Fingerboards Mineral Sands Project Inquiry and Advisory Committee Technical note

TN No: TN 025

Date: 21 May 2021

Subject: Compliance, enforcement and complaint handling roles for the Fingerboards Mineral Sands

Project (Project)

SUMMARY

This note outlines how Kalbar expects complaints concerning offsite impacts from the Project will be responded to. It is based on an assessment of relevant legislative provisions and documents which express the views of regulators on this topic.

- In summary, Kalbar expects a concern raised by a member of the public to be responded to as follows:
 - a) First, a concern should be raised directly with Kalbar which will be responded to according to the complaints handling procedure that will form part of the work plan. Under the *Mineral Resources (Sustainable Development) Act 1990* (MRSD Act), a work plan must include a community engagement plan, which must in turn include a complaints handling procedure. Kalbar's EMF, Mitigation Register and draft Community Engagement Plan contained in the Draft Work Plan outline what these measures will be.
 - b) Second, a concern can be raised with the relevant regulatory authority.
- For most matters where a complaint is made to a regulator, complaints will be referred to the Earth Resources Regulator (ERR) who will have principal jurisdiction and compliance tools under the MRSD Act, in particular, the power to enforce compliance with the mine's work plan and licence conditions under the MRSD Act. As to any overlapping jurisdiction between EPA and ERR, a Memorandum of Understanding between these authorities explains that in most cases (including offsite amenity complaints in relation to dust or noise), a complaint received by EPA will be referred to ERR.
- For complaints arising in connection with the supporting infrastructure¹ outside the mining licence boundary, which will be regulated by the Incorporated Document, both the Responsible Authority and ERR could assume responsibility for responding to complaints. Both would have powers to enforce the Incorporated Document; and

¹ Namely, roadworks, private haul road, bore field, Mitchell River pump station and powerlines.

the Responsible Authority would have a duty to do so.² Relevantly, s 110(1)(b)(iii) of the MRSD Act empowers the Minister³ to issue a remedial notice in respect of non-compliance with a planning scheme. Moreover, s 114 of the *Planning and Environment Act 1987* allows "any person" to apply for an enforcement order in relation to non-compliance with the scheme. Kalbar expects an arrangement would be developed between ERR and the Responsible Authority, however it is unaware of what that will be at this time.

5 Details in support of this summary are as follows.

KALBAR'S COMPLAINTS HANDLING PROCESSES

- It is useful to consider Kalbar's proposed complaints handling procedures by reference to the statutory requirements for work plans which govern this matter.
- Relevantly, s 40(3) of the MRSD Act requires a work plan to include a 'community engagement plan' being:
 - "a plan for consulting with the community that demonstrates that the licence holder will use appropriate and effective measures to consult with the community throughout the period of the licence ... prepared in accordance with the regulations and any guidelines issued by the Minister relating to such plans."
- In turn, rule 46 of the *Mineral Resources (Sustainable Development) Regulations*2019 (MRSD Regulations) specifies that a community engagement plan under a
 work plan must, among other things, set out how the licensee will:
 - "(d) ...manage complaints and other communications from members of the community; and

. . .

- (e) ... register, document and respond to complaints and other communications from members of the community in relation to the mine operations."
- 9 Relatedly, s 39A of the MRSD Act imposes a duty on a licensee to undertake ongoing consultation with the community during mining operations. Section 39A provides:

"39A Licensee's duty to consult with community

² Planning and Environment Act 1987, s 14.

³ This is a power of the Minister under MRSD Act, however such power can be delegated, so Kalbar expects that in practice such notices are either issued by, or otherwise administered by, ERR.

A licensee has a duty to consult with the community throughout the period of the licence by—

- (a) sharing with the community information about any activities authorised by the licence that may affect the community; and
- (b) giving members of the community a reasonable opportunity to express their views about those activities."
- 10 Kalbar's draft Community Engagement Plan at Appendix D of the Draft Work Plan exhibited with the EES outlines how complaints will be received and handled.
- Further detail is contained in Mitigation Register (EES Appendix H) and the Environmental Management Framework (EES Chapter 12) (**EMF**).
- 12 For example, the Mitigation Register includes the following:
 - a) "AQ19 A principal contact person to whom community queries and complaints will be directed will be identified for the project. The complaints response procedure will be implemented to address any complaints received. Twentyfour-hour contact details for the principal contact person will be provided through letters and signage onsite."
 - b) "NV09 A noise and vibration sub-plan will be prepared and implemented. The sub-plan will be informed by best practice guidelines. At a minimum, the subplan will include: ... Complaints handling process, including contact details, follow-up inspection, monitoring and corrective action processes once a complaint is made."
 - c) "SE22 Timely responses will be provided to any community complaints raised."
 - d) "SE26 A community complaints procedure will be developed and implemented."

13 The EMF explains:

"12.4.10.3 Complaints management

The complaints management process will be available on the project website and would be included in the updated Community Engagement Plan prior to construction commencing. Kalbar would aim to respond to all comments and complaints in a timely and effective manner to ensure that the values, priorities and issues of affected stakeholders are acknowledged and addressed. A register would be developed to log and track the progress of all complaints and responses made. The proposed procedure for addressing complaints, along with key roles and responsibilities for implementation are outlined in Table 12.10.

- Table 12.10 of the EMF outlines the specific roles and responsibilities for Kalbar employees in receiving and responding to complaints.⁴
- In sum, the MRSD Act and Regulations create a framework that will require Kalbar to have in place processes for receiving and responding to complaints directly from the community throughout the life of the mine. A person will also have the ability to raise a concern with relevant authorities, should they wish, as discussed next.

REGULATOR INTERACTIONS

As noted above, the most specific controls that will regulate the construction, operation and rehabilitation of the mine will be those provided in the mining licence and work plan.

ERR's Powers

- 17 It is an offence for the holder of a mining licence to undertake work in breach of the licence or a work plan.⁵ This offence has a maximum corporate penalty of 100,000 penalty units or about \$165,000 and company officers can be personally liable if certain criteria are met.⁶
- As to ERR's enforcement powers, s 110 is of relevance.⁷ It provides:⁸

"110 Notice requiring authority holder to take action or stop work

- (1) This section applies if the Minister believes on reasonable grounds that—
 - (a) an act or omission by the holder of an authority is likely to result in a risk to public safety, the environment, land, property or infrastructure; or
 - (b) the holder of an authority—
 - (i) has contravened or is likely to contravene this Act or the regulations; or
 - (ii) has not complied with any condition to which the authority is subject or any condition specified under section 44; or
 - (iii) has not complied with any relevant planning scheme or permit; or

⁷ Note that Division 4 of Part 12 of the MRSD Act provides for a range of remedial notices and enforcement orders, however s 110 is a key one.

⁴ Pp 12.41-12.42 (pdf pp 43-44).

⁵ Section 39 of the MRSD Act.

⁶ Section 111.

⁸ Note that 'authority holder' is defined in s105A of the Act as including the holder of a mining licence.

- (iv) has not complied with any condition applying to the carrying out of the work plan under the authority; or
- (v) <u>has undertaken work on land otherwise than in accordance</u> <u>with the work plan</u> under the authority". (Emphasis added)
- (2) The Minister may, by notice served on the holder of the authority
 - (a) require the taking within a specified period of any action necessary—
 - (i) to remedy the contravention or non-compliance;
 - (ii) to avoid the likely contravention or non-compliance;
 - (iii) to avoid, minimise or remove the risk to public safety, the environment, land, property or infrastructure;
 - (b) prohibit the doing of any activity or class of activity by the holder of the authority for a specified period or until the occurrence of a specified event;
 - (c) require the holder of the authority to supply any plans or other information specified in the notice;
 - (d) require the holder of the authority—
 - (i) to provide monitoring equipment;
 - (ii) to carry out any monitoring or surveys specified in the notice;
 - (iii) to have any audit or assessment specified in the notice carried out by an appropriately qualified person or body;
 - (iv) to give the Minister a report detailing the results of the monitoring, surveys, audit or assessment."
- 19 It is an offence to fail to comply with a notice under s 110.9 The Act also allows the Minister to apply to the Supreme Court for an injunction to compel compliance or undertake the remedial work required by the notice herself¹⁰ and recover the costs incurred in doing so from the authority holder.¹¹

⁹ MRSD Act. s 110(3).

¹⁰ MRSD Act, s 110AB.

¹¹ MRSD Act, 110AG.

- 20 ERR's *Interim Compliance Strategy 2021–2022* (**Compliance Strategy**)¹² provides further information concerning its compliance tools and approach.
- The Compliance Strategy identifies 'community impacts' as a 'priority area' and relevantly states:

"Resource developments have the potential to pose environmental and public health impacts to the community. With each approval, we regulate authority holders' management of emissions such as dust and noise, light, and activities such as blasting (e.g. vibration issues) to maintain the risk profile as low as reasonably practicable.

When this does not happen, communities are more likely to lodge complaints, and community dissatisfaction may spread to other businesses in the same industry sector. To reduce this risk, we will address offsite emissions as part of its compliance activities."

The Compliance Strategy summarises the role of ERR 'inspectors' appointed under Part 9 of the MRSD Act in the following terms:

"2.3.2 Inspectors

The compliance team consists of Earth Resources Regulation Inspectors. Inspectors are empowered to carry out compliance activities under the legislation listed in part 1.2.3 of this strategy.

Inspector powers are defined under Part 9 of the *Mineral Resources* (Sustainable Development) Act 1990 (MRSDA) and Part 13 of the Petroleum Act 1998. In general terms, inspectors have the power to:

- Enter a work site and conduct inspections to monitor compliance with legislation, including sighting or copying documents
- Compel authority holders to take remedial action to rectify noncompliance
- Under the MRSDA, give a direction to an operator if the inspector reasonably believes that it is necessary to do so because of an immediate risk to public safety, the environment, land, property or infrastructure."

Memoranda of understanding

As to areas of co-regulation, the Strategy states:

"2.4 Working with other agencies and regulators

Earth Resources Regulation has Memoranda of Understanding and agreements in place with co-regulators to enable a whole of government

¹² https://earthresources.vic.gov.au/__data/assets/pdf_file/0020/461315/Compliance-Strategy-final-published-190321.pdf

approach to regulation. These working relationships aim to provide authority holders with clear direction on regulatory requirements, assure transparency and support robust engagement with the industry. Earth Resources Regulation's work with co-regulators aims to effect more efficient regulation and therefore reduce the regulatory burden on authority holders.

24 EPA Publication 1823, *Mining and quarrying* — *Guide to preventing harm to people* and the environment (October 2020) provides further information about co-regulation activities. It explains:

"4. EPA's role in mining and quarrying

EPA is the primary regulator for water discharges from mining and quarrying activities. EPA also advises on air quality and noise emissions, and responds to referrals for mining and quarrying from other government agencies.

Earth Resources Regulation (ERR) is the primary regulator for all other aspects of mining and quarrying.

EPA has a support and advisory role that includes advising on:

- air discharges, noise and waste management
- environmental management conditions (both operational and rehabilitation) related to waste and pollution.

EPA and ERR work together under a Memorandum of Understanding. EPA also uses the Protocol for Environmental Management: Mining and extractive industries (publication 1191) to set out requirements for assessment and management of emissions to air and environment from mining and quarrying activities."

The Memorandum of Understanding (**MoU**)¹³ referred to in Publication 1823 (dated May 2018) provides further context. Section 6.3 of the MoU relevantly provides:¹⁴

"6.3 OPERATIONS AND COMPLIANCE

Both ERR and EPA have statutory responsibilities relating to the regulation of earth resource industries, which include assessment and approval. compliance monitoring, responding to reports of non-compliance and community complaints, and where necessary conducting enforcement action.

The agencies recognise it is important for businesses not to be subject to 'double regulation' on environmental issues. The agencies agree the existence of an EPA licence should not determine whether EPA has a role (other than for the primary purpose of managing offsite water discharges),

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¹³ <u>https://earthresources.vic.gov.au/about-us/our-role/earth-resources-regulation/memoranda-of-understanding</u>

¹⁴ Clause 6.3.

given ERR approvals are a principal tool for environmental regulation at ERR sites.

Proactive operational compliance

ERR and EPA may decide to undertake proactive joint inspections on mining sites within their regional boundaries if identified through discussions by regional managers. This will allow for knowledge sharing between organisations (e.g. sharing of work programs), and potentially lead to better coordinated site based management strategies, compliance, remedial and enforcement work.

Reactive operational compliance

ERR is the lead regulator and EPA's role is in the provision of specialist advice and support, consistent with its expertise and regulatory skills, when dealing with significant community concern regarding offsite environmental and health impacts related to earth resource industries, for example (but not limited to) dust, noise and water contamination.

See Appendix — Schedule 3 for more information." (Emphasis added)

Schedule 3 of the MoU provides details on how EPA and ERR will coordinate their compliance, enforcement and pollution responses for particular types of incidence. Content of particular interest for presented purposes is extracted in Figure 1 overleaf. It can be seen that for most issues, including amenity concerns regarding noise and dust, complaints will be referred to ERR even if first received by EPA.

1. Agreed referral approaches

The agencies recognise that while ERR is the lead regulator for most earth resources environmental impacts, some cases require support or guidance from other agencies and external parities, including EPA. The table below provides examples of issues and their corresponding lead agency.

