, extractives, petroleum and others
 each with their own economic and policy issues, but also with much in common.
- The contribution of the earth resources sector to Victoria's economy particularly in regional areas is not always well understood across the community.
- There are multiple regulatory objectives at play, overseen by a myriad of specialised regulators.

This Continuous Improvement Project has been tasked with finding ways to improve the regulatory environment for the sector — simplifying processes and reducing red tape for businesses, without compromising the regulatory standards that the community expects (box 1). The project is focused on delivering tangible benefits today and into the future, drawing on several past reviews and wide consultation across government and industry.

This report outlines actions that are already in train, and proposes recommendations for the next steps needed to deliver real improvements. The report includes:

- practical changes that the Earth Resources Regulation branch (ERR) of the
 Department of Economic Development, Jobs, Transport and Resources (DEDJTR) can apply over the next 12 months
- important policy work for DEDJTR in some cases, in partnership with other departments — to provide greater clarity to industry and the community, and fix some long-standing problems in how the sector is regulated
- the basis for a long-term reform program that will embed a culture of continuous improvement within the regulatory system, and support the activities of a best-practice regulator for earth resources in Victoria.

The project has concentrated on the mining and extractives industries specifically, but the benefits are expected to be shared across all aspects of ERR's regulatory activities.

There has been much good work undertaken already, which this report points to and builds on. The actions and recommendations in this report will consolidate the gains, bolster industry confidence and capitalise on the lessons from leading regulators in Victoria and other jurisdictions.

Box 1 What is the Continuous Improvement Project?

ERR has made several significant changes to improve its operations over the past two years (attachment 1). However, scope remains for further improvements to meet the expectations of industry and the community.

To drive these improvements, the Continuous Improvement Project for ERR was initiated in July 2017 by the Treasurer, at the request of the then Minister for Resources. The project has been led by Victoria's Commissioner for Better Regulation, Anna Cronin, supported by a team from DEDJTR. External consultants were also engaged to bring insight and perspective to the project's work:

- Rivers Economic Consulting has advised on the prioritisation and processing of incoming regulatory applications to ERR (section 3) and is involved in refreshing ERR's standard operating procedures. Rivers Economic Consulting has produced a summary report on ERR's current regulatory processes — this work is contained in attachment 2.
- The Nous Group led a series of policy workshops targeted at understanding industry perspectives on the regulatory system, and opportunities to improve the experience of operators in dealing with ERR. A summary report reflecting the matters discussed in these workshops can be found at attachment 3.

The project has drawn on several past reviews of ERR and the regulatory system, including a parliamentary inquiry by the Economic Development and Infrastructure Committee (the Inquiry into Greenfields Mineral Exploration and Project Development in Victoria). Policy work to inform successive rounds of legislative and regulatory changes has also been useful. In addition, Victoria's Red Tape Commissioner has highlighted various opportunities to reduce regulatory burdens for mining and extractives operators.

This report is just one milestone in ERR's modernisation. Discussed throughout the report is a series of regulatory improvements: immediate actions through to long-term reform options. Beyond these pages, implementation work has already commenced, and will continue over the months and years ahead. To maintain momentum for implementation, DEDJTR will set timelines for delivery, track outcomes and report on performance.

The success of the project has depended on the involvement of mining and extractives industry representatives, as well as staff from ERR and across DEDJTR, several regulators, departments, local councils and other relevant parties. Their ongoing engagement will be needed to make a success of the improvements outlined in this report. In implementing changes, ERR and DEDJTR must continue to communicate with all stakeholders: the considerable goodwill generated through this project should form the basis of a lasting and collaborative approach to reform.

2 The earth resources sector

The earth resources sector comprises several distinct industries:

- Mining: Metallic minerals such as gold and base metals, and non-metallic minerals such as gypsum, kaolin, zircon, rutile, ilmenite and coal.
- Extractives: Various types of sand and stone ordinarily used in construction and manufacturing, including sandstone, limestone, basalt, granite, slate and gravel.
- Petroleum: Naturally occurring hydrocarbons and a mixture of non-hydrocarbon gas.
- Geothermal: Heat contained within both solid rock and the fluids within the fractures and pores of the rock.

This report is principally focused on the mining and extractives industries, which are covered by the *Mineral Resources (Sustainable Development) Act 1990* (MRSDA).

As this report acknowledges, there are significant differences between the mining and extractives industries, including the role each industry plays in the economy, the primary ownership of the resources of each industry, and the nature of the risks from operations in each industry. The regulatory system must be sensitive to these differences. Nevertheless, there are sufficient similarities to warrant a common approach to regulation across the mining and extractives industries.

Mining and extractives: two different industries

Under the MRSDA, mining refers to the act of extracting minerals from land for commercial production. The term mining includes activities associated with processing and treating ore and is exclusive of activities associated with the exploration of potential minerals. All minerals are owned by the Crown, which can require mining operators to pay royalties to the Victorian Government (though not in all cases). In 2015-16, Victoria collected mining royalties of \$42.3 million.

An extractive industry is involved in the extraction or removal of stone from land if the primary purpose is for sale; commercial use; or use in construction, building, road or manufacturing works. Most extractives activity occurs on private land and to a depth of 15 metres — this means, in contrast to mining, most extractive resources are privately owned. However, extractive resources are owned by the Crown if they are located on Crown land or below 15 metres on private land. Royalties from operations involving Crown-owned extractives totalled \$5.4 million in 2015-16.

The economic context for the two industries is also different.

- Mining has a long history in Victoria: gold mining propelled Victoria's growth in the 19th century. Mining remains a key driver of jobs and economic activity in regional Victoria, and contributes to exports.
- Extractives are principally used as construction materials in Victoria: the availability of low-cost and accessible extractive resources is essential to Victoria's development, including the government's infrastructure program. Quarries need to be located as close as possible to development sites otherwise, the costs of construction are much higher. This means transport infrastructure, housing, schools and hospitals all become more expensive to build. The costs also include wider economic, environmental and social effects: moving extractives over longer distance imposes greater wear and tear on roads, generates additional pollution and adds to congestion.

Why regulate this sector?

The core similarity between mining and extractives is that, in basic terms, they both involve getting something of value out of the ground. It is this common attribute that gives rise to potential risks for the community and the environment.

The rationale for regulation of the earth resources sector is multifaceted, and includes:

- public and occupational health and safety: ground instability, slope failures, and other adverse consequences from operations (for example, flyrock from blasting)
- community amenity: vibration, dust and excessive noise, as well as the post-closure development of sites
- environment protection: loss of biodiversity, removal of native vegetation, impacts on water quality, and the long-term rehabilitation of sites.

Who regulates this sector?

The Minister for Resources has portfolio responsibility for Victoria's earth resources sector. ERR reports to the Minister and, in practice, delivers regulatory functions under the MRSDA (box 2). Owing to the multiplicity of regulatory issues (many of which are not specific to earth resources), there are many other regulators with an interest in earth resource operations.

• The Department of Environment, Land, Water and Planning (DELWP) is responsible for land use planning and environmental assessment in Victoria. It also manages the

- regulatory framework and provides advice on planning policy, strategic planning and urban design.
- The Environment Protection Authority (EPA) is responsible for regulating offsite discharges of water from earth resources sites, and for advising on and monitoring air and noise discharges.
- WorkSafe Victoria has responsibility for preventing workplace injuries, illnesses and
 fatalities by monitoring and enforcing compliance with Victoria's occupational health
 and safety laws and regulations. WorkSafe and ERR work together in relation to mine
 stability; mine fire prevention, mitigation and suppression; explosives, including
 blasting; and well integrity.
- Aboriginal Victoria ensures the protection and management of Victoria's Aboriginal cultural heritage.
- The Native Title Unit of the Department of Justice and Regulation oversees the administration and implementation of Victorian Government responsibilities under Commonwealth and State native title schemes.
- Catchment Management Authorities support sustainable management of land and water resources and contribute to biodiversity management.
- The Country Fire Authority works with ERR on the inspection of coal mines to assess fire preparedness.
- Energy Safe Victoria is the independent technical regulator responsible for electricity, gas and pipeline integrity and safety in Victoria.
- At the Commonwealth level, the National Offshore Petroleum Safety and Environmental Management Authority (NOPSEMA) regulates safety and well integrity in state waters off Victoria for the offshore petroleum and greenhouse gas industries.
- Under the *Environment Protection and Biodiversity Conservation Act 1999* (Cth), proposed activities that have an effect of national environmental significance require the approval of the Commonwealth Minister for the Environment.

In addition to these regulatory functions, the Mining Warden provides a channel for dispute resolution — including, at times, disputes between operators and ERR.

To coordinate approvals across this complicated regulatory system, ERR acts as 'lead agency' — that is, operators submit their applications to ERR, which then in certain circumstances seeks input from other relevant regulators ('referral authorities'). The key exception to this is approvals under the planning system, where operators are required to deal directly with the responsible authority — usually local councils. This is discussed in greater detail in section 6.

Box 2 A profile of ERR

ERR safeguards the health and wellbeing of local communities and ensures that earth resource operations do not pose environmental and public safety risks. ERR fulfils this purpose in partnership with referral authorities, industry and other stakeholders.

ERR's functions are to:

- authorise earth resources exploration, production and other activities
- regulate these activities to balance the needs of the environment, community and the Victorian economy.

The ERR workforce

ERR is comprised of around 80 staff located across five offices: Ballarat, Benalla, Bendigo (Epsom), Melbourne and Traralgon.

ERR has changed significantly since 2015, with the introduction of a new leadership team and structural reforms to the organisation. 70 per cent of the current ERR workforce has been employed in ERR for two years or less.

How is this sector regulated?

As noted, the mining and extractives industries are regulated under the MRSDA. Although not discussed further in this report, the petroleum and geothermal industries in Victoria are regulated under the *Petroleum Act 1998* (onshore), the *Offshore Petroleum and Greenhouse Gas Storage Act 2010* (offshore within three nautical miles — beyond this, Commonwealth legislation applies) and the *Geothermal Energy Resources Act 2005*.

A more detailed discussion of the current regulatory processes is included at attachment 2.

Mining tenements

A mining tenement refers to a claim, lease, mining, exploration, retention or prospecting licence (box 3). Mining tenements are granted to:

- maintain certain standards to reduce the risk of adverse impacts upon safety, the environment and community disturbance as discussed earlier; and
- allocate rights to develop Crown owned resources on behalf of the Crown for the benefit of all Victorians.

Box 3 Different forms of mining activity

There are four types of mining tenements in Victoria:

- An exploration licence permits the holder to undertake exploration on the land covered by the licence, is current for the period specified on the licence (but must not exceed 5 years) and may be renewed.
- A **retention licence** permits the holder to retain rights to mineral resources in the land covered by the retention licence, is valid for the period specified on the licence (but must not exceed 10 years) and may be renewed.
- A **mining licence** permits the holder to undertake mining on the land covered by the mining licence, is valid for the period specified on the licence (but must not exceed 20 years unless the Minister decides otherwise) and may be renewed.
- A **prospecting licence** permits the holder to prospect, explore and mine on the land covered by the licence. A prospecting licence is valid for five years, cannot be renewed and the land described in the licence must not exceed five hectares.

There are additional, smaller-scale activities that are also regulated.

- A miner's right permits the holder to search for minerals on private or Crown land and if
 covered by a mining, prospecting or retention licence, consent must be granted by the
 licence holder to the miner's right holder. A miner's right is restricted to the use of nonmechanical hand tools only for the purposes of searching for and extracting minerals.
- A **tourist right** permits the holder, any employee of the holder, or person accompanied by the holder to search for minerals subject to specific conditions.

Extractive industry work authorities

An extractive industry operation requires the granting of a work authority. The application for a work authority must include lodgement of a work plan with ERR unless the applicant is exempt from the work plan requirements of the MRSDA (box 4).

Work plans — mining and extractives

For either a mining or extractives operation, the business will generally be required to submit a work plan to ERR. (Exceptions to this are discussed in box 4.)

Box 4 When is a work plan not required?

A mining and prospecting licensee is not required to lodge a work plan where:

- the mining activity is to be carried out on land that has an area of less than five hectares and a depth of less than five metres, and
- the mining does not involve underground work, chemical processing, blasting or the clearing of native vegetation.

Similarly, a person who proposes to apply for an extractive industry work authority to carry out an extractive industry is not required to lodge a work plan where:

- the extractive industry is to be carried out on land that has an area of less than five hectares and a depth of less than five metres, and
- the extractive industry does not require blasting or the clearing of native vegetation.

Where a work plan is not required, the applicant must instead operate in accordance with the *Code* of *Practice for Low Risk Mines* or *Code of Practice for Small Quarries*. These codes of practice are made under provisions in the MRSDA (section 5).

The work plan identifies how proponents will undertake their mining or extractives operations. The requirements of a work plan and its contents will vary depending on the type of operation (that is, work for minerals exploration will be different from the extraction activities of a quarry). But in broad terms, a work plan will describe the works that are proposed to be carried out on the site, with the operator required to prepare separate plans that form elements of the work plan — for example, a community engagement plan and a rehabilitation plan for the site.

Following legislative and regulatory changes that took effect on 8 December 2015, ERR adopted a 'risk-based approach' to work plan approvals. This changed the requirements for work plans. Operators are now required to prepare a hazard assessment and risk management plan — that is, an assessment of hazards on the site, including the potential impact on significant community facilities, and information on how the risks will be managed.

The risk-based approach focuses the approval of work plans (and any subsequent variations to work) on:

- any serious consequences of mine or quarry site operations in the context of location
- sensitivity receptors (for example, housing, roads, other community assets)
- measures to mitigate risk.