Type of issue	Agreed lead	Processes and exceptions
Offsite water discharges (typically level 3 or 4 incidents using EPA Response Triage)	EPA	If ERR contacted, contact 1300 EPA VIC and regional office on behalf of caller. If EPA contacted, EPA to action and advise ERR regional manager by email or phone.
Risk of water discharge, e.g. sediment management on site (typically level 2 or 3 incidents using EPA Response Triage)	ERR	If EPA contacted, log call, and region to advise ERR regional manager by email or phone. If ERR initially contacted, ERR to manage using controls under work plan, and requiring other management measures as necessary. EPA may provide technical or regulatory support to ERR, where ERR have already applied common management approaches and assessment to the issue, and they deem the risk of offsite discharge is high.
Widespread (multiple homes) or health impact (e.g. sleep deprivation or highly intrusive) amenity/wellbeing issues, e.g. dust, noise (typically level 3 or 4 incidents)	ERR	EPA may provide technical or regulatory support to ERR, where ERR have already applied common management approaches and assessment to the issue (including use of consultants as relevant), and further assistance may be needed.

		N.B. High levels of impact may trigger incident management arrangements (see Schedule 4).
Intermittent, localised or lower impact amenity/wellbeing issues, e.g. dust, noise (typically level 2 or 3 incidents)	ERR	If EPA contacted, customer service to refer caller to ERR, of if agreed, contact ERR regional manager on behalf of caller. ERR to seek EPA technical support only by exception and where common management measures and assessment methods have not been successful.

Figure 1 Extract from Schedule 3 of the MoU (pp 22-23)

Attachments

- EPA and ERR Memorandum of Understanding
 ERR Interim Compliance Strategy, 2021-2022
 EPA Publication 1823 Mining and quarrying

EARTH RESOURCES REGULATION BRANCH DEPARTMENT OF ECONOMIC DEVELOPMENT, JOBS, TRANSPORT AND RESOURCES

and

ENVIRONMENT PROTECTION AUTHORITY

Memorandum of Understanding

1 PURPOSE of the Memorandum of Understanding

To make arrangements that enable EARTH RESOURCES REGULATION (ERR) and ENVIRONMENT PROTECTION AUTHORITY (EPA) to work together in a way that facilitates earth resource industries while protecting the environment and communities of Victoria. ERR and EPA are working towards the same objectives, and it is an expectation of government, industry, and the community, that they will work together in a way that is both collaborative and efficient.

This Memorandum of Understanding (MOU) is not intended to create legally enforceable obligations between the two parties.

2 DEFINITIONS

"ERR" means EARTH RESOURCES REGULATION, which is part of the Department of Economic Development, Jobs, Transport and Resources (DEDJTR) and regulates the performance of minerals, extractive, petroleum, geothermal, and greenhouse gas sequestration industries (referred to as the earth resource industries). ERR is the authority responsible for administering a variety of legislation including, but not limited to, the *Mineral Resources (Sustainable Development) Act 1990* (MRSDA), the *Petroleum Act 1998*, the *Geothermal Energy Resources Act 2005*, and the *Offshore Petroleum and Greenhouse Gas Storage Act 2010*, and any Regulations made thereunder.

"EPA" means ENVIRONMENT PROTECTION AUTHORITY (EPA), which has a role in regulation of any offsite discharges of water from earth resource sites, and for

providing advice on, and monitoring of air and noise discharges. EPA is the authority responsible for administering various legislation including but not limited to the *Environment Protection Act 1970* and the *Pollution of Waters by Oil and Noxious Substances Act 1986*, and any Regulations made thereunder.

"Primary contact person" means the person who is the designated key contact for either ERR or EPA from time to time, as set out in Schedule 6 to this MoU.

"Schedule contact person (SCP)" means the person who is designated the contact from ERR and EPA from time to time, under a schedule to this MoU, to deliver that schedule

"Mining" means extracting minerals from land for the purpose of producing them commercially, and includes processing and treating ore; (Section 4 MRSDA)

"Environmental impact" means, but is not limited to air, noise, surface water, groundwater, land, waste or energy related impacts.

"ERR site" means all mining or extractives industry sites that may be the subject of ERR regulation.

"ERR approvals" means all forms of approvals and licences granted or issued under the MRSDA.

"Statutory endorsement of work plans" has the same meaning as in the MRSDA.

"Statutory referral" is a referral is required under the Victorian Planning Provisions (VPP) and individual planning schemes, or under the MRSDA.

"Emergency Management Manual Victoria (EMMV)" means the Victorian Emergency Management Manual which details the State emergency management arrangements.

'Privacy legislation' means laws in respect of privacy and the protection of personal information including but not limited to the *Privacy and Data Protection Act 2014* (Vic) and the *Privacy Act 1988* (Cth)

'Confidential information'_means all information supplied by one party to the other in connection with the MOU, including but not limited to:

- any information designated by the party providing the information as being confidential:
- any information pertaining to either party's finances/internal management and structure/personnel, policies and structure/suppliers, contractors and stakeholders;
- personal information; and
- any information in the nature of confidential information and which the receiving party ought reasonably to have identified as confidential information.

- "Resource Industry Site" means any site at which activities are being undertaken under the following Acts: Mineral Resources (Sustainable Development) Act (MRSDA) 1990
- Petroleum Act 1998
- Offshore Petroleum and Greenhouse Gas Storage Act 2010
- Geothermal Energy Resources Act 2005
- Greenhouse Gas Geological Sequestration Act 2008
- Mines (Aluminium Agreement) Act 1961
- Underseas Mineral Resources Act 1963
- Extractive Industries (Lysterfield) Act 1986.

Executed for Environment Protection Authority Victoria by its Chief Executive Officer, Nial Finegan:



Executed for Earth Resources Regulation Branch, Department of Economic Development, Jobs, Transport and Resources by the Executive Director, Anthony Hurst:

Dated: 25 May 2018

3 PERIODIC REVIEW

This MOU is a 'living document' and will be reviewed periodically by the parties to ensure its ongoing effectiveness.

The Schedules to this MOU will be reviewed at least every 3 years.

4 OBJECTIVES OF THE MOU

The parties share the following objectives:

- (a) the effective cooperation of both parties in the administration and implementation of their respective obligations in relation to the matters set out in the MOU schedules
- (b) regular general engagement across the two organisations to understand who the organisational key contacts are at all levels
- (c) early and constructive engagement to identify and resolve issues
- (d) the efficient utilisation and application of ERR and EPA resources
- (e) excellence in the management and control of environmental and public health impacts.

5 UNDERTAKINGS

The parties undertake to:

- give effect to the arrangements and procedures set out in this working document and relevant laws
- to maintain a primary contact person to ensure the effective operation of the agreement
- inform their staff of their roles and responsibilities under this MOU, and any relevant changes to the regulatory instruments overseen by them in a timely manner as they arise
- meet regularly to discuss policy, strategy and/or operational issues relevant to this MOU, with such meetings to be attended by the primary contact person (or delegate) and relevant staff.

6 KEY SCHEDULES FOR THIS MEMORANDUM OF UNDERSTANDING

ERR and EPA have identified six main areas for collaboration:

- policy and guidelines
- approvals and licensing

- · operations and compliance
- emergency (immediate response) management
- post closure rehabilitation and aftercare management
- governance, implementation, communications and stakeholder engagement.

The subject matter of these areas is described below.

6.1 POLICY AND GUIDELINES

It is essential ERR and EPA consult each other on matters of joint interest and responsibility. Lack of consultation may have unintended consequences and cause difficulties for the agencies, the industry and/or the community. Effective consultation between the agencies will ensure consistency of messages and information to industry, the community and other government agencies in relation to environmental management and regulation.

ERR will refer to EPA any guideline, statutory policy, regulation, Bill or Act (or similar instrument) they are developing, reviewing or amending which relates to the environmental impact and/or public health of earth resource industry sites that EPA is responsible for regulating.

EPA will refer to ERR any guideline, statutory policy, regulation, Bill or Act (or similar instrument) they are developing, reviewing or amending which relates to any earth resources industries that ERR is responsible for regulating.

See <u>Appendix – Schedule 1</u> for more information.

6.2 APPROVALS AND LICENSING

ERR and EPA are both responsible approval and licensing assessment agencies for the earth resources industries. Both agencies have mechanisms that enable referrals to each other under various legislation. Both agencies are committed to working closely together in instances where ERR is considering applications where potential adverse environmental impacts could occur and in instances where EPA is considering licences and approvals that cover activities under the *Environment Protection (Scheduled Premises) Regulations* 2017 in the following categories:

- extractive industry and mining (C01)
- coal processing (G02)
- oil and gas refining (G03)
- carbon geosequestration (K02).

Continuing improvements around the referral, approval and licensing process between the two agencies should lead to more efficient and effective assessment and approval processes, that improve consistency and reduce regulatory uncertainty and overlap.

The four categories of assessment, approvals and licensing that involve input, referral, consultation and/or approval by both EPA and ERR are:

- (a) ERR regulated sites not requiring EPA regulation, but that may be referred to EPA in a non- statutory capacity
- (b) Sites requiring both EPA and ERR approval, or that are referred under the statutory endorsement process set out in the *Mineral Resources Sustainable Development Act 1990* (MRSDA): Referrals for these sites are statutory referrals and are timeframe bound.
- (c) Major projects that may require Environmental Effects Statement (EES) input from both EPA and ERR.
- (d) Emergency discharge approvals: Where EPA is requested to issue an approval to an ERR site not licensed by EPA.

See Appendix – Schedule 2 for more information.

6.3 OPERATIONS AND COMPLIANCE

Both ERR and EPA have statutory responsibilities relating to the regulation of earth resource industries, which include assessment and approval, compliance monitoring, responding to reports of non-compliance and community complaints, and where necessary conducting enforcement action.

The agencies recognise it is important for businesses not to be subject to 'double regulation' on environmental issues. The agencies agree the existence of an EPA licence should not determine whether EPA has a role (other than for the primary purpose of managing offsite water discharges), given ERR approvals are a principal tool for environmental regulation at ERR sites.

Proactive operational compliance

ERR and EPA may decide to undertake proactive joint inspections on mining sites within their regional boundaries if identified through discussions by regional managers. This will allow for knowledge sharing between organisations (e.g. sharing of work programs), and potentially lead to better coordinated site based management strategies, compliance, remedial and enforcement work.

Reactive operational compliance

ERR is the lead regulator and EPA's role is in the provision of specialist advice and support, consistent with its expertise and regulatory skills, when dealing with significant community concern regarding offsite environmental and health impacts related to earth resource industries, for example (but not limited to) dust, noise and water contamination.

See Appendix – Schedule 3 for more information.

6.4 EMERGENCY (IMMEDIATE RESPONSE) MANAGEMENT

Roles and responsibilities must be well defined and communication with stakeholders coordinated to effectively manage major incidents at a resource industry site and provide a consistent government message during an emergency/incident response activity.

(a) Emergency Event

If an incident is deemed an <u>emergency event</u> by Emergency Management Victoria then all actions and support must be in accordance with the Emergency Management Manual Victoria (EMMV). ERR and EPA, as support agencies, are committed to actions already sanctioned by their respective organisation, governing legislation and statutory requirements and the State emergency management arrangements.

Each agency should ensure, where appropriate, they are represented within the relevant Incident, Regional and State Emergency Management Team as the primary mechanism for the exchange of information.

Each agency will follow its own approved emergency management processes. During response and recovery activities, each agency will maintain appropriate levels of communication.

ERR and EPA will comply with relevant occupational health and safety (OHS) laws during an emergency activity and each agency remains liable for all employee entitlements as they apply to its personnel.

(b) Non-emergency Event (requires immediate attendance)

In instances where a major incident/activity has occurred at a resource industry site and requires immediate attendance (not covered under EMMV) but poses a significant environmental/public health issue; ERR will notify EPA of the incident, and EPA will notify ERR of any major incident at an ERR site, reported to EPA by community, emergency services or discovered by EPA officers.

In such situations, ERR and EPA will work together to manage the consequences of the impact on community and/or the environment. This will be completed through joint inspections, compliance, remedial (may include audits) and enforcement actions and/or on-going joint communications with all relevant stakeholders.

See Appendix – Schedule 4 for more information.

6.5 POST- CLOSURE REHABILITATION AND AFTERCARE MANAGEMENT

ERR is responsible for ensuring that rehabilitation and aftercare management of mining sites is carried out appropriately, and for determining when rehabilitation is complete and aftercare management is no longer required, for the relevant elements of the bond to be returned. EPA may be involved in an advisory capacity or if it becomes evident that there are environmental impacts requiring a broader regulatory approach.

If an earth resources site is not rehabilitated to an appropriate standard, and is not managed and monitored appropriately during the long aftercare period, it has the potential to pose risks to the environment and the health of nearby communities. It is therefore important that rehabilitation and ongoing aftercare management of sites is regulated collaboratively by ERR and EPA.

It must be noted that:

- EPA and ERR recognise that further work is required to better understand and assess potential risks associated with legacy sites. Actions required around these sites will be further clarified in the next 12-24 months (as lessons learned from joint approaches at Hazelwood and Alcoa closed coal mines are incorporated into operational approaches) and
- Section 79A of the MSRDA Act 1990 provides for EPA appointed auditors to conduct mine rehabilitation liability assessment audits to determine "the amount of a rehabilitation bond or reviewing the amount of a rehabilitation bond entered into or to be entered into by the authority holder".

EPA and ERR have developed a Joint Implementation Plan to support the delivery of this function for Latrobe Valley coal mines, when it is triggered by the responsible Minister.

See Appendix – Schedule 5 for more information.

6.6 GOVERNANCE, IMPLEMENTATION, COMMUNICATIONS AND STAKEHOLDER ENGAGEMENT

A governance framework has been created to provide both agencies with a clear understanding of the arrangements, which includes a communications and engagement program with each other and key stakeholders. This is vital to building and maintaining the strong relationships that will ensure the success of the agreement.

Governance and Implementation

Both ERR and EPA will support the establishment of the following governance structure to oversee the MOU (see Schedule 6 for participants and meeting frequency).

The structure will include the following:

- (a) Project Control Board (primary contact person from each organisation) that will approve recommendations for amendments to the MOU, and resolve any dispute that cannot be resolved at other lower levels.
- (b) Implementation Working Group (IWG) comprising the schedule contact persons from each organisation associated with the MOU. This group provides a forum for all relevant EPA and ERR staff to discuss progress against, plan and resolve issues and disputes that may arise during the delivery of the MOU.
- (c) High Priority Sites Working Group (HPSWG) comprising relevant operational and engagement staff from both agencies. This group provides a forum for discussing the key issues around high-priority mining sites from a communications, engagement and public health perspective.
- (d) Regional Management Contacts (RMC) who will implement the relevant day to day actions and tasks of the MOU within their own regions. They will also report back to the IWG on any joint actions.

In addition, the effectiveness of this MOU will be monitored through regular reports to the Earth Resources Regulators Forum (ERRF) which includes executive representatives from ERR, EPA, DELWP, CFA and WorkSafe; or such equivalent forum as may be convened by ERR in the future.

Consultation and engagement with key stakeholders

Consultation and engagement with extractive and mining industry businesses, community and other government stakeholders is critical in ensuring an effective MOU.

As such, ERR and EPA will continue to develop combined strategies, joint participation (where required) and messaging around relationship progress, as well as future guidance, approvals, compliance, incidents, public health impacts and general site governance to our key stakeholder/communities.

The lead organisation of the issue will be responsible for the consultation process.

See Appendix – Schedule 6 for more information.

7 TRAINING

The work undertaken in these schedules may lead to the identification of technical skill gaps in both or either ERR and EPA, which may require joint training programs to be undertaken. Both Parties agree to provide opportunities for the training and cross training of staff.

8 CONFIDENTIAL INFORMATION

8.1 Treatment of confidential information

With respect to any confidential information supplied by one party to the other pursuant to or in connection with this MOU, or which is otherwise designated as confidential, each party agrees to: maintain the confidential use, disclosure and security of the confidential information consistent with relevant privacy laws, statutory requirements and any applicable professional standards.

8.2 No confidentiality in certain instances

The treatment of confidential information clause shall not apply to information which is:

- publicly known other than as a result of a breach by either party of the confidentiality obligations set out in this MOU;
- already known to the receiving party;
- authorised in writing by the parties to be disclosed to each other
- permitted under legislation or required by law to be disclosed by either of the parties to a third party without restriction.

9 PRIVACY

The parties agree not to use, disclose, store, transfer or handle personal information collected in connection with this agreement except in accordance with applicable privacy legislation.

10 FREEDOM OF INFORMATION

In carrying out any responsibilities under freedom of information (FOI) legislation, a party will have regard to the interests of the other party and will consult with them if a party proposes to take any action relating to a FOI request that may have an impact on the interests of the other party.

11 OWNERSHIP OF INFORMATION

All original documents (including written, visual or electronic forms) will remain the property of the originating party.

This MOU contains the whole of the agreement between the parties with respect to its subject matter and supersedes any and all other MOUs, representations or statement by either party whether oral or in writing prior to the date of this MOU.

12 AMENDMENT, VARIATION OR MODIFICATION

This MOU may be amended, varied or modified by a further MOU in writing duly signed by the parties. An amendment or variation to the agreement takes effect on the date it is signed by the parties or on a date agreed by the parties in writing.

Notwithstanding the above, by written agreement of the parties or their delegates, schedules to this MOU may be added, amended, varied or deleted.

13 DISPUTES

Where an issue arises between the parties in relation to any matter in this MOU, the nominated relevant schedule contact persons will meet and attempt to resolve the issue within 28 days. Where the schedule contacts are unable to resolve the issue, the relevant Executive Director at EPA, and the Executive Director of ERR, or their delegates, will meet to resolve the issue.

14 TERMINATION OF THE AGREEMENT

If a party wishes to terminate this MOU they must give 28 days' notice in writing to the other party of their intention to terminate the agreement. This notice must include the reasons for termination and any proposed transitional arrangements.

Both parties may agree in writing to terminate this MOU at a date agreed by the parties.

15 GENERAL

Each party must do anything and must ensure that its employees and agents do anything that any other party may reasonably require to give full effect to this MOU.

PROTOCOLS

Both ERR and EPA will follow the steps outlined below to achieve the objectives of this Schedule:

- 1. Where a guideline, statutory policy, regulation, act (or similar instrument) is being developed or reviewed, the relevant Schedule Contact Person will assess whether there are areas of shared interest (see section 6.1).
- 2. The Schedule Contact Persons will advise each other as soon as practicable when the development or review of a guideline, statutory policy, regulation, act (or similar instrument) of shared interest has, or is about to commence.
- 3. In reviewing any guideline, statutory policy, regulation, act (or similar instrument) of shared interest, a timeline will be provided by the relevant Schedule Contact Person; as well as an outline of the development and/or review process and the proposed opportunities for the input of the other party.
- 4. Each Schedule Contact Person will coordinate comments from within their respective organisation. Collated comments will then be provided to the other Schedule Contact Person. If there is disagreement on comments provided, each Schedule Contact Person will take the time to discuss the disagreement prior to finalising the development or review process. Where the Schedule Contact Person cannot reach an agreement, they will raise to the primary contact person for resolution.
- 5. The Schedule Contact Persons will meet every 6 months to share forward work programs.

SCHEDULE CONTACTS

ERR	Director - Stakeholder Relations and Strategy
EPA	Manager - Policy and Regulation

PROTOCOLS

The Schedule Contact Persons for both ERR and EPA will be responsible for following the processes outlined in the scenarios/statements below:

	ERR	EPA
Roles	Lead process for ERR approval Referring agency Include EPA's advice in the approval or seek further advice as required Provide timely and risk-based response to EPA's referral	Lead process for EPA approval Referring authority Include ERR's advice in the approval Provide timely and risk-based response to ERR's referral
Process: Pre - application to ERR for Approval	ERR will advise the proponent / operator to organise a site meeting with the relevant referral agencies and will advise the operator to invite EPA to the site meeting where issues exist which might trigger a referral to EPA. (see table of triggers for referral below)	 Based on risk, EPA will endeavour to attend the site meeting, and if unable to attend will find an alternative method to assess if EPA input is required. As soon as practicable after the site meeting EPA will advise the proponent / operator of any specific requirements that will be needed in the Work Plan / application in order for EPA to assess it, and provide a copy of the advice to ERR to inform the assessment. Note: EPA should work through any requirements with the proponent / operator prior to submission as once an application is submitted, ERR will have 28 days within which to make a decision. (EPA does not have legislative powers under the MRSDA to require further information from the proponent – this can only be done formally by ERR as part of the application assessment process).

		This is the stage where EPA can work with the proponent / operator to review and request changes of the plan.
Process: Once ERR application for approval / endorsement is received	 Where there is a statutory referral ERR will refer to the EPA and specify the timeframe for the referral (noting no response in that timeframe will result in a non-objection). Referral timeframe is 30 days. For statutory referrals (under ss77TE and 77TF MRSDA), ERR must refer to EPA with 28 days and EPA must respond in writing within 30 days. Where the need for a non-statutory referral is identified, the ERR officer will refer the documentation to the relevant EPA regional office via that office's email address as soon as possible after it has been received and a decision about the need for referral has been made. The EPA's response imerame is 14 days. Note: ERR will advise of the date by which EPA's response is required. This will be shorter than the specified statutory timeframe within which ERR must make a decision or, for a non-statutory referral, may be specified to meet a client service standard commitment for decision timeframes. Any response received after 30 days for a statutory referral cannot be considered as the MRSDA deems a non-objection 	 When EPA's regional office becomes aware of an ERR referral they will acknowledge receipt by return email. Note: If EPA identifies a need for further information this should be discussed with ERR as a matter of priority. There is no "stop the clock" mechanism in the MRSDA. This is why it is preferred that any further information needs are identified in the pre-application stage. It is acknowledged that a late stage request for further information may not be able to be accommodated in all situations and will be assessed relative to ERR's powers to request changes from the proponent For statutory referrals the EPA can object, not object or not object subject to the work plan imposing conditions on the workplan/variation. EPA must provide reasons for conditions or an objection. If the EPA propose conditions or objects it must provide reasons for the conditions or refusal – this information will be included in the decision makers 'statement of reasons' which will subsequently form part of the review process at VCAT if the proponent pursues that pathway EPA does not have power of veto through a non-statutory referral process. However it can provide comments and suggest conditions to manage identified risks – EPA must provide reasoning for this so it can be

	 after 30 days if no response is received. For non-statutory referrals the Act requires ERR to make a decision with 28 days of the last of any applicable events therefore if a response is not received after 14 days the work plan will be progressed to ensure compliance with the Act. Once ERR receives EPA's response, it will include any conditions on the subsequent approval (statutory ERR must include, non-statutory may include). 	included in the decision makers 'statement of reasons'. If the EPA is of the opinion a work plan should be refused it would need to provide sufficient information to form a statement of reasons for refusal and potentially support this opinion at VCAT should the proponent pursue this pathway. (ERR could refuse based on EPA advice but it would need to be linked to a refusal trigger under the MRSDA). Responses will be provided to the relevant ERR officer within 30 days of receipt for statutory referrals.
Process: Once ERR approval/end orsement is granted	Notify the responding EPA officer, via the region's email address, of the outcome of endorsement and approval.	Return receipt to acknowledge outcome.
Throughout the process		to the process to ensure that mutual ses are negotiated and well understood.

Additional context for approvals and licensing:

1. ERR Regulated Sites that does not trigger statutory referral to EPA approval (non-statutory referral):

Scenario: A new mine is opening in a region, it does not require EPA <u>approval</u> but the site may have issues with dust or noise. The site triggers a non-statutory referral to EPA.

2. ERR Regulated Sites that require EPA approval (statutory referral from ERR to EPA; non-statutory referral from EPA to ERR):

Scenario: A new mine is opening in a region with a discharge to water. The site requires an EPA Works Approval and therefore a statutory referral is required from ERR to EPA. During the Works Approval process a non-statutory referral from EPA to ERR is also triggered.

3. Statutory and non-statutory referral triggers

Statutory referral triggers	Non - Statutory referral triggers
 ERR Works Approval in accordance with s19A of the EP Act 1970 A licence to discharge or emit waste in accordance with s20 of the EP Act 1970 Amendment of a licence under s20A of the EP Act 1970 	 ERR The construction and operation of tailings dams The storage and use of chemicals in mineral processing Discharges to surface or ground waters Dust sources at proposed separation distances less than those detailed in SEPP Noise sources where technical reports have been provided Works proposed on sites which are already the subject of an EPA licence EPA The site is also regulated, or will also be regulated, by ERR

4. Major projects that may require Environment Effects Statement (EES) input from EPA and ERR

Complex or significant earth resource projects often require a formal EES process, or modified EES process, with input from various agencies including ERR and EPA.

Both ERR and EPA will endeavour to provide clear and consistent advice regarding their respective regulatory processes in responding to the requirements of an EES. Where appropriate, each agency will provide the other with drafts of intended submissions or responses to ensure that potential environmental impacts from major earth resources projects are consistent with a Whole of Government approach. Where such co-ordination is required, it will take place at the regional level unless otherwise necessary. Once the EES is completed, the work plan or work plan variation lodged with ERR will be the subject of a non-statutory referral to EPA.

5. Emergency discharge approvals - where EPA is requested to issue an approval to a non-licensed site (also see Schedule 4 – Emergency Management)

ERR will refer applicants to *Section 30A Approvals* (EPA Publication 1590) and advise them to contact EPA and visit EPA's website for emergency discharge approvals http://www.epa.vic.gov.au/our-work/licences-and-approvals/section-30a-approvals

SCHEDULE CONTACTS

ERR	Director - Statutory Authorisations	
EPA	Manager - Development Assessments	

PROTOCOLS

The Schedule Contact Persons for both ERR and the EPA will be responsible for following the processes outlined in the scenarios/statements below:

CONSISTENT REGULATORY RESPONSE

Examples of when a consistent regulatory response will be required include when:

- Communities, EPA or ERR seek resolution of an environmental or amenity issue that would be best resolved by joint action from both EPA and ERR.
- Communities or operators seek EPA response to an impact that would ordinarily be managed by ERR, and issue/case referral to ERR is required.
- Communities seek ERR response to an environmental issue which has particularly challenging environmental assessment aspects.
- Communities seek EPA's oversight, guidance or control on an environmental issue after initial reporting to ERR.
- Both ERR and EPA licences apply to a site and there are not common views on the appropriate tools to apply.