Work plans under the risk-based approach are commonly referred to as 'risk-based work plans'. This report refers only to 'work plans', distinguishing between those lodged or approved prior to 8 December 2015 and those lodged or approved on or since 8 December 2015. These two types are subsequently referred to as 'lodged prior to December 2015' and 'lodged since December 2015'.

The intention of the December 2015 changes was to move from a prescriptive list of inputs to a regulatory model more focused on outcomes (box 5). With better information about risk, regulators (ERR and referral authorities) can focus on new or changed hazards that significantly increase risk. As section 4 discusses, there have been considerable problems in implementing the new risk-based approach.

Box 5 Intended benefits of the 'risk-based' approach: work plans since December 2015

- Effort is targeted based on risk significant and high risks require more information, higher standards and a greater level of regulatory scrutiny
- Work approved under a work plan can be carried from one licence type to another removing the need to reapply for previously approved work
- Work Plan Notification Process avoid variation if change in work plan is associated with reduction in risk
- Significant reduction in amount of documentation, once transitioned
- Outcome focused set a threshold for impact and be held to account against that threshold
- Recognition of leading practice materials as standard controls
- Clear assessment criteria for effectiveness of additional controls
- Provides for a transparent assessment of risks/activities

3 Making the right decisions more quickly

The immediate priority for this project at its commencement was to rapidly assess and treat the considerable 'backlog' of applications for licences, work authorities and work plan approvals sitting with ERR. At the start of August 2017, ERR had at least 238 applications on hand — several of these exceeding the processing timeframes set out in the MRSDA. Industry frustrations were not driven purely by the length of time that applications sat with ERR, but the lack of transparency about ERR's processes and the uncertainty about when decisions would be made.

This project, in partnership with ERR, commenced a series of steps to bolster ERR's operational practices. These include:

- development of an Allocation and Prioritisation Tool for assigning work
- introduction of new staff and improved support for staff
- a stocktake of standard operating procedures (SOPs).

The early results from these efforts are already evident. The number of applications on hand has fallen by about 25 per cent in net terms (that is, taking account of new applications coming in as ERR clears applications already on head). While there is considerable variability in application numbers from week to week, there appears to be a recent upward tick in the number of new applications coming into ERR — the procedural improvements underway are laying the foundation for operators to commence delayed works and lodge new applications.

Prioritisation and Allocation Tool

As part of this project, Rivers Economic Consulting (Rivers) was commissioned to examine the backlog and its contributing factors. Rivers identified a need to better align ERR's staffing profile with the nature of approvals work. Coordination with referral authorities was also factored into the assessment of ERR's processing capability.

As a snapshot in time, Rivers used the 238 applications on hand at 2 August 2017 (190 licence applications and 48 work plans) to assess ERR's operating practices — for instance:

- How is work allocated to approvals and licensing officers?
- What are the processes staff go through when completing that work?

• What happens when problems emerge — how does ERR resolve these?

Through extensive consultations with ERR staff, Rivers developed process maps and identified the basic resource requirements for each of the 165 unique categories of application types. In effect, Rivers' work held a mirror up to ERR: revealing to ERR and its staff a level of detail about their day-to-day activities that had not previously been recorded.

Using this baseline data, Rivers developed a multi-criteria framework around ERR's resource allocation and prioritisation of work (box 6). As the name implies, this Allocation and Prioritisation Tool serves two functions:

- First, the tool allocates work to one of two categories: complex or routine. This 'triage' function directs work to the appropriate level of resourcing (staff seniority/expertise) that is, more complex cases can be better handled by more experienced staff, while routine applications have their own resourcing to ensure these are processed quickly.
- Second, within each of the two categories, the tool prioritises applications. That is, the tool provides an indicative ranking of which applications should be tackled first. This priority score is informed by time-specific factors: statutory time frames and community service agreements (noting that statutory time frames are an overarching criterion with respect to meeting the requirements of the MRSDA). The tool also considers the likely effect of different risks on how long it will take overall to process the application: issues such as public safety, the environment and business implications. The greater the risks to address, the longer it will likely take to process the application, therefore the earlier assessment work should be started, and the higher the priority it should be afforded.

A training program is being rolled out to ERR staff to enable use of the tool. Refinements to ERR's online approvals portal — the Resource Rights Allocation and Management system (RRAM) — will also enable easier identification of the key material used by the tool to determine allocation and prioritisation. (RRAM is discussed in section 7.)

Action 1

ERR has implemented a new internal system for allocating and prioritising licencing and work plan approvals and variations. This system is designed to:

- match each application to the right level of skill and expertise within ERR
- sort applications on the basis of their relative significance (for industry, government and/or the wider community) and complexity.

Box 6 Allocation and Prioritisation Tool: criteria and weighting

The nine criteria included in the tool are:

- health and safety risk
- processing time delay
- state economic significance
- community concerns
- strategic (extractive) resource in a strategic location
- industry risk
- application complexity
- environmental risk
- cultural and public infrastructure risk.

Each criterion is given a weighting for each category of application type (recognising different risks will matter in different ways to different types of applications). When ERR receives an application, ERR quickly reviews the application to identify relevant information for the tool: based on this, the tool allocates the work as either complex or routine. The tool will also provide an initial prioritisation score: but prioritisation may vary over time, once ERR has had time to review the application material in greater detail, and is better informed of the key issues.

Sample of criteria and weighting by application type (non-exhaustive)

Type of application	Health and Safety Risk	Processing time delay	State economic significance
Mineral exploration no work plan (low impact)	12%	20%	12%
Mineral exploration no work plan (code of practice)	15%	25%	15%
Mineral exploration work plan	12%	17%	12%
Mineral exploration work plan variations	11%	26%	11%
Mining Projects no work plan (low impact)	13%	13%	9%
Mining Projects no work plan (code of practice)	13%	22%	13%
Mining Projects work plan (statutory work plan)	13%	13%	13%
Mining Projects work plan variations (statutory work plan)	15%	15%	7 %
Mining Projects work plan (non-statutory work plan)	12%	12%	12%
Mining Projects work plan variations (non-statutory work	15%	15%	7 %

New staff and support

The work underpinning development of the Allocation and Prioritisation Tool also identified gaps in ERR's processing capability. A major driver of the backlog is that approval and licensing officers have been spread thin: there have simply been too few to adequately manage the inflow of applications.

As a result of this project, ERR has been given authorisation to bring new staff and support online. Additional officers have already been employed in the licensing and approvals teams: a total of six new staff are anticipated. To expedite the backlog reduction effort, ERR has engaged consulting firms with the relevant expertise to augment ERR's capacity in processing applications. (ERR has developed protocols that will assure quality, guard against conflicts of interest, and ensure ERR executes its regulatory functions properly.)

This is not purely a numbers game, but also relates to how staff are used. In consultations for this project, ERR staff reported on the large amount of time they spend on internal departmental matters and reporting tasks. While these are essential to enable ERR's operation, to support effective decision making and to maintain accountability, they also take a small number of people with specialised skills away from the core tasks for which they are employed.

Greater specialisation of work within ERR will allow technical experts to assess applications and minimise the time they spend on other tasks. One option to support this is for ERR to employ additional staff with skills targeted to preparing briefs and writing correspondence, as well as greater project and administrative support. Better processes and systems will also make a significant contribution (see below).

The responsiveness of ERR and its staff to the changes in process and practice being rolled out is commendable: their continued support is fundamental for ERR's continuous improvement. ERR's people and culture are discussed in greater detail in section 7.

Action 2

DEDJTR is allocating additional staff and funding to ERR to boost capacity and capability in the ERR approvals team. Further resources are being brought online to support implementation of the regulatory improvements proposed through the Project and to underpin improvements in ERR's long-term performance.

Standard operating procedures

Good internal policies and processes underpin high-quality and consistent regulatory decision making. This material is essential in an environment as complex as the one ERR operates in.

One of the first findings of this project was that ERR lacked up-to-date and relevant standard operating procedures for key areas of its operations — the combined effect of high staff

turnover in a period of significant regulatory changes. Many ERR staff identified a lack of internal guidance material or clearly established practices — they have learnt how to do their jobs in their own way. A consequence of this is inconsistency in how industry interact with ERR, making the regulatory regime less predictable and harder to comply with. From ERR's own perspective, the lack of up-to-date standard operating procedures exacerbates organisational and reputational risks: 'wrong' decisions are more likely.

The problem of missing SOPs is relatively new: there is a large volume of past guidance, but it has not been refreshed to match ERR's current structure or today's legislative and regulatory environment. This provides a solid footing on which to build a comprehensive catalogue of SOPs. Better SOPs (internal documents) will also support development of better guidance for and communication with industry and the community (section 7).

This project has commenced a stocktake of ERR's SOPs to assess their coverage and adequacy. The stocktake will identify where existing SOPs are current and effective, where updates to SOPs are required, and where there are gaps that require new SOPs.

Opportunities to consolidate SOPs — ensuring that the volume of material is sufficient, but not excessive — will also be considered.

The changes discussed in this report will have knock-on consequences for SOPs, with some areas requiring urgent attention. In particular, new SOPs will be required for:

- assessing variations submitted to ERR since December 2015 to work plans that were approved by ERR prior to December 2015 (section 4)
- identifying 'unacceptable risk' on site and requiring an operator to prepare a new work plan (section 4)
- applying the case management approach for strategic projects (section 5)
- escalating cases to the Earth Resources Approvals Coordination Group (section 6).

To ensure that the necessary work can be progressed quickly, ERR's internal capacity for development and maintenance of SOPs should be increased. The development of SOPs should occur in consultation with ERR staff, referral authorities and industry as required.

Action 3

ERR has commenced a stocktake of its internal SOPs to assess their coverage and adequacy. This will inform an ongoing program of work to update SOPs and — where gaps exist — develop new SOPs.

Work to refresh SOPs will involve consultation with ERR staff, referral authorities and industry as required.

4 Providing certainty for industries and communities

Significant changes to the content and structure of work plans took effect in December 2015, following amendments to the MRSDA (section 2). These changes were intended to implement a risk-based approach to approving work plans and variations to work plans: that is, to focus regulatory requirements on the potential site hazards of greatest likelihood and consequence.

In practice, the adoption of the risk-based approach has caused great uncertainty for industry, referral authorities and local councils. It has also undermined confidence in the regulator. Where an operator has a work plan that was lodged prior to December 2015, and has sought to vary that work plan since December 2015, the regulatory experience has become complicated and confusing.

ERR has sought to apply the requirements of the risk-based approach introduced in December 2015 to work plans lodged prior to December 2015.

- As noted in section 2, work plans lodged since December 2015 must include a risk management plan — an assessment of hazards across the whole site, and how the operator will manage associated risks. Older work plans do not include a risk management plan, although they incorporate actions to address risks.
- Separately, it is a regulatory requirement for variations lodged since December 2015 to describe how a variation to works will affect risks on site.
- When an operator has proposed a variation to a work plan lodged prior to December 2015, ERR has required the operator to prepare a risk management plan for the whole site.
- ERR has applied this approach because the risk management plan establishes a baseline risk profile for the site, against which the risks associated with the proposed variation to works can be assessed.

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.

In short, the 'transition' to the risk-based approach has not itself been risk based.

ERR is cognisant of these industry concerns, and has been keen to improve the transition. This project has provided an opportunity to examine ERR's practices and identify ways to make the risk-based approach work better for operators, the regulator, and the community as a whole. The key messages that this report can confirm are:

- There is no general requirement for operators to transition their (pre-December 2015) work plans to the new risk-based approach. Nevertheless, some operators may still find benefit in converting their (pre-December 2015) work plans to the new format voluntarily.
- Variations to any work plans lodged prior to December 2015 can be considered
 without necessarily requiring a full risk management plan for the site. However, an
 operator will be required to provide information to ERR about how it identifies,
 assesses and manages risks in aspects of the site that are directly relevant to the
 proposed variation.
- Notwithstanding the above, an operator can be compelled to produce a new work plan — including a risk management plan — in specific cases where ERR considers that there is 'unacceptable risk'.

The processes are requirements for work plans and variations are mapped out in figures 1 and 2 (two sets of flowcharts for, respectively, the extractives and mining industry).

No requirement to 'transition' work plans

Work plans have evolved considerably over time. Some work plans that were lodged 30 years ago are still in effect today, even though they may bear little resemblance in style and format to work plans being lodged nowadays.

The differences in work plans over time are potentially compounded by any variations made to work plans. Historically, each variation has been treated as an additional document to sit alongside the work plan and any previously approved variations. These 'unconsolidated' work plans are complicated to regulate, and can contribute to confusion about what activities the work plan is actually outlining.

With the introduction of the risk-based approach in December 2015, and aligned with the intended functionality of RRAM (section 7), ERR began treating new work plans as living documents — that variations would directly revise or update the work plan, rather than generate a separate document alongside the preserved original. This would also allow ERR and operators to more easily track what practical changes a variation has made to a work plan.

In the case of work plans lodged prior to December 2015, any variations submitted since December 2015 have not been treated in this way unless the work plan has been 'consolidated' — that is, the original work plan and all its variations have been re-packaged into a single document. The process is — at least based on experience to date — a time-consuming one, with operators facing large upfront costs with the prospect of benefits to come over time through streamlined variation approvals processes.

Moreover, consolidating work plans and variations will not necessarily result in a new work plan that satisfies the requirements of the risk-based approach introduced in December 2015 (section 2). The risk management plan is a new feature, the necessary information for which might not be contained in any prior documentation submitted to the regulator. It may be possible to compile a risk management plan as a purely administrative exercise. However, in some cases, the preparation of a risk management plan could reveal risks on site that have not been identified or sufficiently managed through activities set out in the work plan. This discovery could trigger new or changed works on site, and consequently require the operator to lodge a variation for approval by ERR.

Given the potential for surprises of this kind, it is understandable that operators are not enthusiastic about transitioning work plans lodged prior to December 2015 to the risk-based approach. The concerns are compounded by patchy and inconsistent guidance, and the poor design and functionality of RRAM. These problems collectively also weaken the effectiveness of the regulatory system: it is harder for operators to comply with their regulatory obligations.

A priority for this project has been to resolve the considerable uncertainty around the transition to the risk-based approach. A key finding is that there is no general requirement to transition. As demonstrated by schedule 9 of the MRSDA, there was no intention associated with the 2015 changes to force operators to re-produce work plans for existing sites. In many cases, work plans lodged prior to December 2015 are adequate — risks are effectively managed on site (even in the absence of a documented risk management plan), because it makes good commercial sense for operators to do so, and also because ERR has compliance and enforcement responsibilities.

Nevertheless, there will be circumstances where an operator may choose to transition their work plan. The process for doing this should be simpler. This report announces that:

 ERR has committed to develop a process for consolidating work plans lodged prior to December 2015 as an administrative process. ERR will be responsible for the consolidation, and will consult with each operator on a case-by-case basis. This ERR-led consolidation will reduce risks associated with regulating against multiple documents — the more variations in place, the greater the scope for confusion over

- what regulatory conditions apply. As a priority, ERR will start with work plans originally lodged prior to 2000, and work plans with ten or more variations. Operators may also voluntarily request that ERR consolidate their work plans.
- Once a work plan has been consolidated by ERR, the operator will have the choice of completing the transition to the risk-based approach by preparing a risk management plan.
 - Where the risk management plan does not require any new or changed works on site, ERR will assess and (if satisfactory) accept the risk management plan. By extension, the work plan will satisfy the requirements of the risk-based approach and be treated as other approved work plans lodged since December 2015.
 - Where the risk management plan identifies a need for new or changed works to address a risk, a variation will be required. (As outlined in the next section, this process will now be tailored to the significance of the risk.)
- Whether or not the operator chooses to transition, any variations to the consolidated work plan will be processed as updates to the work plan (rather than as separate documents). This will be facilitated by RRAM (section 7).

Action 4

ERR is developing a process to administratively 'consolidate' work plans lodged or approved prior to 8 December 2015 and all variations to work subsequently approved into a single document. This process will be led by ERR, in consultation with operators as required. Consolidation will not change any regulatory requirements on operators or cause existing rights to be amended or revoked.

A risk-based approach for variations

With no general requirement to transition work plans, variations can be assessed on their merits. A variation to a pre-December 2015 work plan does not reopen the entire work plan and the approvals attached to it. This provides far greater certainty for operators.

This project has also confirmed that the variation process (specified under the MRSDA) only applies where the operator proposes new or changed works on site. Any other changes to work plans — updates to paperwork, such as a revised map or changes to company details, as well as the administrative consolidation process discussed above — are not variations.

In practical terms, this means there are three pathways for ERR to assess any proposed changes to work plans.

- Administrative change: Any changes to work plans that do not involve new or changed works on site do not constitute a variation (a variation is a 'variation to work'). As such, administrative changes do not require any referral to other agencies or consultation with local councils. ERR must merely be satisfied that the change has no bearing on the works already on site and set out in the work plan.
- Variation with <u>no</u> planning permit implications: Where an operator proposes new or changed works on site, a variation is required. ERR (and referral authorities) will assess the variation and whether any new or changed risks are appropriately managed. As part of this approval process, ERR must consult with the relevant local council. However, if the proposed scope of the new or changed works is entirely within the envelope of an existing planning permit, there is no basis for local council to reopen the planning permit (that is, it cannot apply new conditions or revoke the permit entirely). ERR can approve the variation if it is satisfied that it satisfies all regulatory requirements, and does not require a new or changed planning permit.
- Variation with planning permit implications: In those cases where a variation to a work plan relates to a matter outside the scope of an existing planning permit and/or where a new planning permit is required, the local council must decide on the planning permit before ERR can approve the variation.

The interaction between ERR's approvals and the planning system is discussed in greater detail in section 6 of the report. The upshot is that the planning decision maker will only consider the effect of the variation — as was the case before the risk-based approach was implemented in December 2015.

For ERR to assess a variation (with or without planning implications), it requires an understanding of the site's risk profile: what are the hazards on site and how great are the risks associated with them? This provides the basis for determining what effect the variation to work will have on the site's risks.

For work plans lodged prior to December 2015, the risk profile on site might not be neatly encapsulated in any existing document — as noted, risk management plans have only been a requirement of work plans lodged since December 2015. However, many operators as a matter of business practice will have an internal risk assessment of some kind: a risk register or matrix, for instance. In many cases, such internal assessments will be sufficient to inform operators — and, in turn, ERR — of the potential consequences of new or changed works.

In lodging a variation, an operator is required to provide details of the new or changed works. As part of these details, an operator should be able to describe the effect of those works on the risk profile of the site and demonstrate the rationale for its assessment. For works of a limited nature that have no consequence beyond a defined part of the site, this should be straightforward. Where the proposed new or changed works will have widespread consequences across the site, the operator may find it advantageous to prepare a full risk management plan — something they may consider as part of standard business practice in any event. This differentiated approach for assessment and reporting of risks will greatly reduce the regulatory burden associated with variations that would not result in a significant increase in risk, while maintaining effective oversight over those works that would pose a significant increase in risk.

ERR needs to develop internal policies and industry guidance that enable the application of this approach. Basic issues for the regulator to resolve are:

- what constitutes new or changed works? that is, what sorts of changes require a variation to works to be lodged?
- what information is required to demonstrate the likely effect of a proposed variation on the risk profile of the site? — that is, in the absence of a risk management plan for the whole site, how does an operator explain the effect of new or changed works on risk?

ERR is progressing this work as a priority — these policy questions need practical answers. Once ERR is confident it has a workable approach that both satisfies the regulatory requirements and minimises burdens on industry, it should prepare a Statement of Operating Change to publicly explain how it will process changes to work plans. Communication with industry and the community is integral to increasing certainty and confidence in the regulator.

The process outlined here relates to work plans lodged prior to December 2015. For work plans lodged since December 2015 (that is, under the current risk-based approach), there are no substantive changes. This is because a key element of work plans under the risk-based approach is the risk management plan. The risk management plan provides the necessary baseline for an operator to determine — and for ERR to consider — whether any proposed new or changed work on site would significantly increase any risk. For work plans lodged since December 2015, a variation only needs to be submitted where the associated works would result in a significant increase in risk.

Action 5

ERR is adopting a risk-based approach for processing changes to work plans. This graduated approach for assessing changes to work plans includes pathways for:

- administrative changes to work plans, where there are no new or changed works on site (not a variation)
- variations with no planning permit implications: new or changed works on site that would not trigger any change in conditions pertaining to or requiring a planning permit
- variations with planning permit implications: new or changed works on site that would trigger a change in conditions pertaining to or requiring a planning permit.

ERR is developing policy guidance to:

- define what activities would constitute new or changed works that is, those activities that would trigger a variation
- describe how an operator should explain the likely effect of a proposed variation on the risk profile of the site.

Recommendation 1

ERR should develop and release a Statement of Operating Change to explain to industry and the community the risk-based approach for processing changes to work plans.

Better managing unacceptable risk

The flipside to the above is that ERR has the power to require an operator to produce a new work plan (that is, under the risk-based approach) for an existing operation, where it assesses that there is 'unacceptable risk' on site (ss. 3 and 3A, schedule 9, MRSDA). To date, ERR has elected not to use this provision of the MRSDA. But ERR's comprehensive risk assessment of sites, which the regulator has recently finalised as part of its improved compliance and enforcement activities (section 7), will better enable ERR to make judgments about where risks need to be better managed.

Directing operators to prepare a new work plan should not necessarily be viewed as a sanction or evidence of poor performance. Rather, use of this provision may reflect the inherent attributes of a site and its operation that require careful management — something that a risk management plan is designed to assist with. This is entirely consistent with a risk-based approach: ensuring that regulatory effort is focused principally on the greatest risks.

Figure 1 Extractives industry approvals

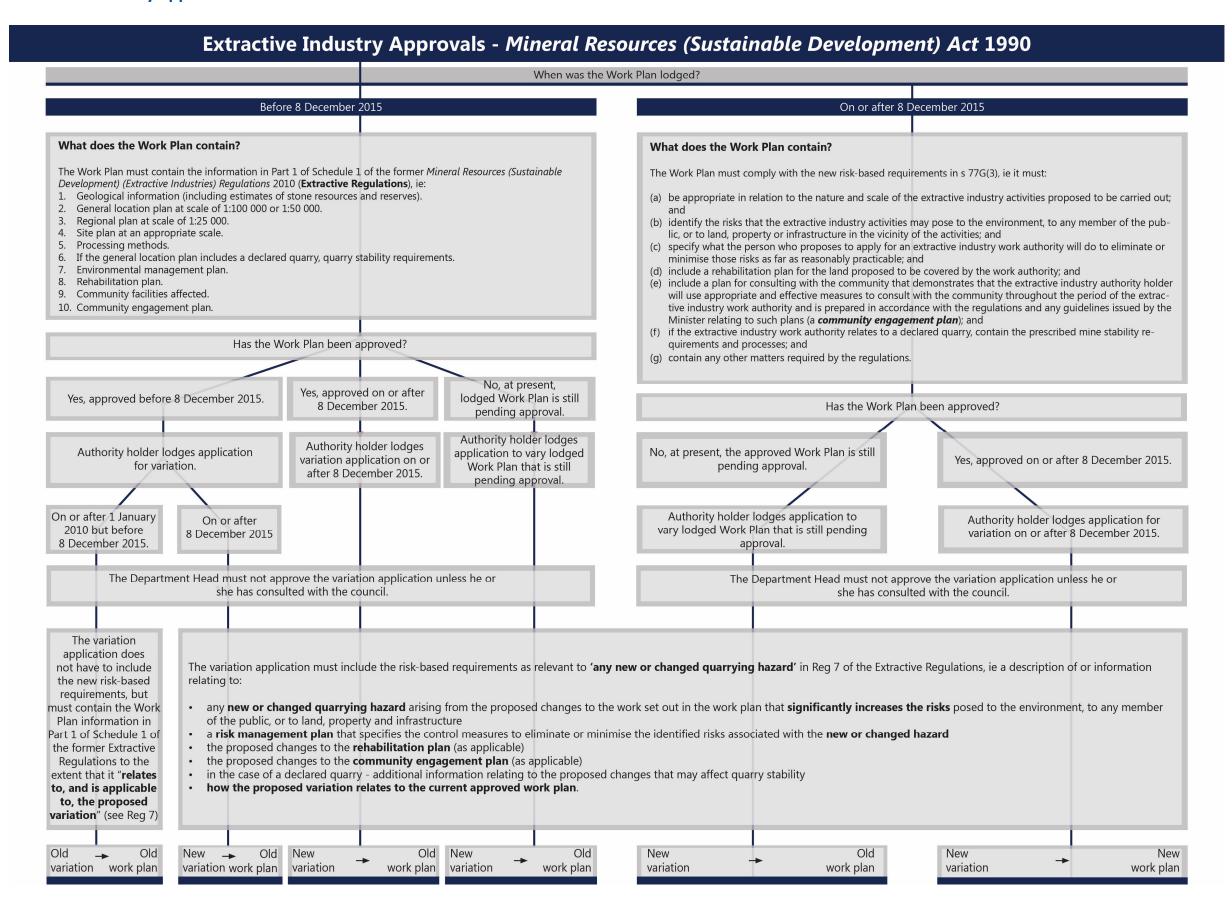
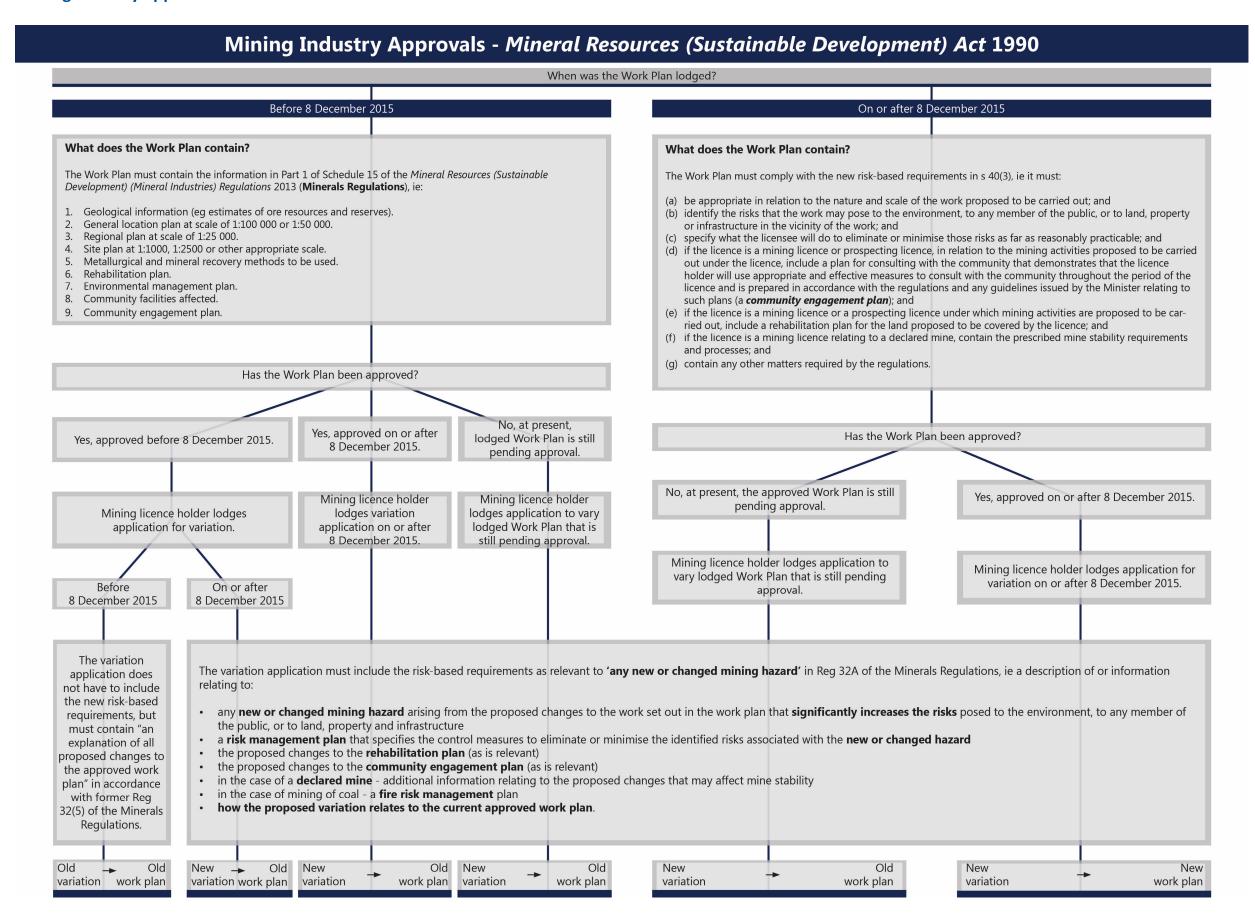