ERR and EPA recognise the importance of shared principles for managing community and industry reports and notifications of environmental impacts or risks. As such, both agencies have agreed to model shared principles for their approaches as adapted from EPA or ERR triage processes as follows:

Level of incident / response	Typical examples
Referral (level 1)	Lower impact amenity issues, other agency (not EPA) has primary controls or responsibility
Desktop response (level 2)	Lower impact amenity issues, no other lead agency Risks of water impact, site may manage, poor evidence of harm
Planned field response (level 3)	Risks of water impact, not immediate hazard Significant wellbeing/health issues on individuals, or widespread amenity impact, no other lead agency
Immediate response (level 4)	Immediate hazard to waterways

Both ERR and EPA will provide the field/compliance response within 5 days of the detected issue with timely specialist technical follow up, as required, to provide community and key stakeholder confidence. The parties will consult with each other and propose an appropriate regulatory response. This may require ERR and EPA to undertake joint inspections, follow-up compliance, agreed remedial actions, clear public health messaging and/or enforcement work, as well as joint communications with all relevant stakeholders.

1. Agreed referral approaches

The agencies recognise that while ERR is the lead regulator for most earth resources environmental impacts, some cases require support or guidance from other agencies and external parities, including EPA. The table below provides examples of issues and their corresponding lead agency.

Type of issue	Agreed lead	Processes and exceptions
Offsite water discharges (typically level 3 or 4 incidents using EPA Response Triage)	EPA	If ERR contacted, contact 1300 EPA VIC and regional office on behalf of caller. If EPA contacted, EPA to action and advise ERR regional manager by email or phone.
Risk of water discharge, e.g. sediment management on site (typically level 2 or 3 incidents using EPA Response Triage)	ERR	If EPA contacted, log call, and region to advise ERR regional manager by email or phone. If ERR initially contacted, ERR to manage using controls under work plan, and requiring other management measures as necessary. EPA may provide technical or regulatory support to ERR, where ERR have already applied common management approaches and assessment to the issue, and they deem the risk of offsite discharge is high.
Widespread (multiple homes) or health impact (e.g. sleep deprivation or highly intrusive) amenity/wellbeing issues, e.g. dust, noise (typically level 3 or 4 incidents)	ERR	EPA may provide technical or regulatory support to ERR, where ERR have already applied common management approaches and assessment to the issue (including use of consultants as relevant), and further assistance may be needed.

		N.B. High levels of impact may trigger incident management arrangements (see Schedule 4).
Intermittent, localised or lower impact amenity/wellbeing issues,	ERR	If EPA contacted, customer service to refer caller to ERR, of if agreed, contact ERR regional manager on behalf of caller.
e.g. dust, noise (typically level 2 or 3 incidents)	la IVIV	ERR to seek EPA technical support only by exception and where common management measures and assessment methods have not been successful.

Overall, the agencies agree that:

- 1. The above is a guide to common examples, but assessment and referral is based on risk of harm and likelihood of detection of a non-compliance.
- 2. Regional offices will discuss risk assessment where required.
- 3. In issues where ERR has primary control:
 - a. EPA's role is generally in specialist technical support, where required; and
 - b. EPA applies a remedy to drive a particular outcome, ERR will remain the lead.
- 4. Other issues with a proactive assessment may have a different approach to case management.
- 5. Operational roles may vary under certain circumstances which would be assessed and agreed on by a case by case basis.

JOINT ASSESSMENTS

There are a range of reasons the regulators may collaborate on shared issues and interests, including:

- transfer of knowledge
- mapping regulatory interface on an environmental problem
- joint problem solving diagnosing issues at a site(s)
- · establishing protocols and roles for a new issue
- providing community confidence that concerns are acted upon as a whole of Government approach
- · ensuring issues raised are resolved and closed out in a timely manner.

CAPABILITY BUILDING

ERR has responsibilities to develop and maintain a level of capability for commonplace impacts from earth resources sites however, EPA has existing skills and resources that may assist ERR to meet its obligations or vice versa. Where appropriate, program or planned approaches to capability building will be used, such as sharing training tools. For emerging or more complex issues at sites, a joint assessment approach will be used help to develop capability and understanding between agencies.

The agencies will commit to an annual joint work plan, via a planning phase, to progress joint assessments and capability building.

SCHEDULE CONTACT PERSONS

ERR	Director - Regulatory Compliance
EPA	Director - Regional Operations and Emergency Management

PROTOCOLS

The Schedule Contact Persons for ERR and EPA as support agencies will be responsible for applying the State strategic control priorities as defined in the State emergency management arrangements to achieve the objectives of this Schedule. These priorities are:

- protection and preservation of life is paramount, including:
 - o safety of emergency services personnel; and
 - safety of community members, including vulnerable community members and visitors/tourists located within the incident
- issuing of community information and community warnings detailing incident information that is timely, relevant and tailored to assist community members make informed decisions about their safety
- protection of critical infrastructure and community assets that support community resilience
- protection of residential property as a place of primary residence
- protection of assets supporting individual livelihoods and economic production that supports individual and community financial sustainability
- protection of the environmental and conservation assets that considers the cultural, biodiversity and social values of the environment.

The focus and priority of responding to emergency events will be on those that have a high consequence and impact on community outcomes, which will include environmental impacts, irrespective of the likelihood of the event occurring. The events include, but are not limited to:

- coal mine fire
- tailings containment failure
- explosion involving hazardous materials
- pipeline or batter failure
- well integrity failure carbon sequestration, geothermal and petroleum wells
- flood water discharge.

SCHEDULE CONTACTS

ERR Director - Regulatory Compliance	
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	EPA	Director - Regional Operations & Emergency Management
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PROTOCOLS

The Schedule Contact Persons for both ERR and the EPA will be responsible for following the processes outlined in the scenarios/statements below:

Potential referral triggers:

1. Referral of rehabilitation (closure) plans associated with assessment of applications by ERR.

ERR role:

- Refers rehabilitation plan to nominated liaison contact at EPA.
- Develop criteria for referring rehabilitation plans to EPA.

EPA role:

 Responds to referral within agreed time. Nominated liaison person is responsible for sending plan to relevant people in EPA and collating comments for referral back to ERR.

ERR responsibility:

- 1. Rehabilitation plans associated with an application to ERR will be assessed to determine the need for referral to EPA. ERR and EPA will develop a list of triggers which will identify when rehabilitation plans will be referred to EPA. Triggers will include sites where the rehabilitated site may:
- impact or have the potential to impact on surface water, groundwater, noise, air quality
 or land or relates to a significant waste stream (e.g. a tailing storage facility)
- impact or potentially impact on sensitive receptors or significant environmental features near the site.
- 2. Following the provision of comments from EPA, ERR will communicate back to EPA to confirm how comments were addressed in conditions placed on the rehabilitation plan.

EPA responsibility:

o Within:

- 30 days of receiving a statutory referral or
- · 14 days of receiving a non-statutory referral or
- the mutually agreed timeframe for any other informal submissions for assessment of the rehabilitation plan, EPA will provide comments with particular reference to:
 - o the impact the rehabilitation/closure of the site may pose to beneficial uses and in particular the potential for offsite impacts
 - any amendments or conditions that should be placed on the rehabilitation of the site in order to protect the beneficial uses, (including community impacts) and minimise the risk of future impact

 monitoring required to assess the ongoing performance of rehabilitation of the site

Note: As the rehabilitation plan forms part of the work plan the standard timeframes and protocols apply. The opportunity for the EPA to influence, review and make changes to the rehabilitation plan (and the work plan in general) is in the drafting stage following the site meeting, prior to the work plan, including the rehabilitation plan, being submitted to ERR for assessment. Once submitted for assessment the EPA cannot request changes and timeframes for review are limited due to statutory timeframes within the MRSDA for when as decision on approving or refusing the plan must be made.

2. Request for EPA assistance in relation to managing existing sites under rehabilitation regulated by ERR.

ERR role:

 Determine if / when to request assistance from EPA with regards to rehabilitation.

EPA role:

 Provide advice/comments for sites when requested by ERR.

ERR responsibility:

- ERR will request EPA assistance for sites where there is potential for pollution of land, water or groundwater or other matters, related to rehabilitation.
- Inform EPA about the potential risks to the environment.
- Conduct periodic reviews of the rehabilitation liability of sites (such as during a bond review). When conducting this review, the ERR officer will assess whether the existing rehabilitation plan remains adequate or whether it needs to be updated to address potential impacts to the environment. EPA will be consulted for advice where issues are identified.
- If a rehabilitation plan needs to be updated, a work plan variation will be required.
 ERR will then follow the above 'Referral of a rehabilitation plan' process to refer the amended rehabilitation plan to EPA for sites which contain any of the referral triggers listed.

EPA responsibility:

 When requested by ERR, assess environmental risks of the earth resources site, check the mitigation of risks are acceptable and land, water and groundwater environments are protected and provide advice on whether EPA regulatory tools may assist.

• Provide response to ERR within an agreed timeframe.

EPA and DEDJTR (ERR) have developed a joint implementation plan to support the delivery of this function for Latrobe Valley Coal Mines when it is triggered by the responsible Minister:

Implementation Plan

1. Purpose:

- (i) The Implementation Plan sets out the further matters that need to be resolved and implemented prior to an EPA appointed auditor carrying out an audit of a rehabilitation liability self-assessment prepared by any of the Latrobe Valley coal mines in accordance with the requirements specified by the Minister for Resources under section 79A of the Mineral Resources (Sustainable Development) Act 1990. ("MR (SD) Act")
- (ii) The plan sets out the intentions of both EPA and DEDJTR to ensure success of the roll out of auditing by EPA appointed auditors of rehabilitation liability assessments prepared by the coal mine operator(s) to meet requirements of the MR SD Act
- (iii) Period of plan: 1 January 2017 1 January 2021

2. Timing:

- (iv) DEDJTR to advise EPA in writing (via e-mail to environmental.audit@epa.vic.gov.au) at least 4 months prior to the expected date that auditors will be required to be called upon to offer services to any of the Latrobe Valley coal mine operators to undertake functions under MR (SD) Act.
- 3. Actions to occur within the 4 month window listed in item 2.

Identification and approval of auditors to undertake duties under the MR (SD) Act

- (v) EPA and DEDJTR to identify those EPA appointed auditors, in good standing (ie not the subject of disciplinary action or investigation) interested in and holding requisite skills to conduct duties under the MR (SD) Act.
- (vi) EPA and DEDJTR to issue any approval (such as letter of approval) to confirm auditors meeting requirements under EPA publication 86S in order to undertake functions under the MR (SD) Act.

Refresher training - Currency of knowledge and appreciation of expectations in conducting duties under the MR (SD) Act

(vii) DEDJTR to determine and provide as necessary training in the use of the bond calculator, form of report and how supporting information should be presented and other relevant guidance, on the conduct of duties under the MR (5D) Act.

(viii) EPA to provide support to DEDJTR as required in delivery of the above training Liason officers to support auditor in understanding the responsible authority(s) requirements in the conduct of duties under the MR SD Act

(ix) EPA and DEDJTR to make available a liason person to support the auditor(s) with impartial advice about the regulators expectations, in support of the conduct of duties under the MR (SD) Act.

4. Other

- (x) The role of EPA and DEDJTR is to manage the implementation of the requirements for auditors to carry out audits of Rehabilitation Liability assessments prepared by the coal mine operator(s) to meet the requirements of the MR (SD) Act.
- (xi) The EPA and DEDJTR role does not include,
 - a. being part of the auditor's team,
 - b. the assumption of liability for decision making for the auditor,
 - c. endorsement of auditor findings and conclusions or methodology.

SCHEDULE CONTACTS

ERR	Director - Regulatory Compliance
EPA	Director - Regional Operations and Emergency Management

SCHEDULE 6 - Governance, Implementation, Communications and Engagement

PROTOCOLS

The Schedule Contact Persons for ERR and EPA will be responsible for maintaining the following governance structures to oversee the delivery of the working agreement and associated schedules:

Project Control Board Meeting (Primary Contact Persons)

Membership:

- Executive Director Earth Resources Regulation
- Executive Director Practice and Assurance

The Executive Directors have oversight over the implementation of the agreement. Meeting Frequency: minimum 12 months in June, when a dispute under this MOU requires resolution or when recommendations are made to amend this MOU.

Implementation Working Group

The Implementation Working Group is made up of Schedule Contact Persons, the Regional Manager – Gippsland and the Secretariat and is responsible for the day-to-day implementation of the MOU.

Membership:

Implementation Working Group		
EPA	Manager	Policy and Regulation
EPA	Manager	Development Assessments
EPA	Director	Regional Operations and Emergency Management
ERR	Manager	Stakeholder Relations & Operational Policy
ERR	Director	Stakeholder Relations and Strategy
ERR	Director	Regulatory Compliance
ERR	Director	Statutory Authorisations

Implementation Working Group		
ERR Regional Manager		Gippsland Mine Fire and Emergency
ERR /EPA	Project Officer	Secretariat

Meeting Frequency: every 6 months

High Priority Sites and Stakeholder Engagement Working Group

The High Priority Sites and Stakeholder Engagement Working Group meets to share information in relation to site specific issues and strategies to improve stakeholder engagement, community consultation and science-based decision making.

ERR	Manager	Stakeholder Relations
EPA	Manager	Public Health Unit

Meeting Frequency: 3 months

It is noted the High Priority Sites and Stakeholder Engagement Working Group Managers will be supported by other organisational managers prior to this meeting, in regard to site related issues and current communications and engagement.