Figure 2 Mining industry approvals



5 Maintaining standards and focusing on what matters

Plans to introduce a risk-based approach to earth resources regulation were originally welcomed by industry stakeholders. The concept reflected the emerging best practice for regulators, and aligned with principles for better regulation (box 7). Some of the intended outcomes were:

- a streamlined lodgement and approvals process for industry, recognising that many risks are common to most mines or quarries, and that there are often accepted industry standards for managing these
- a greater effort by the regulator on site-specific and more complex risks where more tailored approaches, drawing on the regulators technical expertise and judgment would be required
- a well-designed IT platform that would guide users through the process and demand only the information required of them.

These are reasonable and realistic aspirations for the approvals processes for work plans. And some progress has been made. But the prospective benefits have not yet been fully realised.

Box 7 Better regulation

Regulation is necessary in all modern economies — to set the rules that make contracts enforceable, to support markets and to deliver governments' economic, environmental and social objectives.

A major challenge in designing and implementing regulation is to protect community interests while minimising the compliance costs imposed on regulated entities and the administration costs incurred by government.

Better regulation is focused on how governments regulate: it focuses on the effectiveness of regulation in meeting community expectations and supporting government objectives, and doing so at least cost to households and businesses.

A focus on better regulation encourages policy makers to think about:

- what types of regulatory approaches, if any, can address a specific problem or risk
- where government should put its greatest effort to achieve the best outcomes for the community overall
- how responsive is regulation to changes over time.

This report outlines a 'back to basics' approach that will re-focus the design and operation of work plans on what was intended — and enabled by the legislative and regulatory framework that took effect in December 2015. The changes include:

- development of a standard risk management plan that will form the backbone for work plans
- new codes of practice for low-risk mines and quarries
- a tailored regulatory pathway for 'strategic projects': supporting economically significant and complex proposals to comply with their regulatory requirements, and unlock value for Victorians.

The changes discussed in this section relate to new work plans and variations to work plans approved since December 2015 under the risk-based approach.

Standard risks, standard controls: a standard risk management plan

As section 2 outlines, there are multiple elements to a work plan. Much of the information required is specific to the site and proposed works. However, the risk management plan might not materially vary between sites — especially low-risk operations, where there is typically commonality in processes and practices. There is considerable scope to standardise risk management plans: reducing costs for business, increasing regulatory consistency and underpinning community confidence.

A standard risk management plan would act as a template for industry. It would list the standard risks for operators (customised for mining and extractives as required), and outline standard controls (mitigation measures) that operators could apply to meet their regulatory obligations. In most cases, these controls would be developed on the basis of widely adopted practices by industry — many mitigation measures draw on accepted Australian and international standards for mining and extractives operators.

Operators would not be bound to the standard controls. Operators would have scope to propose and apply alternative controls, but would need to demonstrate to ERR how those controls would satisfy the relevant regulatory objective(s). The balance here is to provide a low-cost compliance pathway without compromising the scope for innovation: the standard is a floor, not a ceiling.

The standard risk management plan would also enable different pathways for work plan approvals based on risk.

• Where an operator agrees to apply the standard controls without additions or

alterations, they would not need to prepare a separate risk management plan — the ERR standard is accepted by default.

- Where an operator either:
 - proposes to apply alternative controls to those outlined in the standard, or
 - has additional or greater risks on site beyond those accommodated by the standard

then the operator must detail the risks and/or controls that depart from those contained in the standard. The operator would use the standard risk management plan as a model, and revise or include additional information where required.

In practical terms, this approach will be enabled by RRAM: the standard risks and controls will be loaded into the system, operators will select which standard risks are relevant and which standard controls they will apply, and operators will be able to supplement these with additional risks and controls if needed. RRAM is discussed in detail in section 7.

DEDJTR already has a considerable body of policy work that can support the development of a standard risk management plan. Industry consultations throughout 2014 examined key problems associated with work plans, and opportunities to make them less prescriptive and more outcomes based. This work remains relevant, and can provides a solid foundation for identifying standard risks and controls.

The standard risk management plan will need to be developed in consultation with and the support of all referral authorities. In the absence of agreement on the standard risks and controls, referral authorities may not be satisfied that controls proposed are suitable to manage particular risks, and this would contribute to greater cost and uncertainty for operators. However, improved relationships between ERR and other regulators should facilitate common understanding (section 6).

Action 6

ERR is developing standard risk management plans for extractives and mining operations. These will support the risk-based approach for work plans. These standard risk management plans will set out:

- a comprehensive range of standard risks
- standard controls that can be applied by operators to manage those standard risks, drawing on available and recognised industry standards that already exist

The standard risk management plans will be developed in conjunction with referral authorities, so that the plans can satisfy all applicable regulatory requirements and expectations. DEDJTR has already commenced initial discussions with referral authorities.

Aligned with the development of standard controls is the application of standard conditions in licences and work authorities. ERR has commenced a process to review and refresh the standard conditions currently used. Ensuring that the standard conditions are relevant and reflective of best practice will facilitate compliance and provide greater industry certainty.

Action 7

ERR is reviewing and amending the standard licence and work authority conditions to ensure enforceability and provide certainty to industry.

Codes of practice

Part 8A of the MRSDA outlines provisions for the Minister for Resources to make codes of practice, which specify standards and procedures that support the objectives of the Act or the Regulations. There are currently three codes of practice made under s. 89 for mineral exploration, low-risk mines and small quarries (box 8).

A code of practice 'may apply, adopt or incorporate any document, standard, rule, specification or method, [which has been] formulated, issued, prescribed or published by any person' (s. 89A(2)). In other words, a code of practice can give formal endorsement to documentation and processes that support the practical application of the regulatory regime. This does not require legislative change.

There would be merit in enshrining the standard risk management plans, once developed, in separate codes of practice for mines and quarries. Although codes of practice would not give any greater practical effect to the standards (that is, the standard risk management plans would be just as functional in the absence of a code of practice), there is likely to be a confidence-enhancing attribute to having unambiguous Ministerial endorsement of the standards. Moreover, the processes for making, varying or revoking a code of practice involve consultation, and require the Minister to consider submissions. The legislated processes are likely to provide greater certainty for industry.

Recommendation 2

The Minister for Resources should, upon finalisation by ERR of each standard risk management plan and development by DEDJTR of the necessary policy work, make codes of practice under Part 8A of the MRSDA to reinforce each standard risk management plan.

Box 8 Codes of practice

For Mineral Exploration

The *Code of Practice for Mineral Exploration* provides practical guidance on how to comply with standard licence conditions attached to a prospecting, exploration, retention or mining licence. It promotes exploration practices that prevent or minimise impacts on the environment, community and other land users.

Licence holders wishing to conduct low impact exploration must ensure that the required public liability insurance, bond and land owner consents are in place. On private land, consent to undertake low impact exploration activities requires the licensee to obtain written consent of the owners and/or occupiers of the affected land. Informed verbal consent is not permitted for low impact exploration activities which include ground disturbing work or the removal of native vegetation.

It is the responsibility of the licensee to determine if their proposed exploration falls within the definition of low impact exploration, and therefore whether a work plan is required.

For Low Risk Mines

New prospecting and mining licences that meet the definition of a low risk mine are exempt from the Work Plan requirements of the MRSDA, unless declared otherwise by the Minister. These licences must instead comply with the *Code of Practice for Low Risk Mines*.

Low risk mining projects include those with a licence area of five hectares or less, that do not involve underground operations, blasting, clearing of native vegetation or the use of chemical treatments.

The Code applies to all Crown and private land in Victoria where low risk mining activities are permitted under prospecting or mining licences.

The purpose of the Code is to set out the legally enforceable requirements of licensees operating under it, and to provide practical guidance in meeting these requirements.

The Code encourages licensees to adopt an active and committed approach to compliance, and promotes mining practices that prevent or minimise impacts on the environment, infrastructure, community and other land users.

For Small Quarries

Certain small-scale quarries are exempt from the work plan requirements of the MRSDA: quarries less than five hectares in area and less than five metres in depth, where no blasting or native vegetation clearance occur. These quarries are instead required to comply with the *Code of Practice for Small Quarries*.

The Code creates obligations which operators must meet in relation to the management and control of potential negative impacts when operating small quarries. The Code also provides practical guidance on how to achieve a well-designed and operated quarry, to assist operators in meeting the Code's minimum mandatory requirements.

The Code does not apply to quarries that are less than one hectare in area and less than two metres in depth. These quarries are exempt from regulation under the MRSDA.

Strategic projects

While the placement of quarries can be contentious, no one disputes the importance of the construction materials they produce. Similarly, mining activity plays a key role in Victoria's energy supply and contributes significantly to Victoria's exports.

Some projects — whether new developments or expansion of existing operations — will have a particular significance to Victoria. For example, a proposed quarry might supply an essential material in the construction of a major infrastructure project — without it, construction costs could be substantially higher because of transport costs or the need to use more expensive substitute products. Or a mine might be a major employer in a specific regional community — unless it can continue to develop its operations, it would have to close once it has exhausted the resources available under its existing licence conditions. Government has an interest in ensuring that these operations can come online or expand quickly, so long as they comply with all necessary regulatory requirements.

There are (at least) two distinct roles that governments can play:

- ensuring regulatory processes are streamlined: making the right decisions to meet the community's expectations, but doing so in a timely way at the lowest cost
- encouraging industry development through skills and training, infrastructure, investment facilitation, strategic planning, and government service provision.

ERR's role is the first; the second role is not that of a regulator. The industry development function is, however, core business for DEDJTR. For this reason, a degree of functional separation of ERR — as a branch of DEDJTR — is required. Issues relating to the structure and governance of the regulator are discussed in section 7.

Case management

As a result of this project, ERR is introducing regulatory case managers to act as a single point of contact for each operator of a strategic project. Case managers will assist operators to navigate the regulatory system, and enable timely regulatory approvals by:

- liaising with referral authorities, and ensuring there is clear understanding of regulatory requirements and obligations
- engaging with local councils early in the process, to provide guidance and advice on the regulatory assessments and how these can support councils' decision making

• providing regular updates to the operator throughout the approvals process, and seeking additional information where required (building on better communication practices relating to *all* approvals).

Consistent with good regulatory practice, case managers will not act as a project advocate or investment facilitator (see below).

The definition of a 'strategic project' should not be overly prescriptive — a degree of judgment and discretion is warranted in determining when a case manager approach is likely to be a useful. Conditions for strategic significance that have been identified at this stage include:

- operations or proposed operations located in a Strategic Resource Area (to be defined through the strategic resource and land use planning approach outlined in box 9)
- economic significance (in terms of employment or output) at a state or regional level
- the demand–supply balance for the particular resource, and/or
- potential to supply a major infrastructure project at appreciably lower cost than alternative sources.

Further consultation with industry will help to develop and refine the approach.

Action 8

ERR is introducing case managers to act as a single regulatory approvals contact point for strategically significant and complex earth resources projects. Such projects could include operations that:

- are located in a Strategic Resource Area
- contribute significantly to employment or economic output at a regional level
- are complex in terms of approvals across government
- will deliver essential materials for a major infrastructure project, at an appreciably lower cost than alternative sources.

Industry development

In addition to improvements associated with ERR's regulatory management of strategic projects, DEDJTR is also refining its approach to industry development. Strategic resource and land use planning is one element of this. The department is pioneering a new approach

to facilitating investment in an under-tapped but geologically promising area in Victoria's west: the Stavely Project (box 10). This approach leverages government information and scientific expertise to lay the groundwork for major greenfield exploration and mining activity. Work of this kind signals Victoria is 'open for business', while ensuring there is effective engagement with the community and sensitivity to social and environmental issues. (Further opportunities to increase industry access to information and improve communications are discussed in section 7.)

Box 9 A new strategic resource and land use planning approach

In partnership with DELWP, DEDJTR has developed a new approach to strategic resource and land use planning. This approach is focused on enabling access to earth resources in geologically promising areas, supporting the efficient allocation of rights, and facilitating jobs and investment.

Key components include:

- completing the Extractive Resources in Victoria: Demand and Supply Study 2015 2050 to provide a robust evidence base to inform strategic resource and planning decisions
- identifying a range of instruments available within Victoria's planning system to secure strategic extractive resources in defined areas — Strategic Resource Areas, which offer good access to markets and are conducive to development subject to environmental and planning controls
- engaging with stakeholders from across government and local councils, interest groups and industry to inform the preparation of an overarching government strategy for extractive resources
- undertaking a pilot program to secure strategic extractive resources in up to two selected local government areas, which involves:
 - undertaking geological investigations to identify and map rock and sand resources
 - preparing a land scape inventory to identify key natural, cultural and existing land use values, and transport networks, to inform the selection of areas suitable for resource development
 - drafting strategic land use planning instruments to secure access in selected areas
 - engaging with the local community to inform the overall approach.

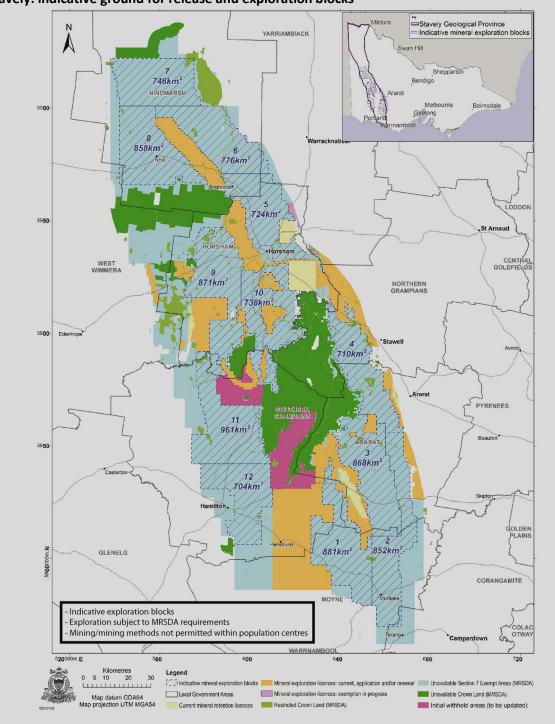
DEDJTR is working closely with the Victorian Planning Authority and local councils to inform decisions about the preparation of Precinct Structure Plans and other land use planning decisions.

A detailed economic assessment will better define the costs of sourcing extractive resources at a greatest distance from key construction markets. This will further inform strategic resource and land use planning decisions.

Box 10 The Stavely Project

The Stavely Project is a practical demonstration of DEDJTR's new strategic approach to investment facilitation. The Geological Survey of Victoria has identified the Stavely geological province in western Victoria as being highly prospective for discoveries of copper, other base metals and gold. Current work in the Stavely area has included the preparation of a landscape inventory and collaborating with local stakeholders to select ground suitable to release for future minerals exploration and areas that should be withheld.

Stavely: indicative ground for release and exploration blocks



Other arms of DEDJTR — specifically, Regional Development Victoria and Invest Assist — are also increasing their focus on fostering new opportunities in the mining and extractives industries. Professionals with industry-specific expertise will help to build connections across government (including at the Commonwealth level and with local councils), that will help new projects and expansions to get underway. Support includes:

- information about investment opportunities: helping proponents to find the most promising locations for new activity
- advice on infrastructure and utilities: information about service availability and cost, and how to obtain access
- assistance to identify and navigate applicable statutory and regulatory requirements (separate from those administered by ERR).

DEDJTR also has an interest in fostering innovation, and there is scope for the department to attract and encourage innovative flagship projects — providing an environment that is conducive to new ideas. This function requires a combination of investment facilitation, research and development support, and policy work to identify and remove undue barriers to the application of new technologies and practices.

A specific opportunity identified during this project has been the idea of fixed-term quarries: in some cases, instead of perpetual work authorities for extractives operations, an operator could be authorised for a defined time. This approach would focus greater attention on the post-quarry rehabilitation and development of the land. The policy work behind this idea is at a nascent stage and requires development. Steps required to advance this include:

- a detailed study of the economics of the extractives industry among other things, this would examine the business conditions under which a fixed-term quarry could be commercially viable
- identification of leading practices in Victoria and other jurisdictions for the rehabilitation and re-purposing of former quarries — including options to progressively enhance community amenity during the lifespan of the quarry
- legislative and/or regulatory changes to permit ERR to apply time limits to work authorities for extractives operations — these changes should be considered as part of a wider refresh of the MRSDA (section 7)
- collaboration with local councils to identify sites where a fixed-term quarry could be commercially viable and acceptable to the community, contingent on post-closure uses that would deliver local benefits.

Action 9

DEDJTR is tasking its Invest Assist unit with developing options for tailored investment facilitation services for the earth resources sector. This will include working with Victorian government agencies to help smooth the way for planned investments.

Local government

Local councils have a strong interest in promoting local economic development. In direct terms, the mining and extractives industries can make a strong contribution to jobs and investment in a community. The sector's output also enables development. The construction materials produced by the extractives industry are essential for the delivery of local infrastructure such as roads and community facilities.

There are obviously trade-offs associated with this: although there are economic benefits from earth resource operations, many people would be concerned about the prospect of a mine or a quarry in their backyard. Moreover, there are competing uses for land. Many resource-rich sites are also attractive for property development — although such developments would be adversely affected by a rise in the cost of construction materials due to insufficient access to extractives. Operators need to demonstrate to local communities that they will manage mining and extractive activities with due care for their surrounds — having regard to such considerations as environment, public safety, planning, heritage and local amenity. This applies not just to the lifetime of the mine or quarry, but also the site's rehabilitation and its after-use.

As section 6 outlines, there is scope to better equip decision makers under the planning system. But planning is only one aspect of the policy implications for local government. A central consideration for councils is service delivery, and their capacity to respond to growing local needs. It is harder for councils to meet the demand for local infrastructure as project costs escalate. DEDJTR, DELWP and local councils all have an interest in ensuring policy settings are appropriately aligned to enable the growth of local communities across Victoria.

Recommendation 3

DEDJTR should work with DELWP and local councils on models to facilitate the local supply of extractives resources as construction materials for local government infrastructure projects.

6 Improving coordination across the regulatory system

ERR acts as a 'lead agency' for regulating mines and quarries. As described in section 2, there are many regulators with an interest in mining and extractives activities; ERR has responsibility for managing relationships with these regulators so that all regulatory objectives can be effectively accommodated. This is far from a simple task, and there have been past episodes of procedural breakdowns and regulatory failures (box 11). But ERR has made significant progress, and today's institutional arrangements are far better suited to the complex environment that ERR operates in.

Box 11 The Hazelwood Mine Fire Inquiry

In February 2014, a fire broke out at the Hazelwood mine — it took 45 days to extinguish, with smoke and ash cast across Morwell and its surrounds. It was the Latrobe Valley's largest and longest running mine fire. An independent inquiry into the mine fire made 18 recommendations, many of which were directed to the Victorian Government and its agencies.

With regard to regulatory oversight, the inquiry pointed to 'silo mentalities' among the two key regulators, ERR and the Victorian Workcover Authority (VWA, now WorkSafe Victoria):

In the Board's view, both the VWA and the Mining Regulator [ERR] had statutory powers enabling them to influence and enforce compliance with fire prevention practices at the Hazelwood mine. However, regulation of the mine was undermined by:

- the silo mentality adopted by the Mining Regulator and VWA in carrying out their functions
- the passivity with which each agency has pursued its supervision of the Hazelwood mineby shifting complete responsibility for dealing with fire risk to GDF Suez.

The Memorandum of Understanding between the Mining Regulator and VWA attempts to recognise areas of overlapping responsibility and define each agency's role in regulating each area. If the Mining Regulator and VWA had approached their respective roles in the consultative manner contemplated by the Memorandum of Understanding, this may have resulted in overlapping responsibilities, but as noted by Counsel Assisting, 'that is far preferable to there being a gap.' The risk of fires like the Hazelwood mine fire that occurred in February and March 2014 slipped through the cracks between regulatory agencies. This reality must be confronted if similar incidents are to be avoided in the future.

Source: Hazelwood Mine Fire Inquiry Report 2014.

Building on ERR's work in recent years, this report outlines further enhancements to how ERR interacts with other regulators. These will simplify regulatory processes, boost the

regulator's capability and provide greater certainty for industry. The measures discussed in this section are:

- better integration between the ERR approvals process and the planning system
- a senior officials' group to address complex project approvals and system-wide risks
- improved engagement at the staff level across regulators.

ERR approvals and the planning system

The incorporation of different regulators into ERR's approval processes as referral authorities is marked by one key exception: approvals under the planning system. The planning system is governed by the *Planning and Environment Act 1987* (P&EA). ERR has no responsibility for the planning system: DELWP is the administering department, and local councils are commonly the relevant decision maker.

A work plan cannot be approved until planning approval (where required) is granted. However, the work plan is material to consideration of planning issues as it defines the operations on site and the management of risks. Hence, since 2012, the Victorian Planning Provisions (under the P&EA) and the MRSDA require 'statutory endorsement' of work plans — essentially a pre-approval stage for a work plan, once ERR's approval functions have been substantially carried out, pending the granting of planning approvals (figure 3). An operator cannot apply for a planning permit until statutory endorsement is granted. And the work plan can only be approved once a planning permit, if needed, is granted.

The process is different again where an operator chooses, or is required, to prepare an Environment Effects Statement (EES) under the *Environment Effects Act 1978* (box 12). For extractives operators, s. 77T of the MRSDA provides that a planning permit is not required where an EES has been prepared and assessed and a work authority is consequently granted. Similarly, for mining operators, s. 42(7) provides that a work plan does not require a planning permit in the event of an EES. There are also carve-outs for variations to approved work plans (s. 77HC for extractives, s. 42A for mining): in many cases, where an EES was prepared for the work plan, a variation to that work plan does not require a planning permit.

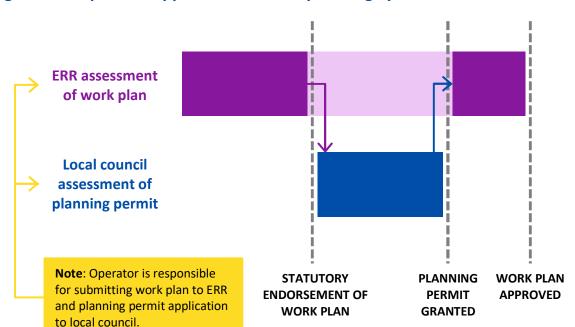


Figure 3 Sequential approvals: ERR and planning system

Box 12 When is an EES required?

The EES process is intended to focus on projects capable of having a significant effect on the environment. Circumstances under which the Minister for Planning might require an EES include where:

- there is a likelihood of significant state-wide or regional adverse effects on the environment
- there is a need for integrated assessment of potential environmental effects (including economic and social effects) of a project and relevant alternatives
- normal statutory processes would not provide a sufficiently comprehensive, integrated and transparent assessment.

The EES is not itself an approvals process; it is an analysis of the potential effects of a proposed project. The Minister for Planning assesses the proposal and its outcomes, and provides this advice to relevant decision makers including other Ministers, departments, agencies and local councils. In their approval processes, each decision maker is required to have regard to the findings of the EES.

Source: DELWP 2006, Ministerial guidelines for assessment of environmental effects under the Environment Effects Act 1978.

This sequence was intended to support effective decision making by local councils about planning conditions. Many local councils would have little exposure to earth resources projects, and would generally not have the same technical expertise as ERR and referral authorities. Statutory endorsement should satisfy local councils that a robust, evidence-

based assessment of risks and controls has been undertaken. These on-site matters do not require further review by council. Moreover, statutory endorsement also enables streamlined decision making at the planning stage: there is no need for repeat referral to the same agencies already involved in ERR's assessment.

In practice, the sequential approach has had some drawbacks.

- In some cases, proposals that satisfy all regulatory requirements under ERR's
 approvals process are rejected at the planning stage. This means that operators incur
 significant upfront costs in the preparation of a work plan (and the relevant technical
 reports that comprise that document), without any formal avenue to obtain early
 advice from local councils on the likelihood of problems obtaining planning approval.
- Industry has also expressed concern that local councils on occasion 're-prosecute'
 matters already addressed through ERR's statutory endorsement process. In one
 example, a local council imposed conditions on blasting on site conditions that
 deviated significantly from industry standards and ERR's judgment of the risks.

There are some material changes that will clarify the interface between ERR's approvals processes and the planning systems, and provide greater flexibility for industry. This report discusses:

- providing operators with the ability to choose between a concurrent or (the current) sequential approval process: the concurrent pathway would allow an operator to lodge with local council an application for a planning permit at the same time as submitting to ERR a work plan for approval.
- improved guidance on the role of ERR and approval processes under the MRSDA
- the possibility of instituting the Minister for Planning as the responsible authority for planning decisions for mines and quarries in Strategic Resource Areas.

Work on these proposals will require close cooperation between DEDJTR and DELWP. The engagement to date has been positive, with broad agreement on the opportunities to make the system work better.

Concurrent approvals

As noted, the introduction of the statutory endorsement process for approving work plans was a significant change to the regulation of earth resources: and one with reasonable grounds to support it. It makes sense for ERR to first complete its substantive assessment of a work plan, ensuring all on-site aspects are appropriately defined and risks are managed, before a council considers the planning implications. This ensures that the planning officer

has a sufficient level of detail about a mining or extractives operation proposal to make an informed decision. In principle, it should mean that operators are not required to re-work the same information for presentation to different agencies.

Notwithstanding the intrinsic advantages of the sequential approach, it has some drawbacks — including longer timeframes for getting approvals. In some cases, approvals could be streamlined by applications being considered concurrently by ERR (along with referral authorities) and local councils.