Regional Management Contacts

Membership:

EPA Region	ERR Region	
North East	North East	
North West	North West South West	
South West	South West	
Gippsland	Gippsland	
Metro	M. II	
South Metro	Melbourne Region	

Meeting Frequency: Individual catch-up with your equivalent - 2 months

MEETING SCHEDULE AND GOVERNANCE

After the Project Control Board (primary contact person from each agency) meet, every June, it will be the responsibility of the Schedule Contact Persons to develop and create the meeting schedule and required outcomes. This will be provided to the primary contacts for review and approval by the end of July each year.

SCHEDULE CONTACTS

ERR	Director - Stakeholder Relations and Strategy	
EPA	Director - Regional Operations and Emergency Management	

Earth Resources Regulation Interim Compliance Strategy 2021–2022



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1 Authorisation

Title Interim Compliance Strategy 2021–2022

Issuing Division/ Branch Earth Resources Regulation

Date Effective 01 March 2021

Enquiries ERRFeedback@ecodev.vic.gov.au

Contact 1800 366 356

Approved by Executive Director, Earth Resources Regulation

2 Introduction

Earth Resources Regulation regulates Victoria's mining, quarrying, petroleum and recreational prospecting sectors.

2.1 Overview

Earth Resources Regulation recognises that public confidence in the earth resources sector and its regulator depends in large part on industry compliance. The regulator's primary objective is to protect public safety, land, infrastructure and the environment in accordance with the laws applicable to the sector.

Earth Resources Regulation has initiated an exercise to refresh its compliance operating model with the aim to ensure that it addresses current and foreseeable risks and incorporates contemporary compliance practices, within the context of a significant increase in activity within the sector. The regulator will apply a risk-based tasking and coordination model that draws upon its regional knowledge and presence. This work involves considering the compliance operating models used by other comparable regulators in Victoria and interstate, drawing on independent specialist expertise and engaging with co-regulators, industry and the wider community.

This interim Compliance Strategy outlines how Earth Resources Regulation will apply its compliance approach, incorporating education and enforcement activities, in the interim.

2.2 Purpose

The intent of this strategy is to ensure that authority holders conduct their earth resources activities in a safe and environmentally responsible way by the regulator applying the available compliance tools ranging from education, notices, infringements and prosecution. The Compliance Strategy is published for three purposes:

- To inform all stakeholders of Earth Resources Regulation's compliance priority risk areas and where additional focus will be applied
- To inform industry bodies and authority holders of how Earth Resources Regulation intends to encourage compliance and treat and deter non-compliance
- To ensure that Earth Resources Regulation compliance activities are undertaken in a fair, equitable and consistent manner

The Compliance Strategy is part of Earth Resources Regulation's compliance framework (below figure 1). The framework is a series of high-level documents that inform how compliance activities are prioritised, coordinated and managed.



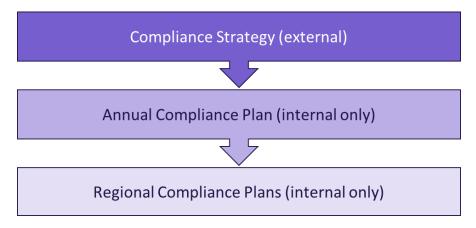


Figure 1. Earth Resources Regulation Compliance Framework

The Compliance Strategy is public document. The Annual Compliance Plan and Regional Compliance Plans are restricted for internal use, as these detail confidential information about the conduct of compliance activities.

2.3 Our role

Earth Resources Regulation is Victoria's regulator of exploration, mining, quarrying, petroleum, recreational prospecting and other earth resource activities.

Our role is to ensure that any potential risks posed to the environment, the public, land, property and infrastructure from earth resources activities are identified and eliminated or minimised as far as reasonably practicable. We do this by:

- Licensing, assessing and setting conditions for earth resource projects
- · Educating operators in the earth resources sector and the wider community on regulatory requirements
- Informing industry compliance through the provision of codes of practice, guidance notes and technical guidelines
- Monitoring compliance with laws, including by working with co-regulators
- Enforcing laws

2.3.1 Role of the Compliance Team

The compliance team is responsible for monitoring compliance with laws and enforcing these to ensure that mine, quarry and petroleum operators fulfil their obligations under the relevant legislation.

2.3.2 Inspectors

The compliance team consists of Earth Resources Regulation Inspectors. Inspectors are empowered to carry out compliance activities under the legislation listed in part 1.2.3 of this strategy.

Inspector powers are defined under Part 9 of the *Mineral Resources (Sustainable Development) Act 1990* (MRSDA) and Part 13 of the *Petroleum Act 1998*. In general terms, inspectors have the power to:

- Enter a work site and conduct inspections to monitor compliance with legislation, including sighting or copying documents
- Compel authority holders to take remedial action to rectify non-compliance
- Under the MRSDA, give a direction to an operator if the inspector reasonably believes that it is
 necessary to do so because of an immediate risk to public safety, the environment, land, property or
 infrastructure.

Authority holders and site occupiers are required to provide reasonable assistance to Inspectors.

Earth Resources Regulation Inspectors exercise their powers with a high degree of professionalism and impartiality. Additional information is available in Earth Resources Regulation's Stakeholder Engagement Charter, available from the Earth Resources website.



2.3.3 Legislation

Earth Resources Regulation is responsible for monitoring compliance with the following legislation:

Legislation	Regulations
Mineral Resources (Sustainable Development) Act 1990	Mineral Resources (Sustainable Development) (Extractive Industries) Regulations 2010
	Mineral Resources (Sustainable Development) (Mineral Industries) Regulations 2013
Petroleum Act 1998	Petroleum Regulations 2011
Offshore Petroleum and Greenhouse Gas Storage Act 2010	Offshore Petroleum and Greenhouse Gas Storage Regulations 2011
Geothermal Energy Resources Act 2005	Geothermal Energy Resources Regulations 2006
Greenhouse Gas Geological Sequestration Act 2008	Greenhouse Gas Geological Sequestration Regulations 2009
Mines (Aluminium Agreement) Act 1961	
Underseas Mineral Resources Act 1963	
Extractive Industries (Lysterfield) Act 1986	

2.3.4 Ministerial Statement of Expectations

This compliance strategy aligns with the Ministerial Statement of Expectations for the regulation of the earth resources sector.

Earth Resources Regulation produces an action plan for meeting the Statement of Expectations. This action plan and the associated Statement of Expectations are available from the Earth Resources website.

Earth Resources Regulation reports on its actions and performance against the Statement of Expectations each year.

2.4 Working with other agencies and regulators

Earth Resources Regulation has Memoranda of Understanding and agreements in place with co-regulators to enable a whole of government approach to regulation. These working relationships aim to provide authority holders with clear direction on regulatory requirements, assure transparency and support robust engagement with the industry. Earth Resources Regulation's work with co-regulators aims to effect more efficient regulation and therefore reduce the regulatory burden on authority holders.

This joint regulatory landscape includes Earth Resources Regulation, Environment Protection Authority (EPA) Victoria, the Department of Environment, Land Water and Planning (DELWP), Parks Victoria (ParksVic), National Offshore Petroleum Safety and Environmental Management Authority (NOPSEMA) and WorkSafe Victoria. Other agencies we work closely with include Catchment Management Authorities (CMAs), water authorities, Fire Rescue Victoria (FRV), Emergency Management Victoria (EMV) and local councils

2.5 Working with the community

Earth Resources Regulation recognises that earth resources industry activities can have an impact on surrounding communities.

The concerns and observations of local communities, earth resources businesses and environment groups can provide information that is relevant to compliance programs. Community feedback and information about emerging issues and impacts is valuable. Earth Resources Regulation will investigate allegations of non-compliance; however, community concerns are just one input into compliance and enforcement programs.

Earth Resources Regulation must remain independent. Earth Resources Regulation expects authority holders to fulfil their duty to consult local communities to work through any potential or actual issues in good faith.

Additional information is available in Earth Resources Regulation's Stakeholder Engagement Charter, available from the Earth Resources website.



3 Strategic compliance objectives

3.1 Strategic compliance objectives

Earth Resources Regulation's compliance activities aim to:

- · identify and address potential risks to public safety, the environment, land, property and infrastructure
- · encourage an industry culture where authority holders take ownership of their own compliance
- ensure effective and timely rehabilitation (including progressive rehabilitation) of land to a safe, stable and sustainable landform after earth resource activities have ceased.

Earth Resources Regulation is committed to applying robust risk assessment to inform compliance activity, and to understanding the effectiveness of those activities on reducing non-compliance.

3.2 State-wide coordination

In 2021, Earth Resources Regulation will move to a centralised model for prioritising, tasking and coordinating compliance activities and investigations. This will aim to improve consistency and transparency in regulatory outcomes, ensuring authority holders have a consistent experience with compliance and enforcement regardless of their location, and ensure that key risks are addressed.

A State-wide Tasking and Coordination Committee (STCC) will be responsible for establishing criteria in assessing risks and prioritising, tasking and coordinating compliance operations. This will include targeted campaigns on priority compliance risks and areas.



4 Regulatory approach

This section outlines the principles that inform Earth Resources Regulation's compliance decisions and actions. Earth Resources Regulation's compliance activities are conducted in accordance with the following regulatory principles:

- Risk-based
- Proportionate and graduated
- Consistent and fair
- Transparent and accountable

4.1 Risk-based

Earth Resources Regulation takes a risk-based approach to all regulatory activities. For compliance and enforcement, this ensures regulatory activities are prioritised for sites or activities that present the greatest risk to public safety, the environment, land, property and infrastructure.

A risk-based approach also enables Earth Resources Regulation to:

- use resources effectively and efficiently
- help stakeholders understand the rationale behind compliance activities
- determine the appropriate actions to be applied when non-compliance is identified

4.1.1 Priority risks

A risk-based approach means we use information and evidence available to identify priority risks relating to compliance activities.

Priority risks may change over time due to changes within the operating environment or when our understanding of the risk increases through better information and evidence gathered during compliance activities.

Identified Priority risk areas for 2021–2022 are detailed in part 6 of this strategy.

4.1.2 As Far as Reasonably Practicable

Earth Resources Regulation's risk management framework considers the level of risk mitigation that is reasonably practicable. Section 1(b)(i) of MRSDA states that risks to the environment, members of the public, land, property or infrastructure arising from the operation must be eliminated or minimised as far as reasonably practicable.

The 'as far/low as reasonably practicable' (ALARP) test, is a common method of determining risk mitigation and implementation. While a variety of risk mitigations can be used to address a risk and to meet the compliance requirements, our focus is on ensuring the outcome meets the ALARP test.

Figure 2 illustrates the ALARP concept where risks are treated to reduce their likelihood and/or consequence of occurrence to the point at which they are as low as possible, without costs being disproportionately high in comparison.



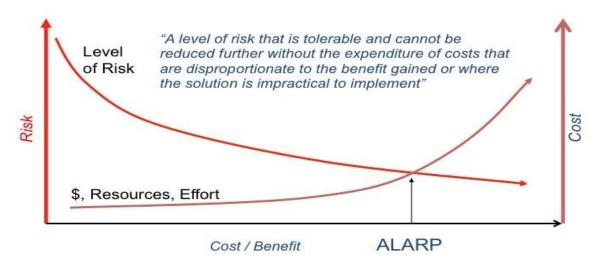


Figure 2: The concept of as low as reasonably practicable (ALARP) (Talbot, 2012)

4.2 Proportionate and graduated

Compliance actions in response to identified non-compliance are proportionate to the level of actual or potential harm.

Actions are also graduated, using the full scope of regulatory tools from education to prosecution to match the seriousness of the non-compliance (including potential risk) and history of compliance performance. Additional detail on how this is applied in practice is in the compliance approach section of this strategy. Figure 3 below outlines the concept of a proportionate and graduated regulatory principle.

Earth Resources Regulation may also take enforcement action where it considers it appropriate to do so, irrespective of whether or not such non-compliant activities have been enforced in the past.

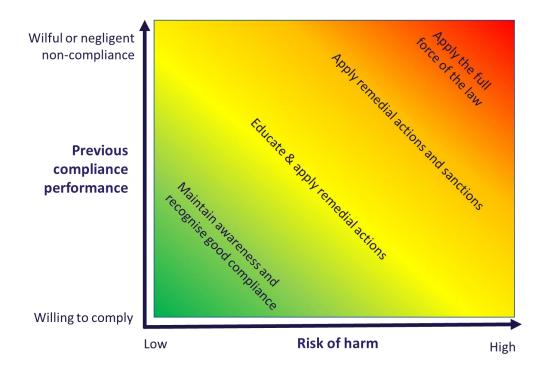


Figure 3: Concept of proportionate and graduated regulatory principle



4.3 Consistent and fair

Authority holders will be treated in the same way for equivalent non-compliant actions, risks and circumstances, regardless of company, location or size of operation.

Earth Resources Regulation ensures authority holders are given an opportunity to explain any alleged non-compliant activity and are given sufficient time to undertake remedial action. Earth Resources Regulation will follow-up to ensure remedial action has been taken where non-compliance is identified.

4.4 Transparent and accountable

Earth Resources Regulation publishes monthly, quarterly and annual reports on the publicly available website that details compliance and regulatory performance.

In addition to regulatory performance reports, Earth Resources Regulation will publish information on compliance decisions and actions where appropriate and relevant, to provide transparency of compliance action taken. Information on compliance action may be published on Earth Resources Regulation's public website or in other media.