- For low-risk proposals, where the operation is of relatively small scale and is managed according to common industry standards and practices, there is less need for a detailed work plan to guide at least the land use aspect of planning approvals processes. A standard risk management plan (section 5) would further simplify assessments under the planning system.
- An 'early no' is also enabled by concurrent processes: without requiring the full work
 plan (and all relevant technical reports) to be developed as is the case now, an
 operator would be able to get an early read from local councils if their project is
 unlikely to obtain planning approval in particular, if the proposal is inconsistent
 with local planning schemes for land use.

There would be merit in introducing greater flexibility about when operators may apply for a planning permit. They should have the choice between lodging concurrently or sequentially, depending on what they consider would deliver the timeliest decision and best meet their operational needs.

The policy work to enable these will require ongoing collaboration between DEDJTR and DELWP. This report does not prescribe the pathways required, but suggests a couple of changes that should be considered as a starting point for analysis.

- The Victorian Planning Provisions (clauses 52.08 and 52.09) could be amended to
 enable an application for a planning permit to be submitted without a statutorily
 endorsed work plan. In cases where an application is not accompanied by a
 statutorily endorsed work plan, the responsible authority for the planning decision
 would provide a copy of the application to ERR as a referral authority under the
 P&EA. This means that ERR's approval of the work plan would be required before the
 planning permit could be granted.
- The MRSDA could be amended, such that that the statutory endorsement process (Part 6B) for assessing work plans or variations does not apply in cases where a planning permit application has already been lodged, and the responsible authority for the planning decision has referred the application to ERR. In these cases, ERR's

assessment of the work plan or variation would proceed according to Part 3 (for mining) and Part 6A (for extractives).

A key consideration for successfully enabling concurrent approvals will be developing processes for local councils to obtain the necessary information that would otherwise be available to them through a statutorily endorsed work plan, while minimising the administrative requirements and reporting burdens for industry.

Recommendation 4

DEDJTR should work with DELWP to provide operators with the choice of lodging their planning permit application with local council concurrently with lodging their work plan with ERR for approval. This option for concurrent approvals would sit alongside the current sequential approvals process. Options for the departments to explore include amendments to the Victorian Planning Provisions and the MRSDA.

Clearer guidance

ERR's approval processes and local councils' decisions under the planning system are guided by different legislation. Hence, there can be understandable uncertainty as to the responsibilities and functions of different decision makers in the combined approvals process for earth resources. Moreover, while there is only one ERR, there are 79 local government administrations in Victoria — with their own staff, their own priorities, and their own processes. Capability and understanding of the regulatory system varies enormously.

In consultations as part of this project, local council representatives have expressed strong interest in better understanding ERR's processes and how ERR's capabilities can usefully inform planning decisions. ERR has previously run information sessions with planning officers in local councils. More can be done.

An immediate action is to bolster ERR's engagement with local councils, and provide targeted guidance to better inform planning officers on the regulatory assessments made by ERR and referral authorities. Professional development is also an avenue — a targeted module for planning officers could be delivered by a recognised education and training provider in conjunction with ERR and local councils. Collaboration between ERR and local councils will become more important with the introduction of the option for concurrent approvals: ERR and local councils will need to work in tandem to ensure the respective approvals processes remain aligned and that each can inform the other.

DEDJTR is working with DELWP to reinforce this guidance with a Planning Practice Note. DELWP issues Planning Practice Notes to provide advice on planning issues, including around interactions between different regulatory processes. In addition, a joint statement from the Minister for Resources and the Minister for Planning to clarify accountabilities would support effective decision making by both ERR and local councils and provide certainty for industry and the community.

Action 10

ERR is building on past work to provide better guidance to local councils and will increase its engagement with councils to improve understanding of approvals processes under the MRSDA. ERR will ensure relevant information on applications is shared between ERR and local councils to enable well-informed approvals decisions.

Recommendation 5

DEDJTR should work with DELWP to develop and implement a Planning Practice Note to clarify the circumstances under which a variation to a work plan could require a change to an existing planning permit or a new planning permit.

The Minister for Resources and the Minister for Planning should consider releasing a joint statement to provide clarity about the interface between ERR's approvals processes and the planning system.

Strategic planning approvals

While local councils are generally the responsible authorities for some planning decisions, in some cases this power rests with the Minister for Planning. This is commonly the case for selected strategically important locations and sites: for example, Fishermans Bend, the Port of Melbourne or large-scale developments in the central business district.

An option that was raised in consultations for this project is to apply this approach to proposals for extractives operations in Strategic Resource Areas (section 5). This would mean that the Minister for Planning, rather than local councils, would be the responsible authority in the case of proposals in selected priority areas for development. This is consistent with Plan Melbourne. As box 13 explains, the Plan identified the role of the planning system in ensuring extractive industry resources — essential to the ongoing development of a growing state — can be used without unduly affecting local amenity. Effective strategic planning is essential, including well-designed buffer areas and responsible sequencing of extraction and subsequent in-fill development.

Box 13 Plan Melbourne and planning for development

Plan Melbourne was released in March 2017. Direction 4.5 of Plan Melbourne focuses on Melbourne's green wedges and peri-urban areas. The Plan prioritises a range of uses in Melbourne's periphery, including for earth resources (emphasis added below).

As Melbourne grows, planning for Melbourne's green wedges and peri-urban areas is required to:

- protect biodiversity assets, including national and state parks, Ramsar wetlands and coastal areas
- support existing and potential agribusiness activities, forestry, food production and tourism
- protect major state infrastructure and resource assets, including water supply dams and water catchments and waste management and recycling facilities
- support renewable energy sources such as wind and solar farms
- protect extractive industries
- provide a recreational resource, which contributes to public health outcomes for all Victorians.

These valued features, assets and industries should be prioritised before other land uses.

Future growth in the green wedges and peri-urban areas will be managed to protect productive land, strategic economic resources, heritage and biodiversity assets, while accommodating additional housing and employment in established towns in the outer peri-urban areas that have the capacity for growth. Many towns in green wedges have limited growth potential.

Consistent with Plan Melbourne and the Regional Growth Plans, planning for green wedge and peri-urban areas should:

- define and protect areas that are strategically important to the metropolitan area and the state, for the environment, biodiversity, landscape, open space, water, agriculture, energy, recreation, tourism, environment, cultural heritage, infrastructure, extractive and other natural resources
- protect and manage the value of green wedges consistent with green wedge management plans
- avoid development in locations where there is risk to life, property, the natural environment and infrastructure from natural hazards such as bushfire and flooding
- accommodate additional housing and employment in established towns that have the capacity for growth
- provide for non-urban breaks between urban areas.

Source: DELWP 2017, Plan Melbourne.

It is a challenging task to design planning conditions that will both:

- meet the needs of and respond to the circumstances of rapidly developing local communities
- support Victoria's development through low-cost access to essential earth resources.

Decision making in this space requires a high level of technical expertise and judgment. In some cases, planning officers in local councils may not be sufficiently equipped to make timely, consistent and informed decisions. Elevating responsibility to the Minister for Planning for this specific but significant category of earth resources projects within proposed Strategic Resource Areas would alleviate pressures within the system.

Amending the planning approvals process with respect to Strategic Resource Areas is squarely in the realm of DELWP's policy responsibility, and there is considerable policy work required to build the case for this approach. In particular, guidelines will be needed to define the relevant areas and the criteria to establish their strategic significance. Preliminary discussions between DEDJTR and DELWP on this proposal have been encouraging, but it is important to keep expectations in check. While a streamlined process for projects in Strategic Resource Areas would undoubtedly be helpful, there is still a legitimate community interest that must be respected. The overarching consideration is one of balance.

Recommendation 6

DEDJTR should work with DELWP to develop guidelines for Strategic Resource Areas, to support the option of instituting the Minister for Planning as the Responsible Authority for planning approvals for operations located in Strategic Resource Areas.

Engagement at senior levels of government

Given the number of regulators with an interest in earth resources projects, it is inevitable that some projects will become 'stuck' in approvals processes — different regulators with different responsibilities focusing on different risks. Finding a path forward — whether to an approval (with the right conditions) or a refusal — can be difficult and time-consuming. It is necessary to have practices and processes for managing these complex cases.

There already exist some arrangements to facilitate problem solving.

• ERR has memoranda of understanding with different referral authorities, which clarify roles and responsibilities on a bilateral basis.

- The Earth Resources Regulators' Forum (established as a consequence of the Hazelwood Mine Fire Inquiry) provides a channel for building understanding across the regulatory system.
- Statements of Expectations issued by Ministers to their respective regulators —
 also emphasise the need for cross-regulator collaboration, and can focus effort on
 improving practices and processes.

To augment these arrangements, DEDJTR has convened a new senior officials' group to provide a clear pathway for escalating disputes about specific approvals. The Earth Resources Approvals Coordination Group (ERACG) comprises the senior executives (relevant chief executives, secretaries and deputy secretaries) overseeing the main regulators involved in earth resource approvals. It borrows from a lead agency framework applied in Western Australia for managing approvals of major mining, oil and gas approvals.

ERACG convened for an inaugural session in September and met again in October 2017. Following these, it will meet on quarterly basis. ERACG has a remit to:

- resolve bottlenecks and manage approvals to improve timeframes for earth resources projects
- consider policy and process options to streamline approvals across government for earth resource projects
- provide advice about opportunities to improve the overarching legislative and regulatory framework for earth resource projects.

Industry participants have expressed interest in the operation of ERACG. It would be useful for ERR to communicate directly and regularly with key stakeholders on ERACG's processes and strategic decisions. While ERACG does not have a direct industry interface (as it is focused on strengthening cross-regulator relationships), feedback from industry on the performance of the regulatory system and the challenges facing operators will be useful.

ERACG operates within the parameters of existing regulatory obligations: each regulator represented has its own statutory objectives, and its own responsibilities towards meeting community expectations. ERACG's purpose is to improve coordination across the regulatory system for earth resources — in doing so, it will help all regulators to better carry out their work.

Action 11

DEDJTR has convened an Earth Resources Approvals Coordination Group, comprising the senior leadership of key regulators involved in earth resource approvals. The Group will meet quarterly with a remit to:

- resolve bottlenecks and manage approvals to improve timeframes for earth resources projects
- consider policy and process options to streamline approvals across government for earth resource projects
- provide advice about opportunities to improve the overarching legislative and regulatory framework for earth resource projects.

Cross-regulator staff engagement

Well before matters are escalated to Ministers and senior executives, the first port of call for any regulatory matter is at the staff level: licensing and approvals officers, inspectors and investigators in ERR, dealing with their counterparts in referral authorities and local councils. Relationships across agencies tend to be transactional — staff routinely don't have ongoing points of contact, making it hard to understand the perspectives of those working in other agencies. Building better relationships across regulators at the staff level will ameliorate the risk of inter-agency disagreements and improve coordination across the regulatory system.

As noted, there are already existing arrangements to build closer working arrangements between regulators. For example, memoranda of understanding are useful guides for staff — especially new starters — in defining the roles and responsibilities of different agencies. There is more that can be done, particularly to leverage existing commonalities in the needs and activities of different regulators.

A relatively simple, but potentially quite effective, proposal that emerged during the policy workshops undertaken for this project was for joint training and staff secondments. Regulatory staff from multiple agencies involved in the workshops expressed considerable interest in these arrangements. Policy officers from DEDJTR and other departments could also be included — this would strengthen the translation of policy design and development into regulatory application.

Departments and agencies conduct in-house training programs, send staff to courses offered by training providers, or commission bespoke training modules. Among different regulators, there is likely to be much common ground in the types of training offered: for

example, inspection practices for authorised officers. There is also wide transferability of skills, making secondments and short-term 'job swaps' an attractive option. Indeed, the capability of regulatory staff is only likely to increase with greater exposure to the practices of different regulators.

The Earth Resources Regulators' Forum is best placed to discuss how best to make joint training and secondment opportunities a reality.

- An initial priority would be for ERR and its referral authorities to identify where
 existing training programs could be offered or delivered jointly, with staff from
 multiple agencies working together.
- Beyond this, the Forum (or a working group of staff from across agencies) should identify new training modules that two or more regulators may conduct jointly.
- The Forum should also consider secondment opportunities including job swap arrangements - with a priority focus on identifying opportunities across regional offices.

Recommendation 7

ERR should consult with all referral authorities, DEDJTR's Earth Resources Policy and Programs branch, and any relevant departments on opportunities for joint training and secondment programs. ERR should table options for consideration by the Earth Resources Regulators' Forum.

7 Building a modern regulator, ready for the future

The mining and extractives industries understand the need for regulation. Their willingness to engage in this project reflects an appetite to improve how regulation is applied.

Many operators in this sector operate outside Victoria, and a consistent refrain is that Victoria's regulatory system lags performance in other jurisdictions. While there is no authoritative benchmarking data for the extractives industry, an international measure of regulatory performance in the mining industry reveals that Victoria falls well short of leading standards (box 14).

Box 14 Fraser Institute ranking of mining regulation performance

The Fraser Institute is an independent research organisation based in Canada. As part of ongoing work with the mining industry, it compiled data on the performance of mining regulators in several jurisdictions with 'broadly comparable' mining and environmental policies (various states/provinces of Australia, Canada and the US, as well as Finland and Sweden).

According to its survey results, Victoria's regulatory system performs poorly relative to other Australian states and internationally — routinely ranking at or towards the bottom. Western Australia and South Australia were considerably better performing.

Performance on areas of the permitting process

	Percentage of respondents receiving necessary permits in six months or less	Percentage of respondents indicating that time to permit approval had lengthened over the previous 10 years	Percentage of respondents indicating that timelines were met more than 60% of the time	Percentage of respondents indicating transparency encourages, or was not a deterrent, to investment	Percentage of respondents who were highly confident or confident that they would receive necessary permits
Victoria	13%	75%	17%	38%	38%
Ranking (out	t of 21 jurisdictions	5)			
Victoria	21st	20th	21st	19th	21st
SA	10th	17th	14th	12th	7th
WA	16th	3rd	3rd	1st	3rd

Source: Green, K.P. and Jackson, T. 2017, Permit time for Mining Exploration in 2016, Fraser Institute.

As discussed, the challenges in earth resource regulation are not exclusively ERR's — rather, it is about how the regulatory system as a whole operates. That said, ERR has a major role to play in driving regulatory improvement, and the actions and recommendations outlined in this report will better enable ERR to execute its responsibilities.

This section focuses on ERR and its journey to become a modern regulator. It discusses:

- **people and culture**: what is the capacity and capability of ERR's staff, and how can they be better supported?
- **systems and communications**: what are the tools and processes that ERR has in place to manage information, and engage with industry and the community?
- **policies and processes**: what is ERR's strategic capability to monitor performance, oversee internal practices, and sustain momentum for continuous improvement?
- **institutional and governance arrangements**: what are the long-term settings needed for ERR to respond effectively to changing industry conditions, community expectations and regulatory pressures?

People and culture

In consultations for this project, the strong message received from ERR's staff is that they enjoy working with their peers and they enjoy the subject matter they deal with. Many of the staff were attracted to working at ERR due to the regulatory issues that the regulator deals with, the economic value of the mining and extractives industries, the opportunity to make a difference to Victoria (particularly regional Victoria) or the for the opportunity to expand their regulatory skills in a new field.

This is a positive starting point for ERR, but staff also pointed to many challenges. These issues were raised by multiple people at different levels and locations. They include:

- a lack of clarity regarding staff roles in particular, a lack of understanding of the statutory obligations of their roles (where relevant)
- exhaustion due to large work-loads. Staff reported working long hours due to insufficient resources to deliver required outputs, including statutory timelines.
 Some staff were working across multiple roles as vacancies had not been backfilled when staff were acting in other roles
- limited autonomy and decision-making powers. Inspectors advised they were unable
 to issue notices without approval from senior management and DEDJTR Legal. Staff
 noted they felt disempowered as decision-making powers were elevated to
 management

- 'disconnection' between staff in the regional offices, and their metropolitan colleagues and senior management
- uncertainty about how staff will be affected by the proposed move of ERR to the Latrobe Valley
- insufficient processes to document corporate knowledge. The corporate knowledge
 is held by individuals which results in underutilisation of staff to explain processes to
 new staff (instead of performing high value tasks) and corporate 'brain drain' when
 staff depart
- historically poor collaboration between ERR and DEDJTR's Earth Resources Policy and Programs branch (ERPP), which has significant implications for the implementation of new policies and legislative amendments by ERR.

Work has commenced on leadership and culture development, building capability and developing new operating processes. However, it has been slow and much work is still required. ERR needs dedicated resources to develop practical tools that can quickly be deployed to assist staff to perform their roles with confidence. This is intrinsic to any change management process.

ERR's staff have identified a range of useful steps for ERR to advance, with a key focus on better training and support for staff.

- Better induction is a priority. All new staff (VPS staff and contractors) should be appropriately inducted into ERR, including:
 - DEDJTR's (existing) induction program
 - ERR-specific induction
 - induction specific to the team and role.
- Similarly, improved training and support will boost ERR's performance. Staff reported a lack of availability and access to external technical training opportunities relevant to their roles.
 - There are opportunities to learn from and work with other regulatory agencies (section 6) for example, capability building on what being a risk-based regulator looks like.
 - In consultations for this project, industry representatives expressed willingness to offer site visits and other educational sessions to boost practical knowledge of the mining and extractives industries.
- ERR has committed to offering summer internships to students in relevant engineering and geoscience courses at universities and TAFEs. This will help to build

the reputation of ERR as a graduate employer of choice and improve collaborative opportunities with the tertiary education sector, especially in regional Victoria.

These initiatives can be enacted relatively quickly, and deliver enduring benefits for ERR and its staff.

Improving workplace culture is a long-term project — it is a transformation that must be modelled from the top down, but also shared from the bottom up. Moreover, while it takes time for improved culture to take root, it can be very easy to damage progress.

- Improved communication from ERR's leadership team would ensure there is a consistent understanding across the organisation of ERR's role and purpose, as well as its strategic direction.
- This project has already helped build new relationships between ERR and ERPP, and
 this should continue with the support of the leadership team. This will support the
 development of SOPs and the implementation of new policy and changed
 legislative/regulatory settings over time into ERR's regulatory functions.
- Ongoing consultation with ERR staff about the pending move to the Latrobe Valley
 will ensure the Victorian Government's decentralisation objectives can be met
 without impairing the capacity and capability of the regulator.
- More work is required to build a culture of evaluation and reporting there will be increased performance-based reporting requirements on all regulators upon the commencement of the new Statements of Expectations framework from 2018.

Action 12

ERR is fostering the long-term supply of ERR technical staff by offering internships for students in relevant tertiary education programs (university and TAFE). The internship program is focused particularly on placements for students to ERR's regional offices.

Recommendation 8

ERR should refine and extend its induction and training programs for staff. Induction and training activities should focus on:

- the role of ERR, its regulatory functions and how these meet the community's expectations
- what the earth resources sector does and how it works particularly through site visits
- the wider earth resources regulatory environment, including the roles of each referral authority, and how ERR interacts with them
- ERR's regulatory processes and systems, and how ERR interacts with industry.

Recommendation 9

ERR should embed stakeholder and community engagement functions as a core responsibility of all staff. This would involve:

- working with industry groups on site visits and information sessions to inform practical
 experience of the nature of extractives and mining operations, with a view to better
 targeting regulation and facilitating industry compliance
- guidance and training on the attributes of a well-performing regulator, including how to apply objective and evidence-based regulatory decision making while maintaining constructive relationships with the entities being regulated.

Systems and communications

A major pain point for industry is poor access to and availability of information. Information about how to prepare a work plan. Information about how their approvals are tracking. Information about different regulatory conditions across Victoria: what are the key issues for native vegetation, watch catchments and Aboriginal cultural heritage (among others) at particular locations.

The wider community is no better informed. Some of the staff involved in this project started as earth resources novices, and could not rely solely on publicly available material to gain a comprehensive understanding of how the regulatory system works. Good quality information underpins confidence in the regulatory system, and can dispel doubt and suspicion.

Online platforms should make it easier to disseminate information and facilitate regulatory compliance. But the systems and services that ERR has in place are not as effective as they should be in communicating with industry and the community.

- RRAM is heavily criticised. Even among those who see merit in the system, there is
 agreement that the user interface is clunky and there are gaps in functionality.
- DEDJTR's Earth Resources website (one part of which is focused on ERR) is old, hard to navigate and includes out-of-date material.
- Internal records management practices are improving, but changes in practice still need to be bedded down.
- Better communications practices at the staff level can also make a difference to how ERR is perceived by industry and the community.

Work is in train to update RRAM and the website. Further improvements are required to deliver the actions and recommendations discussed in this report.

RRAM (Resource Rights Allocation and Management)

RRAM is not merely a system, but an ongoing project: to develop a user-friendly platform for managing various regulatory applications (including licences and work plans) and communications between ERR and industry. The full potential of the system is a long way from being realised.

Consultations for this project highlight that RRAM is a widespread source of frustration: for operators and for staff within ERR. Fundamental design problems have crippled the system's effectiveness. For example:

- restrictions on file sizes for attachments, which makes it impossible for some operators to upload detailed work plans or supporting documentation
- differences between external and internal interfaces, which means that some information entered by operators is not seen by the regulator
- no real-time tracking of applications, which means that industry users have no idea
 of how their applications are progressing.

There is no statutory requirement for operators to use RRAM. As a consequence of the system's deficiencies, many operators (or their agents) avoid using RRAM. Instead of digital lodgement, some applications and documentation are submitted by email or in hard copy form by post or in person. This poses additional challenges for ERR in terms of records management (see below).

Some operators and ERR staff have noted RRAM has its advantages. A sentiment shared by many can be summarised as 'it isn't so bad once you know how to use it'. But a platform of this kind shouldn't require extensive training and long hours of trial-and-error: a user-friendly system should be accessible to even the most technologically inexperienced. At a minimum, simple and accurate guidance is required to help users navigate the system.

ERR has a dedicated team leading work to improve RRAM. And there has been some useful progress made in recent months. For example:

- applicants can now upload multiple files
- files uploaded in error can be deleted (without needing to 'overwrite' them with another file)

 the user interface has been adjusted to present data more logically for ERR assessment.

In addition, ERR is now sending weekly emails to operators updating them on the progress of applications they have submitted to ERR. The updates provide a 'best estimate' based on known information of when assessment of the application is expected to be finalised. The email updates are an interim measure, pending the introduction of real-time tracking of applications — allowing operators to get a status update at any time from RRAM.

These small, worthwhile steps are just the beginning. There is much more still to be done.

RRAM relies on a customer relationship management service provided by Salesforce, a major supplier of commercial software services. Salesforce also supplies the backend to other applications used by DEDJTR — including the Global Engagement Management System (GEMS), a far larger and more widely used platform than RRAM. Since the start of the Continuous Improvement Project, ERR's RRAM team has been bolstered by support from DEDJTR's business systems experts, and Salesforce has also committed to improving the user experience with RRAM. This is encouraging, and offers the best chance yet for unlocking all of RRAM's benefits.

This report offers no commentary on the IT underpinnings or the technical work needed to make RRAM work better. However, if RRAM is to be retained, it requires far greater flexibility and responsiveness than has hitherto been demonstrated. This report includes many procedural improvements and regulatory changes, which RRAM will need to be capable of accommodating. If it cannot, then RRAM should be dropped: the system's limitations must not be the proverbial tail wagging the dog.

Action 13

ERR is delivering practical improvements to the Resource Rights Allocation Management system (RRAM), drawing on the internal systems expertise within DEDJTR. Improvements in RRAM's flexibility and functionality will support delivery of the regulatory improvements proposed through this project.

Action 14

ERR is now sending a weekly email to operators to advise them of the status of any applications they have lodged. Over the coming months, real-time updates for industry will be built into RRAM.

Website

The Earth Resources website serves the whole Resources division of DEDJTR — not just ERR. It hosts considerable material relating to Resources' policies and programs, including the digital mapping platform, GeoVic; analysis of prospectivity across Victoria; and details about grant programs, transition programs, and investment facilitation activities.

The Earth Resources website is based on architecture that predates DEDJTR's formation in 2014. It does not meet today's needs: usability is poor, integration with the main departmental website is limited, and some information is simply out of date.

DEDJTR has already identified a need to overhaul the Earth Resources website: work is underway to progress this, adopting a user-centric approach. As part of that work, there is scope to better support ERR's regulatory activities and facilitate industry compliance.

- All guidance material that this report has proposed should be made available online.
 The website is a primary destination for industry, and it should provide them with the information that enables them to satisfy their regulatory obligations.
- The website requires greater emphasis on the community and its expectations. This means improving community understanding of the mining and extractives industries, and their economic contribution. It also means explaining the government's regulatory objectives and how ERR carries those out.
- Referral authorities and local government are also likely to find benefit in a website that clearly explains ERR's responsibilities and processes, and the operation of the regulatory system as a whole.

Building on the GeoVic mapping platform, the website should help industry and the community to understand the different regulatory issues that apply across different parts of Victoria alongside existing information about prospectivity. The website should offer a transparent and consolidated repository of relevant information from across government: biodiversity, water catchments, Aboriginal cultural heritage, native title, and more. Better integrated information will both facilitate investment in the sector and improve awareness of regulatory obligations.

Recommendation 10

DEDJTR should revamp the Earth Resources website to ensure it provides up-to-date information in a usable format for industry, referral authorities and the community.

As part of this refresh, ERR should produce guidance for industry on the major regulatory issues for mining and extractives operators in each region of Victoria. This should include:

- environmental considerations, including native vegetation and catchment management
- an overview of Aboriginal heritage claims
- the status of native title agreements.

DEDJTR should explore how it can leverage its existing GeoVic capability to overlay key regulatory information on interactive maps for use by industry and the community.

Records management

ERR does not have consistent processes around how it handles and stores documents. As one example, there are many ways in which ERR currently receives work plans: material can be submitted through RRAM, other times by email, and sometimes delivered in hard copy form. There is not a problem *per se* in receiving material in multiple formats: ERR's responsibility is to ensure information is managed and made available in a consistent way across the organisation.

ERR knows that records management is an issue requiring attention: poor practices undermine transparency and accountability. More fundamentally, they make it harder for the regulator to do its job on a day-to-day basis.

Aligned with department-wide efforts, ERR has been taking steps to improve performance on records management. New policies are being developed on how ERR uses DEDJTR's primary records management platform, *TRIM*. These are expected to take full effect from early 2018.

A specific issue raised in consultations for this project is that RRAM is not currently equipped to act as an authoritative records management tool. RRAM and TRIM do not speak to each other. As part of the ongoing work around RRAM improvement (discussed above), this issue should be explored, drawing on DEDJTR's expertise with other systems (for example, GEMS).

Communicating better

ERR staff are aware of the frustrations that many in industry and the community feel about their interactions with ERR. They are on the front lines.

Dealing with people is a core function of any regulator: an approvals officer responding to a query from an operator about the status of their work plan application, an inspector on site talking with the manager of a mine, or an executive explaining the regulator's role in a presentation to a community group. All staff throughout through ERR are, to some extent, the public face of the regulator. Hence, staff should have access to training that enables them to deal with industry and community queries with confidence.