Publication of compliance actions assures the community and authority holders that the earth resources industry is being regulated appropriately and in accordance with legislation, as well as acting as a deterrent for future non-compliant behaviour.

Companies may be named in any public information released by the regulator about its range of compliance actions. Naming of companies holds the non-compliant authority holder to account and also protects the reputation of the majority of industry participants who comply with their regulatory obligations.

Similarly, company directors' names may also be released if they are found guilty of an offence by a court. As court proceedings are usually open to the public and tribunal orders and court judgments are public information, the media is also free to report on such matters.

The names of company employees and private citizens, such as recreational prospectors who do not hold a valid Miners Right, will not be published in information released by the regulator. However, exceptions may be made for recidivist or serious offenders.

In all cases, any information on compliance activities will only be published when it is lawful to do so.



5 Compliance approach

Earth Resources Regulation's compliance approach encompasses both education and enforcement. It spans from supporting and encouraging compliance through education, including the provision of guidelines and documentation to assist companies in understanding their requirements to addressing serious or recidivist non-compliance through enforcement actions, including prosecution.

Education is an important tool within the regulator's compliance framework and is used to ensure authority holders can access appropriate information to understand their regulatory obligations and be accountable for fulfilling them.

Earth Resources Regulation will use all available regulatory tools to encourage compliance and deter and address non-compliance, including:

- providing guidance and education material and engaging with authority holders on good practice
- · conducting site inspections and audits and providing feedback on identified issues
- implementing remedial action plans for non-compliant activities. This may include remedial notices with specified timeframes for rectification
- · issuing remedial notices or directions, official warnings, infringement notices, or undertaking prosecutions
- cancelling licences, permits and other authorities when justified by risks and impacts and in line with relevant legislation and policy.

Earth Resources Regulation will particularly consider the following factors in determining the most appropriate compliance action for a particular situation:

- the risks to be addressed
- the degree of harm caused or likely to be caused
- the authority holder's willingness and ability to comply, including recalcitrant or recidivist compliance performance.

Significant non-compliance may also impact a company's 'Fit and Proper' standing, which may impact future applications, renewals and licensing recommendations.

5.1 Supporting compliance

Earth Resources Regulation aims to develop and encourage an industry that takes responsibility for its own compliance.

Some of the activities Earth Resources Regulation may undertake to assist authority holders to understand their compliance obligations include:

- · providing on-site feedback during inspections and audits
- issuing industry compliance alerts
- publishing fact sheets, codes of practice and guidelines to provide information on specific risk management and to assist with understanding regulatory requirements – such as guidelines on what information is required in a work plan
- contributing to industry publications

5.2 Monitoring compliance

Earth Resources Regulation uses a wide range of sources of information to assist with compliance monitoring and risk mitigation. This includes information gathered through field activities, industry reports, complaints and tips provided by the community and information and referrals provided from other regulators and government agencies.



5.3 Addressing non-compliance

Authority holders are expected to understand and follow the requirements of their authorities. Earth Resources Regulation takes an integrated approach to non-compliance, which involves combining one or more enforcement measures with provision of information and guidance.

In addressing non-compliance, Earth Resources Regulation will use remedial measures to address the non-compliance. This may include the issuing of notices and requirements to implement processes to prevent future recurrence, such as the requirement to vary a work plan. We will also consider whether it is appropriate to implement sanctions, which may include infringement notices, prosecution or in extreme cases cancellation of authorities.

In addressing non-compliance, Earth Resources Regulation will particularly consider:

- What information and guidance has previously been given to the authority holder and what further education can be provided if appropriate
- What compliance and enforcement action will be taken to ensure the authority holder complies with the law (remedial actions). Whether more stringent enforcement action is warranted

5.3.1 Follow up

Earth Resources Regulation expects authority holders to address non-compliance and provide evidence of remedial action taken.

Earth Resources Regulation will follow-up on identified non-compliance to ensure remedial action has been taken and the non-compliance has been addressed. Follow-up may include site visits or inspections and may be conducted without prior notice. Earth Resources Regulation is likely to take further enforcement action where the remedy has not been applied and the non-compliance has not been resolved.

5.4 Enforcement actions

Enforcement activity considers the harm or risk of harm, driver of the non-compliant activity and history of non-compliance.

Our enforcement objectives are to:

- Stop the non-compliant activity
- Prevent or remedy harm
- Hold the authority holder accountable for non-compliance
- Deter future non-compliance
- Raise awareness of the law.

To achieve these objectives, we may apply both remedies and sanctions as appropriate for the situation and in accordance with legislation and policy.

In determining any compliance action, Earth Resources Regulation may consider:

- The harm or potential harm caused as a result of non-compliance. An investigation may be initiated where required
- The relevance and quality of the available evidence
- General and specific deterrent value whether enforcement action is likely to deter the specific authority holder or other authority holders from similar conduct
- Whether the matter is time-critical decisions will be made taking account of the statutory time limits that apply to some offences and enforcement actions
- Circumstances of the offence most offences under the MRSDA and Petroleum Act are strict liability offences. However, consideration will be given to the intent of the authority holder, their compliance history, willingness to remedy and take measures to prevent future non-compliance.

When considering the enforcement response, Earth Resources Regulation assesses the seriousness of the alleged offence and the potential impact.



In circumstances where Earth Resources Regulation recommends a matter for prosecution, the offence is referred to DJPR's Prosecution Services for assessment in accordance with the *Victorian Model Litigant Guidelines*. Prosecution Services recommends whether to proceed with prosecution or other enforcement measures on behalf of the department, considering the severity of the offence and whether a prosecution is in the public interest.



6 Priority Risk Areas

Earth Resources Regulation will maintain a priority focus on preventing and responding to the key risks posed by minerals, extractives and petroleum sites to protect public safety, land, infrastructure and the environment. We have identified five risk areas for priority focus for the next 12–18 months, subject to continuing operational review

Risk	Focus	Detail
Fire	Coal mines, plant and equipment fires	Fires can present a risk to public safety, environment and infrastructure. Coal mines are a key focus for compliance in terms of risk of fire, which can result from plant and equipment fires as well as fire ignition from the landscape. This focus area includes implementing the recommendations of the Hazelwood Mine Fire Inquiry. Fire risk in quarries, other mines and petroleum sites are also assessed through compliance activities.
Stability	Mines and quarries batters, integrity of	Most slope failures can be prevented by systematically considering geotechnical risks during the whole life of a
	tailings storage facilities and land erosion	mining/quarrying operation and following diligent geotechnical practices.
		Erosion of tailings storage facility and slimes dam (collectively called tailings dams) walls, seepage from the base and overtopping during intense rain are three risks that have been identified during recent audits. Internationally, significant tailings dam failures have caused the loss of lives and property and environmental damage.
		Risk management of tailings dams involves identifying risks, treating the risks by designing and implementing control or mitigation measures, and monitoring the effectiveness of these treatments.
Rehabilitation	Progressive and final rehabilitation of mines, quarries, petroleum and exploration sites	Effective site rehabilitation underpins confidence in both the resources industry and the regulator. Earth Resources Regulation's aim is to remove – or if not possible to remove, lower as far as reasonably practicable – rehabilitation risks during operation, closure and post-closure phases.
		Progressive rehabilitation is rehabilitation that is undertaken concurrent to mining and extractive operations. It contributes to achieving the final landform as defined in the authority holder's rehabilitation plan. Earth Resources Regulation expects authority holders to conduct progressive rehabilitation works consistently throughout the life of the site. Rehabilitation should not be confined to the end of operations.
		Rehabilitation must include all aspects of an operation, including exploration, appraisal and production, as well as tailings dams, buildings and equipment, satellite locations and additional work areas that may be remote from the main activity centre. Rehabilitation is to be undertaken in accordance with the approved rehabilitation plan.



Risk	Focus	Detail
Community impacts	Including dust, noise and vibrations and security of sites	Resource developments have the potential to pose environmental and public health impacts to the community. With each approval, we regulate authority holders' management of emissions such as dust and noise, light, and activities such as blasting (e.g. vibration issues) to maintain the risk profile as low as reasonably practicable.
		When this does not happen, communities are more likely to lodge complaints, and community dissatisfaction may spread to other businesses in the same industry sector. To reduce this risk, we will address offsite emissions as part of its compliance activities.
		Site security non-compliances can result from inadequate fencing and/or signage at sites such as mines or quarries which pose a risk to public safety. To prevent uncontrolled or unauthorised site access requires the implementation of appropriate site management and safety measures.
Authorisations and access	Native Title, land access and annual returns	Compliance with Native Title is generally checked as part of audits / targeted inspections on work plan and authority or licence conditions. Sites with Native Title implications will be targeted as part of a campaign to assess compliance with agreements and conditions relating to Native Title. Various types of annual returns and reports of operations provide valuable information for the management of earth resources. The ongoing campaign to ensure that such reports are submitted will continue to be a focus until compliance with the provision of such returns achieves acceptable levels.





Mining and quarrying – Guide to preventing harm to people and the environment

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We thank everyone for their contribution and commitment to keeping Victoria prosperous and liveable by preventing and reducing harm from pollution and waste.

Disclaimer

The information in this publication is for general guidance only. It does not constitute legal or other professional advice and should not be relied on as a statement of the law. Because it is intended only as a general guide, it may contain generalisations.

You should obtain professional advice if you have any specific concern. EPA has made every reasonable effort to provide current and accurate information, but does not make any guarantees regarding the accuracy, currency or completeness of the information.

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1. Introduction

Many things we do at work can cause pollution and create waste. This can put our health and our land, air and waterways at risk of harm.

New environment protection laws in Victoria will require all businesses to take proactive steps to <u>manage risks</u> of harm from pollution and waste.

As well as preventing harm and complying with the law, you will be keeping your community safe, <u>lowering your environmental impact</u> and potentially <u>saving time and money</u>.

What you consider to be minor pollution and waste also adds up – think about the combined impact of every business on our health and the environment.

Purpose of this guide

This guide outlines how to manage your risks, including examples of how this can be done using a simple four-step process.

This guide also provides an outline of your legal obligations, starting with the general environmental duty (GED), and what actions you can take to comply with the new laws.

To help you work out which of your activities have the potential to cause harm, this guide contains a list of common hazards in mining and quarrying¹, plus information about managing waste.

This guide doesn't tell you what specific controls to put in place – it links to guidance which has information about controls, and you can decide what best suits your circumstances. It also has a list of resources and where to go for more help.

Note: EPA is the primary regulator of water discharges from mining and quarrying industries. EPA is also responsible for advising on monitoring of air quality and noise emissions and has responsibilities when responding to referrals for mining from other government agencies. <u>Earth Resources Regulation (ERR)</u> is the primary regulator for mining and quarrying, delivering regulatory functions under the <u>Mineral Resources (Sustainable Development) Act 1990</u>.

This guide will be updated when any proposed environment protection regulations become available. You can find out more about the proposed regulations, and how they may be relevant to you, by reviewing the <u>draft regulations</u> on the Engage Victoria website.

The mining and quarrying life cycle can include pre-competitive geoscience, exploration, discovery, feasibility, development and land clearing, operational activities, decommissioning activities, site rehabilitation, closure and post-closure management of the mine.

¹ The Mineral Resources (Sustainable Development) Act 1990 defines:

[&]quot;mining" as extracting minerals from land for the purpose of producing them commercially, and includes processing and treating ore;

[&]quot;quarry" as (a) a pit or excavation made in land below the natural surface for the purpose of extracting or removing stone if a primary purpose of the extraction or removal is the sale or commercial use of the stone or the use of the stone in construction, building, road or manufacturing works; or (b) any place or operation involving the removal of stone from land, declared by the Minister by notice published in the Government Gazette to be a guarry —

and includes access ways on private land and the works, machinery, <u>plant</u>, equipment, buildings and structures above or below ground used for or in connection with —

⁽c) making, enlarging or deepening the pit or excavation; or

⁽d) carrying on the operation; or

⁽e) the extraction or removal of stone from the pit or excavation; or

⁽f) the treatment on or adjacent to the land in which the pit or excavation is made of stone extracted or removed from the land or the manufacture on or adjacent to that land of bricks, tiles, pottery or cement products substantially from stone so extracted or removed.

2. How to manage your risks

As a business owner or sole trader, it is your responsibility to understand and manage the risks of harm from pollution and waste to people and the environment from any work you do.

In straightforward situations, managing risks will involve thinking through your activities and taking simple steps to avoid harm. For example, making sure your rubbish goes in the right bin, and chemicals don't go down stormwater drains and into our waterways.

In larger businesses or those that carry out a lot of different activities with greater risks of harm, more complex systems, procedures and documentation may be required.

You should follow any required risk assessment processes where there are co-regulators involved – for example, ERR's risk assessment process identified in work plans and work plan variations for mining and quarrying. EPA doesn't require a separate risk assessment process to be undertaken when you have followed requirements of another co-regulator. EPA's expectation is that you can demonstrate you have identified and assessed risk. The following four-step process may assist you to do so.

Use these four steps to help you manage your risks:

Step 1 - Identify any hazards from your business activities that could cause harm.

Step 2 – Assess the risk, based on the likelihood of the hazard occurring and causing harm, and the consequence of that harm.

Step 3 – Implement suitable control measures, based on what is reasonably practicable for your business, with the aim of choosing the highest level of protection and reliability.