Better communication practices can be demonstrated across multiple channels — not just RRAM and the Earth Resources website, but also wider media. For example, other regulators have developed active social media profiles that build community understanding of regulatory processes and foster improved compliance by industry. Social media is a relatively low-cost way to broadcast messages widely, but can also be used well to target particular audience segments. Online engagement should be a part of ERR's toolkit: an addition to, not a replacement for, existing practices.

The improvements to systems and policies discussed above will make a significant difference to how ERR communicates with industry and the community. These are geared towards transparency, clarity and productive collaboration to assist operators to meet their regulatory obligations. Better stakeholder engagement is not just the responsibility of one part of ERR, but should be core business for everyone. This is essential to continuous improvement.

Action 15

ERR has committed to improve its stakeholder engagement capabilities across the organisation. This includes how ERR:

- shares guidance about ERR policy and operational changes to industry and the community
- supports compliance and educates industry on its regulatory obligations
- receives and manages industry feedback.

Policies and processes

As attachment 1 outlines, ERR has made several changes over recent years to improve its performance. To support its ambition to be a contemporary regulator, ERR has developed strategies that contribute to capability, capacity and culture. Key pieces of work that ERR has developed include:

- client service standards
- regulation performance reporting, published on a quarterly basis
- · a stakeholder engagement strategy and implementation plan
- a compliance strategy and risk register of all sites across Victoria.

This work has drawn from best practice in other regulators, and is well aligned with continuous improvement of the regulatory system (box 15). The overall direction of this material is sound. There is well-advanced work within ERR to continue to embed this in the daily practices of the organisation.

Changes to policies and strategies will inevitably be required over time to ensure they remain up to date. The critical ingredient for ensuring the currency of ERR's policies and processes is having sufficient internal capacity and capability focused on the long-term direction of the regulator.

The regulatory improvements outlined in this report can yield a significant increase in ERR's operational performance — but the full benefits will not be released unless there is a strategic focus on change management. Without dedicated resourcing to support reform implementation, a culture of continuous improvement cannot be realised, and ERR's ability to be a best-practice regulator will be compromised.

Recommendation 11

DEDJTR should ensure that ERR has dedicated capacity and sufficient capability to enable the implementation of the changes outlined in this report. Implementation will require ongoing reporting on performance and delivery. A key focus should be on change management: ensuring that staff are supported to apply the regulatory improvements outlined in this report, and that a culture of continuous improvement is embedded in ERR.

Box 15 Modern Regulator Improvement Tool

ERR uses an organisational assessment framework developed by the Australian Environmental Law Enforcement and Regulators Network: the Modern Regulator Improvement Tool. This tool measures 12 qualities of a modern regulator, covering various aspects of how it regulates (external performance) and operates (internal performance). In summary, these are:

- problem solving approach
- risk-based compliance planning
- corporate plan and contribution
- · stakeholder and community engagement
- · regulatory philosophy and approach
- culture and leadership focus
- training and procedures
- quality assurance and review functions
- learning with others
- · activity and visibility
- performance reporting
- governance and oversight.

Training & Procedures Outstanding And Procedures

In 2017-18, ERR has chosen to place the greatest focus on training and procedures, and culture and leadership. However, consistent with the ethos of continuous improvement, there is more ERR can do on all fronts.

Source: AELERT 2016, Modern Regulator Improvement Tool.

Institutional and governance arrangements

This report has focused principally on process and practice changes that will strengthen ERR's capability and improve the operation of the regulatory system. These short- to medium-term actions will be instrumental to rebuilding industry and community confidence.

The longer-term effectiveness of the regulatory system relies on it being responsive and flexible: best practice regulation is not a fixed destination, but a constantly evolving frontier. To that end, the institutional and governance arrangements underpinning ERR and the overall regulatory system should be reviewed and refreshed over time. This includes:

 ensuring the legislation governing ERR and defining the regulatory obligations of industry is fit for purpose applying a governance model and funding arrangements for ERR that best enable it to exercise its regulatory responsibilities appropriately and accountably.

Fit-for-purpose legislation

The MRSDA was introduced in 1990. Although it has been amended several times — including with the inclusion of the current risk-based approach for work plans — its fundamental structure reflects a different era of regulatory practice. It is apparent that the MRSDA has several deficiencies that, while not substantially compromising the Act's objectives, nevertheless can add to the costs of doing business or overcomplicate regulatory processes. Examples include:

- differences in regulatory processes for extractives and mining industries, owing to history rather than any material operational differences
- the lack of a clear standard for community consultation, with the Act designed when the concept of 'social licence to operate' was less developed than now
- a regulatory 'gap' in relation to post-closure management, monitoring and maintenance
- a relatively limited range of mechanisms to facilitate industry compliance and, where necessary, enforce regulatory sanctions
- moving from prescriptive regulations to an outcomes-based model without necessarily having the tools and guidance to make this work effectively (as demonstrated by the uncertainty around the risk-based approach to work plans).

The new legislative arrangements underpinning the EPA are an example of a different, more contemporary approach to regulation (box 16). The lessons from South Australia's *Leading Practice Mining Acts Review* will also be instructive — the SA Government has commenced work on refreshing the legislative framework for mining, with the first bill (part of a series to be introduced over two years) released in October 2017.

There is good knowledge within DEDJTR on the opportunities for refining and improving the MRSDA. This project supports those efforts. Once the short- and medium-term reforms outlined in this report are implemented, it would be timely to contemplate a revamp of the MRSDA. Such an exercise would:

- draw on the experiences of other regulators and other jurisdictions
- consider innovative new practices and any barriers to their application in Victoria
- ensure the balance of regulatory and industry development objectives in the Act continues to meet community expectations.

Recommendation 12

The Victorian Government should examine the effectiveness of the current legislative framework and consider developing a new Act. Refreshed legislation would provide a stronger foundation for:

- the earth resources sector in terms of economic development and jobs creation for a sustainable economy
- an efficient and effective regulatory framework, implemented in a way that is consistent, transparent and delivers timely outcomes
- risk-based and outcomes-based approaches, including clear accountability for operators to meet community expectations and satisfy social and environmental regulatory objectives
- the whole-of-lifecycle from initial geoscience to rights allocation and works approvals, through to operation, closure and post-closure land use
- fair, inclusive and transparent processes to build confidence and social licence.

Box 16 Modernising the EPA

The *Environment Protection Act 2017* — the first of two pieces of legislation that contribute to the Government's reform agenda for environment protection — received royal assent on 24 October 2017. Key objectives of the reforms are:

- a proactive and strategic EPA focussed on preventing harm to human health and the environment
- increased clarity and guidance for industry about their responsibilities
- modern, fit-for-purpose legislation
- greater responsiveness to local issues that matter to communities
- strengthened governance for the EPA, providing independence and accountability
- a trusted and authoritative source of scientific and technical knowledge and advice.

Source: DELWP 2017, Andrews Labor Government Response to the Independent Inquiry into the Environment Protection Authority: an overview.

Governance and funding

There is no universal model for how to structure a regulator and ensure its accountability. Across the 58 business regulators within the Victorian Government, there are a range of different approaches — from small units in departments, through to statutorily independent authorities that operate at arm's length from government.

ERR is currently a branch of the Resources division of DEDJTR, reporting through to the Minister for Resources. Some other regulatory functions in DEDJTR are governed in a similar way — including employment information and compliance (to the Minister for Industrial Relations) and biosecurity, animal health and welfare (to the Minister for Agriculture). A new office, Animal Welfare Victoria, is to be established by February 2018 — the governance arrangements for this body will be finalised in coming months.

Other regulators in DEDJTR — principally in the agriculture portfolio — have been reconstituted as statutory authorities.

- Most recently, the Victorian Fisheries Authority has been established an independent statutory authority established to manage Victoria's fisheries resources. The authority has around 160 staff, and is governed by a multi-member board.
- Another example is the Game Management Authority, which was established in 2014 as an independent statutory authority responsible for the regulation of game hunting in Victoria. The authority has approximately 20 staff, with many regulatory and service functions delivered on behalf of the authority by DEDJTR and DELWP. A multi-member board governs the authority.
- Dairy Food Safety Victoria, Prime Safe and the Veterinary Practitioners Registration Board of Victoria have a long history as statutory authorities governed by boards.

The right governance model depends on the risks being regulated, the degree of specialisation required, and the relative balance between discretion and prescription in the regulatory regime (box 17). There is a strong in-principle case for establishing a regulator as a statutory authority in order to build and maintain public confidence, especially where the potential regulatory impacts on business and the community are large. That said, at a time when the regulatory environment is undergoing considerable change, it can be prudent to keep a regulator 'in house' — that is, within the department which has overarching policy responsibility.

Aligned with the proposed review of the MSRDA discussed above, it would be useful to examine options to reconfigure ERR's governance arrangements. An issue that has been front of mind for this project has been the functional separation between ERR and DEDJTR's industry policy and investment facilitation functions: that is, ensuring that regulatory obligations are not conflicted by the department's wider role in economic development (section 5). While there are sufficient safeguards in place under the existing model, establishing ERR as a statutory authority would provide a clear signal to the community and underpin greater confidence in the regulatory regime.

Changing the governance arrangements would also provide an opportunity to review the overall functions of the regulator. Some aspects of ERR's activities may be better suited to a statutory authority model than others. For example, ensuring site stability of quarries is a geotechnical matter rather than a policy question. By contrast, granting licences for mining on crown land (and the royalties associated with that) have a greater policy dimension to them, and it may be appropriate that the Minister — through the department — retains direct oversight of these.

Recommendation 13

Consequent on the implementation of the regulatory improvements proposed through this Project, and aligned with modernisation of the MRSDA (recommendation 11), the Victorian Government should assess whether ERR's structure and governance arrangements are sufficiently robust to support leading regulatory practice. Consideration should be given to other regulatory models including statutory authority frameworks.

Box 17 Governance principles for regulators

In a review of Victoria's regulatory system, the State Services Authority (now the Victorian Public Sector Commission) indicated that departmental regulators were more likely to be appropriate if:

- the regulatory environment is in flux, and there is likely to be a need to frequently re-assess the regulatory environment
- the regulator requires technical knowledge that is integral to the department's (non-regulatory) functions
- the regulated activities are of high strategic importance to the government and warrant direct oversight by a Minister
- the regulatory function is relatively minor, and cannot be justified as a stand-alone entity.

Victorian Government guidance on the structure of regulators suggested that independent regulatory decision making is more likely to be beneficial if:

- an independent regulator is needed to maintain public confidence
- the decisions of the regulator can have a material effect on particular interests and there is a need to minimise conflicts of interest
- the regulator performs a significant compliance or enforcement function
- both government and private entities are regulated under the same regulatory regime.

Regardless of how the regulator is structured, role clarity is essential to good governance. This means ensuring there is no ambiguity on what responsibilities rest with the regulator (including its executives and its governing body), the department and the Minister.

Source: DPC (Department of Premier and Cabinet) 2010, Improving Governance of Regulators: Principles and Guidelines; State Services Authority 2009, Review of the Rationalisation and Governance of Regulators

A related consideration is the funding model for the regulator. The Victorian Government has a long-standing policy of pursuing cost recovery: that is, that the operating costs of regulators should be funded by the entities they regulate rather than by taxpayers (that is, the wider community), except where there are legitimate policy interests to the contrary.

ERR began adopting a cost recovery model with changes to regulations for the mining and extractives industries in 2013. Fees were increased in stages over three years from 2015 to 2017. However, the fee structure was established prior to the introduction of the risk-based approach in 2015 and developments associated with RRAM. The resulting changes in the administrative costs of regulation have not been factored in. The implementation of the reforms discussed in this report will also have consequences for regulatory operating costs.

While cost recovery is a meritorious principle, it should not be pursued at the expense of regulatory effectiveness. Changes to fees and charges at this time are likely to undermine confidence in the regulatory system and complicate efforts by ERR to facilitate industry compliance. Decisions around cost recovery should be backed by a strong evidence base. This requires:

- greater transparency around regulatory performance (public reporting against key performance indicators, and better guidance about how ERR carries out its regulatory functions)
- understanding of what is an efficient cost base for ERR
- cost recovery arrangements should be developed in consultation with industry on the right form and structure of cost recovery arrangements.

This is consistent with the Victorian Government's cost recovery guidelines (box 18).

Box 18 Cost recovery implementation

The Cost Recovery Guidelines state:

When implementing cost recovery arrangements, it is important that they be:

- decided in consultation with relevant parties: cost recovery arrangements will benefit from the information and insights of relevant parties, and are more likely to succeed if those parties have some degree of ownership of the arrangements;
- transparent, with clear accountability: this will help to build trust in the integrity of the process, and will impose a discipline to keep costs down to 'efficient' levels; and
- monitored and reviewed regularly: this will ensure that they continue to be appropriate and based on relevant costs.

Source: DTF 2013, Cost Recovery Guidelines, p. 9

It would be appropriate to review ERR's cost recovery arrangements in tandem with any changes to ERR's structure and governance arrangements. This will give time to bed down regulatory improvements, and deliver the tangible benefits to industry that would support the case for any increase in fees and charges.

Recommendation 14

Consistent with Victorian Government policy, DEDJTR should begin to increase cost recovery for ERR's regulatory activities no earlier than 1 July 2020. This will allow DEDJTR to:

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

Attachments

- 1 Recent regulatory practice improvements
 Prepared by ERR
- Processes for licensing and work plans
 Prepared by Rivers Economic Consulting
- 3 ERR reform options from the co-design process
 Prepared by Nous Group