Step 4 – Check controls regularly to make sure they are working, are being maintained, and remain the most appropriate. This includes monitoring them to determine how effective control measures are and to identify any changes that may need to be made.



Useful resources:

- Assessing and controlling risk: a guide for business (EPA publication 1695) this includes an
 example of a register where you can list your hazards and risks.
- <u>Self-assessment tool for small business</u> (EPA publication 1812) check what actions you can take to manage the risks of your business causing harm to people and the environment.
- Action plan (see the Appendix in this guide) you can use this template to list what actions you can take to improve the way you control risks.

Note: Keeping one of the above registers or plans isn't a mandatory EPA requirement for most sites. However, it can help you demonstrate what steps you have taken to manage your risks, if required.

Risk management examples

These examples show how to use the four-step risk process to manage environmental hazards.

A. Managing risks from dust

Samson is an environmental site manager with a mining company. His worksite is often dry and exposed, so dust is a common hazard they need to control. He knows it can cause health complications and adversely impact surrounding views, vegetation and land uses.

Their site was designed with a buffer zone between dust-generating activities and neighbouring land. Onsite roads near sensitive areas like those with protected flora are sealed or actively treated with clean water to prevent dust. Some of their equipment that generates dust is kept in buildings fitted with extraction fans.



Samson identified the dust comes from: vehicles travelling on unsealed roads; drilling and blasting; vegetation clearing; stockpiling of soil and rock; and equipment like crushers and conveyers.

Dust controls in the site's environmental management plan include progressively rehabilitating disturbed areas, dampening blast areas pre-blasting, dampening unsealed roads to prevent dust and covering or wetting loads when moving materials. The dust prone roads are also signposted with enforced speed limits.

The company monitors weather and is ready to adjust its activities when conditions are dry and windy.

Samson regularly checks and keeps a log of controls and equipment to ensure they're working effectively and are maintained. He also monitors dust levels near sensitive areas and identifies other present or potential sources of dust.

The company adjusts controls depending on their effectiveness, or if onsite conditions change. They register dust complaints which then trigger a review and possible modification of controls and practices.

Samson's confident they are managing their risks associated with dust.

B. Managing risks from water and sediment discharge into waterways

Leah is an environmental officer with a quarrying company. Leah knows rainwater, water from dewatering, and water from other sources can cause erosion and runoff offsite, and collect sediment, nutrients and other contaminants as it travels across a site. This can enter their site's drainage system and waterways, and impact the health of people downstream, as well as plant and aquatic life.

When planning their site layout, the company locates stockpiles away from waterways and floodplains, and incorporates erosion and sediment controls based on rainfall and water flows.



They have bunded washdown facilities to capture wastewater. They have designed their water management requirements to separate dirty water from non-dirty water (to minimise water coming into contact with mining activities).

The company minimises the surface area of land exposed through staging vegetation clearing and earthworks. Other controls include revegetation of disturbed areas, seeding or mulching soil stockpiles, road drainage, and contouring and minimising the length and steepness of stockpile slopes.

The company implements controls that respond to seasonal rainfall patterns, and before and after high-rainfall events. They routinely inspect and de-silt their drainage system and erosion and sediment control structures, so they are ready for use.

Before a high-rainfall event, they increase inspections and monitor against EPA licence water discharge requirements. This helps them understand whether their controls are effective or need to be modified to comply with licence conditions.

Leah is confident they're eliminating or reducing risk well because they follow all relevant EPA guidance and other regulatory requirements.

As EPA is the primary regulator for water discharges, their environmental management plan includes a trigger to notify EPA, as well as Earth Resources Regulation, if any discharge not meeting licence, permitting or compliance requirements leaves their site.

Note: The above are examples. You will need to assess your site and apply relevant legal obligations – refer to information about approvals, licencing and permits in 'Section 4 – EPA's role in mining and quarrying' of this guide for more information.

3. Your legal obligations

New environment protection laws will be introduced in Victoria.

The new laws introduce a duty focused on prevention, called the <u>general environmental duty</u>. This duty requires you to take <u>reasonably practicable</u> steps to eliminate or reduce the risks of harm to people and the environment from pollution and waste.

This means, when the new laws take effect, you will need to proactively manage the risks of harm as well as deal with the impacts of pollution and waste after they have occurred. EPA works with people to help them understand the law and what they need to do to comply.

The main duties in the *Environment Protection Act 2017*² (the Act) are outlined on pages 9 to 11 of this guide. In some instances, there may be specific requirements that may be set out in any future environment protection regulations.

Some businesses may already be managing some environmental risks through their efforts to comply with Victoria's occupational health and safety (OHS) and dangerous goods laws. For example, using and storing chemicals and fuels safely, and keeping their business clean and tidy. You may also be familiar with terms like 'reasonably practicable' which is used in OHS.

'Reasonably practicable' means you must put in proportionate controls to mitigate or minimise the risk of harm.

To show you have thought about what is reasonably practicable, consider these six factors:

- 1. Eliminate first
- 2. Likelihood
- 3. Degree
- 4. Your knowledge about the risk
- 5. Availability
- 6. Cost

EPA's compliance and enforcement approach involves a mix of encouragement and deterrence to motivate action. See 'Chapter 5 – How environmental law is enforced' for more information.

It's important to note that a breach of the general environmental duty could lead to civil or criminal penalties if you are a business or conducting an undertaking, even if harm has not occurred.

Note: If you are using this guide before the new laws take effect, the summary of the duties on pages 9 to 11 may be useful in helping you prepare for their introduction. Until the new laws take effect, you must continue to comply with the *Environment Protection Act 1970* and its supporting regulations and policies.

² Environment Protection Act 2017 as amended by the Environment Protection Amendment Act 2018

Summary of environmental duties (in the *Environment Protection Act 2017*)³

This legal requirement	Means I have to	
General environmental duty (s25-27)	Understand how my business activities may give rise to risks of harm to people or the environment from pollution and waste.	
	Put in place reasonably practicable measures to eliminate or reduce identified risks of harm from pollution or waste.	
	Use and maintain:	
	 plant, equipment, processes and systems in a way that minimises risks (e.g. maintain my machinery and equipment in accordance with manufacturer's specifications) systems for identifying, assessing and controlling risks adequate systems to ensure that if risk eventuates, harmful effects are minimised. 	
	Ensure all substances are handled, stored, used and/or transported in a way that minimises risks.	
	Provide information, instruction, supervision and training to people engaged in activities to ensure they comply with above (e.g. undertake toolbox sessions where practicable).	
	It doesn't matter whether an adverse impact on people and/or the environment has or has not occurred. The general environmental duty is breached whenever there is a <i>risk</i> of harm not being proportionally managed.	
	 If you engage in an activity that involves the design, manufacture, installation or supply of a substance, plant, equipment or structure you must, so far as is reasonably practicable: Minimise risks of harm to people or the environment from pollution and waste arising from the design, manufacture, installation or supply of the substance, plant, equipment or structure when used for the purpose it was intended. Where a risk of harm cannot be eliminated, provide information to each person about the purpose of the substance, plant, equipment or structure and any conditions necessary to ensure it can be used in a way that reduces the risks of harm. 	

³ Environment Protection Act 2017 as amended by the Environment Protection Amendment Act 2018

This legal requirement	Means I have to
Duty to respond to harm (s31)	Take reasonably practicable measures to restore the environment if a pollution incident occurs as a result of a leak, spill or other unintended deposit or escape of a substance.
	The person engaging in the activity that results in the pollution incident must <i>clean</i> it up. They must also <i>restore</i> the affected area to the state it was in before the pollution incident, as far as reasonably practicable.
	This duty applies regardless of fault.
Duty to notify of an event (s32-33)	Contact EPA on 1300 372 842 (1300 EPA VIC) as soon as practicable if a pollution incident happens that causes or threatens material harm ⁴ to human health or the environment.
	Provide information about the nature of the incident, its location, the harm or threatened harm, the circumstances in which it occurred, and proposed action to deal with the incident. EPA will provide further instructions on completing my notification.
Duty to manage contamination (s39)	If I manage or control contaminated land (vacant or occupied), including groundwater, minimise risks of harm to human health and the environment arising from the contamination. This may include mitigating pathways for exposure to the contamination.
	If I suspect contamination, <i>investigate</i> further to understand the risks.
	This duty applies regardless of who caused the land or groundwater to be contaminated or when contamination took place. It also applies regardless of whether EPA is aware of the contamination or has issued any notices.
Duty to notify of certain contamination (s40)	Contact EPA on 1300 372 842 (1300 EPA VIC) as soon as practicable if the land I manage or control is contaminated in any of the circumstances set out in the regulations. This includes contamination to groundwater. See EPA's guidance on the thresholds.
	This duty applies regardless of fault or when the contamination took place. It applies as soon as I become aware (or ought to have been aware) of the contamination.
	The duty is intended to expand EPA's knowledge about contaminated sites in Victoria.

⁴ Material harm means harm that is caused by pollution or waste that has an adverse effect on human health or the environment that is not insignificant; has an adverse effect on an area of high conservation value or of special significance; or results in, or is likely to result in, greater costs than what would have been incurred if action had been taken to prevent or minimise the harm in the first place.

This legal requirement	Means I have to
Duties relating to industrial waste (s133-137)	Only <i>deposit</i> industrial waste at a <u>'lawful place'</u> – this means a place or premises that is authorised and agrees to receive the industrial waste.
	Before handing over industrial waste to another person:
	 identify and classify the type of industrial waste describe the industrial waste to the person collecting, consigning, transferring or transporting the industrial waste check that the place the transporter is planning to take the industrial waste can lawfully receive that waste.
Duties and controls relating to priority waste (s138-141)	If I manage or control priority waste (any waste, including municipal and industrial waste, classified as priority waste in accordance with the regulations, see note below), <i>take</i> all reasonable steps to ensure it is contained so it can't escape and is isolated to ensure resource recovery remains practicable.
	Give the person who collects or consigns the priority waste information about its:
	 nature and type any risks of harm any other relevant information necessary for them to comply with the law.
	Before deciding to dispose any priority waste to landfill, investigate if I can re-use or recycle the priority waste. Also investigate how I can avoid producing or generating similar waste in the future.
	Some ways I can investigate alternatives include:
	 consider EPA guidelines or other relevant publications consider the availability of any relevant technology consult with someone with relevant expertise.
Duties and controls relating to reportable priority waste (s142-143)	Record and notify transaction details relating to reportable priority waste in accordance with the proposed regulations This can be done via the EPA Interaction Portal.
	Note: reportable priority waste is a subset of priority waste and carries the highest level of controls. It is reserved for waste types with the highest levels of risk.
	If I <i>transport</i> reportable priority waste, do so in accordance with a <u>permission</u> .

Note: It is anticipated that environment protection regulations will be made available before the new laws commence. The regulations may provide more specific information about the way you must comply with the new laws. You can find out more about the proposed regulations, and how they may be relevant to you, by reviewing the <u>draft regulations</u> on the Engage Victoria website. It is recommended you periodically check this guide for any further updates.

Permissions

When the new environment protection laws take effect, EPA will be issuing licences, permits and registrations. These are collectively referred to as 'permissions' and work alongside the general environmental duty. They ensure certain standards and conditions are met across a range of activities.

Licences – are for complex prescribed activities that need the highest level of regulatory control.

Permits – are for medium-risk prescribed activities with low complexity.

Registrations – are for low-risk prescribed activities and are simple to obtain (they are automatically granted).

The type of permission you require, if you require one, depends on the type of activities you undertake and the level of control that needs to be put in place.

For more information, see EPA's <u>draft Permissions Scheme Policy</u> (publication 1799), which describes how the three types of permissions will work.

The <u>environment</u> <u>reference standards</u> (ERS) will take effect with the new laws.

The ERS describes features of the environment that are of value to the community, e.g. the quality of water for drinking and swimming. It also has indicators and objectives to measure whether those features are being met for different parts of the environment (air, land, acoustic and water environments).

EPA may consider the ERS when assessing development and operating licence applications, and when making other decisions.

4. EPA's role in mining and quarrying

EPA is the primary regulator for water discharges from mining and quarrying activities. EPA also advises on air quality and noise emissions, and responds to referrals for mining and quarrying from other government agencies.

Earth Resources Regulation (ERR) is the primary regulator for all other aspects of mining and quarrying.

EPA has a support and advisory role that includes advising on:

- air discharges, noise and waste management
- environmental management conditions (both operational and rehabilitation) related to waste and pollution.

EPA and ERR work together under a <u>Memorandum of Understanding</u>. EPA also uses the <u>Protocol for Environmental Management: Mining and extractive industries</u> (publication 1191) to set out requirements for assessment and management of emissions to air and environment from mining and guarrying activities.

As part of the approval process, Environment Effects Statements (EES) are required for projects that are of a larger scale and are likely to have a larger environmental impact. When an EES is not required, mining and quarrying activities are regulated through a work plan process managed by ERR or a planning permit process managed by the local authority. Both processes allow for referral to the EPA for expert technical advice. In addition, mining and quarrying activities are regulated by WorkSafe Victoria, for worker safety aspects of operations.

The <u>EPA website</u> and <u>ERR website</u> provide the most up-to-date information for your sector. With the new environment protection laws and ongoing reform of the <u>Mineral Resources (Sustainable Development) Act</u> 1990, there are a number of publications and webpages that will be replaced and updated.

Approvals, licensing and permits

ERR is responsible for the approval process with advice from EPA where required.

EPA are responsible for licensing of discharges to surface and groundwaters.

ERR regulate mines and quarries under the *Mineral Resources (Sustainable Development) Act 1990*. Mines require a mining licence to extract minerals. Quarries require a work authority to extract stones.

Low-risk quarrying and mining is regulated through codes of practice. This includes mines and quarries that are limited in scale and use low-risk methods to extract materials out of the ground. All other commercial operations are regulated through a work plan endorsement process, in which EPA is a referral authority (both statutory and non-statutory) and can provide comments to ERR in line with our supportive role.

For more information please visit https://earthresources.vic.gov.au/ or email workplan.approvals@ecodev.vic.gov.au

EPA licences for mining and quarrying are outlined in the <u>Environment Protection (Scheduled Premises)</u>
Regulations 2017, or any requirements for <u>licences</u>, <u>permits or registrations as prescribed in future</u> regulations.

EPA has a dedicated email to support referrals and applications for quarry and mine proposals: ERR.Referrals@epa.vic.gov.au

5. How environmental law is enforced

EPA compliance and enforcement

EPA works with industry to build knowledge and capability to prevent environmental harm.

We provide businesses with certainty, transparency and consistency. In turn, EPA expects duty holders to take proactive steps to inform themselves and comply with their obligations.

EPA supports compliance with guidance, education, and where appropriate, remedial action. We will strongly enforce the law if the community is deliberately or negligently exposed to harm.

For more information, see EPA's <u>regulatory</u> <u>strategy</u> and <u>compliance and enforcement policy</u>.



Who enforces environmental law?

EPA has a team of authorised officers who inspect businesses and premises, provide guidance and advice about compliance, and enforce the law. Council officers can also be authorised officers under the EP Act.

What happens if I don't manage my risks?

Where an EPA authorised officer believes that you are not complying with your duties, they will consider using remedial powers and tools (see the table on pages 15 to 16 for an overview). The aim of this is to bring you into compliance with the relevant duties or address any harm, waste or contamination present.

Remedial powers and tools

Remedial tool	What it is	
Compliance advice	This may include information about how to comply with the law, interpret standards and/or other support on how to remedy non-compliance.	
	While an EPA officer will record this advice in an entry report it doesn't mean you necessarily have to follow the advice if you find another suitable way to comply.	
Remedial notices	A formal record that EPA has sought action to remedy non-compliance.	
	They may be issued where an authorised officer reasonably believes you are not complying with the legislation or where a harmful or unlawful situation exists.	
	The range of remedial notices include:	
	 Improvement notice – requires you to take action to remedy non-compliance. These are EPA's primary enforcement tool. A notice can request you to proactively address a risk. This means harm doesn't necessarily have to occur for EPA to issue an improvement notice. Prohibition notice – requires you to stop an activity that has an immediate risk of harm. It may also require you to do other things to prevent or minimise the harm. 	
	Notice to investigate – requires you to investigate whether: land is or may be contaminated; a pollution incident has occurred; industrial waste is at a place or premises unlawfully; or there is a risk of harm arising from pollution or the depositing, storing or handling of waste. This investigation will determine whether further action needs to be taken.	
	Environmental action notice – requires you to address the impact of pollution, waste and contamination. They are used when: land is or may be contaminated; a pollution incident has occurred; industrial waste is at a place or premises unlawfully; there is a risk of harm arising from pollution or the depositing, storing or handling of waste; or you haven't complied with a notice to investigate.	
	Waste abatement notice – requires you to address waste that: negatively impacts the public; negatively impacts the proper use of a place; or is a hazard to the environment. They may be issued by EPA officers or councils. They require you to: conduct a cleanup to remove waste; restore places impacted by waste; modify activities that cause waste to be deposited; or lawfully dispose of waste.	
Site management order	Used for the long-term management or rehabilitation of contaminated land or to undertake a broad range of actions to manage the risk of harm. They may be used when land is contaminated, or where there is a risk of harm from pollution and waste.	
	Measures required by an order may include installing and maintaining infrastructure, monitoring of contamination on the site and ongoing reporting requirements.	

Remedial tool	What it is
<u>Directions</u>	Issued when EPA believes there is an immediate risk of harm, for example during an emergency incident.
	These directions, whether issued verbally or in writing, must be followed immediately.
Cleanup powers	An intervention from EPA that involves conducting a cleanup to deal with an immediate or serious risk of harm arising from pollution, waste or contaminated land.
	EPA will only use these powers when all other attempts to have the person responsible address the immediate or serious risk have not worked.

In certain circumstances EPA may determine that pursuing a sanction is warranted. This may be an infringement notice, enforceable undertaking or penalties determined by a court through civil or criminal proceedings.

6. Common environmental hazards in mining and quarrying

Hazards you may commonly come across in mining and quarrying include:

- air contaminants
- chemical spills
- dust
- fire and explosion
- groundwater contamination
- offensive odour
- surface water contamination
- unreasonable noise
- waste
- wastewater.

See the tables on pages 18 to 25 for information about these hazards, and some examples of what may cause them. This isn't a complete list but gives you an idea of what could harm people and the environment if risks of harm aren't properly managed.

Some of the common sources of harm can impact many different areas of the environment as well as human health. These include, but aren't limited to:

- social surroundings (houses, hospitals, schools, playgrounds, public amenities)
- waterways, streams, sources of drinking water for people or livestock
- parks and recreational areas
- areas of public interest and cultural significance
- land or water with identified flora, fauna, vegetation, ecosystem or environmental value.

These are also referred to as 'sensitive receptors'.

A single hazard can have multiple risks associated with it that can cause several harmful impacts. For example, poor management of stored chemicals can result in chemical spills, release of air contaminants, and surface water contamination.

Remember that every site is different and may have a unique set of hazards and risks. Putting in place controls to eliminate or reduce identified risks of harm from pollution or waste will help you meet your general environmental duty. Following standards in existing relevant regulatory legislation or codes of practice (e.g. OHS) can also indicate that your common sources of harm are being managed appropriately.

Note: Similar example hazards and controls/recommended practices are described in the Earth Resources Regulation code of practices and work plan guidelines for exploration, mining and quarrying (refer to the list on page 25).

Hazard: Air contaminants

Toxic or hazardous materials that are discharged into the air in the form of soot, ashes, fumes, gas, smoke etc.

Common sources of harm	Possible consequences if risks of harm from pollution and waste aren't managed	For more information, including controls
 exhaust fumes from poorly maintained vehicles and machinery fire ignition sources mine ventilation exhausts fumes and exhausts from poorly maintained processing facilities (e.g. furnaces and boilers) smelting emissions bulk storage tank failure (e.g. fuels) mine and stone/rock processing activities (which can discharge hazardous materials) air emissions from waste storage areas respirable particles including crystalline silica and other dust demolition activities 	Air pollution damage Human health Animal health Dust	Check air quality in Victoria – EPA AirWatch Air pollution Air quality Protocol for environmental management: Mining and extractive industries (publication 1191) Recommended Separation Distances for Industrial Residual Air Emissions – Guideline (publication 1518)

Hazard: Chemical spills

The uncontrolled release of chemicals, regardless of the amount or whether the spill happens indoors or outdoors.

Common sources of harm	Possible consequences if risks of harm from pollution and waste aren't managed	For more information, including controls
 leaking containers or pipelines, including chemical storage drums poor storage and handling of fuels, chemicals or drilling mud vehicle/equipment maintenance and refuelling (e.g. spills) inappropriately contained chemical additives and coating substances 	Water pollution groundwater pollution Offensive odour Human health Air pollution Vegetation damage	Liquid storage and handling guidelines (publication 1698) Solid storage and handling guidelines (publication 1730)

Hazard: Dust Earth or other matter, in fine, dry particles. Possible consequences if Common sources of harm For more information, risks of harm from pollution including controls and waste aren't managed Reducing erosion and stripping/land clearance sedimentation risk: open pits guidelines for industry drilling and blasting Vegetation Air Dust unsealed roads damage pollution Construction ore processing and stockpiles techniques for tailings storage facilities sediment pollution exposed soil, overburden and waste control rock stockpiles (publication 275) Fire Human improper use of plant and equipment health (e.g. crushers) Recommended poor management of material transfer Separation Distances (conveyor/truck loading/off-loading) for Industrial Residual soil movement during site rehabilitation Air Emissions – site infrastructure demolition Guideline poor cleaning operations (publication 1518) Guidelines for the design and management of tailings storage facilities (ERR)

Hazard: Fire and explosion Flames and heat from something that is burning in an uncontrolled way. Possible consequences if Common sources of harm For more information, risks of harm from pollution including controls and waste aren't managed unmanaged vegetation Management and storage of combustible self-heating of ore materials (e.g. coal) recyclable and waste inadequate storage of waste mined Land and Water materials – guideline pollution groundwater materials (e.g. resulting in spontaneous pollution pollution (publication 1667) combustion of waste rock materials) poor storage of waste materials (e.g. combustible recyclables and other nonmined waste materials) Vegetation bushfires burning onto or within damage health mining/quarrying sites

Hazard: Groundwater contamination

metal dust uncontained ash

Chemical substances or waste present in the groundwater (water that flows underneath the earth's surface) at levels above what would be expected to occur naturally.

Common sources of harm	Possible consequences if risks of harm from pollution and waste aren't managed	For more information, including controls
 improper stormwater management practices inappropriately managed mine dewatering seepage from tailings storage facilities and soil and waste rock storage leaching of heavy metals from mined metals and waste rock inadequately managed oil, grease, fuel, and chemicals resulting in spills and leaks pipeline leaks inappropriate management of acid mine drainage 	Land and groundwater pollution health	How to prevent water pollution from your business Liquid storage and handling guidelines (publication 1698) Solid storage and handling guidelines (publication 1730) Guidelines for the design and management of tailings storage facilities (ERR)

Hazard: Offensive odour Gases in the air that can cause an unpleasant smell. Possible consequences if For more information, Common sources of harm risks of harm from pollution including controls and waste aren't managed Odour guidance for waste (e.g. processing waste, landfill) businesses chemical use (e.g. material processing and water treatment, fuels/oils) Offensive Human Recommended fumes from poorly maintained pollution odour health Separation Distances machinery (exhaust and ventilators) for Industrial Residual fumes from refueling Air Emissions poorly maintained vehicles (exhaust) Guideline inappropriately contained organic waste (publication 1518) and sewage unsegregated food waste from other waste chemicals (e.g. paints and solvents) stored without containment

Hazard: Surface water contamination

Surface run-off from rain and storms that enters our waterways (e.g. creeks, rivers, wetlands and bays) can contain pollutants such as sediments, chemicals, litter, and human and animal faeces.

Common sources of harm	Possible consequences if risks of harm from pollution and waste aren't managed	For more information, including controls
 inappropriate stormwater management practices lack of separation of clean and dirty site water inappropriate storage of water from site dewatering sediment run-off from exposed cleared areas run-off from soil and waste stockpiles inappropriate / lack of containment of washdown water from cleaning of vehicle, machinery and equipment contaminated run-off that has been in contact with wastes inadequate containment of soil and loose waste during transport inappropriate management of waste rock dumps and tailings storage facilities (e.g. leachates and contaminated soil, sediments and dust) inadequately managed oil, grease, fuel, and chemicals resulting in spills and leaks pipeline leaks seepage from stored processing wastes (e.g. leach dumps/pads, tailings storage facilities) inappropriate management of acid mine drainage tailings storage facility failure 	Water pollution	Reducing stormwater pollution: A guide for industry (publication 978) Construction techniques for sediment pollution control (publication 275) How to prevent water pollution from your business Reducing erosion and sedimentation risk: guidelines for industry Liquid storage and handling guidelines (publication 1698) Solid storage and handling guidelines (publication 1730) Reducing risks in the pre-mixed concrete batching industry (publication 1806)
		Guidelines for the design and management of tailings storage facilities (ERR)

Hazard: Unreasonable noise Unwanted sound (including vibration) that's annoying, distracting or harmful.				
Common sources of harm	Possible consequences if risks of harm from pollution and waste aren't managed	For more information, including controls		
 drilling rock and ore processing (e.g. from crushers, grinders, screens, and conveyor systems) poor material handling (e.g. loading ore bins) improper use of plant and machinery (mobile and fixed) ventilation systems excessive vehicle movement (e.g. haulage) and beepers blasting (detonation of explosive devices) 	Animal Human health health	Noise guidance for businesses How to reduce noise from your business (publication 1481) Reducing risks in the pre-mixed concrete batching industry (publication 1806)		

Hazard: Waste

concrete batching

Any matter, whether solid, liquid, gaseous or radioactive, which is discharged, emitted or deposited in the environment in a way that alters it. This includes unwanted or surplus material, irrespective of its potential use or value.

Common sources of harm	Possible consequences if risks of harm from pollution and waste aren't managed	For more information, including controls
 Mineral waste overburden or waste rock stockpiles tailings storage facilities and processing wastes acid sulphate soils leachate ponds contaminated soils Non-mineral waste hazardous wastes (e.g. fuels and chemicals) onsite landfill site closure and demolition activities dewatering sludges or solids (e.g. sediment ponds) contaminated soils 	Water pollution groundwater pollution Fire Offensive odour health	Managing waste Manage contaminated land Imported materials management guidelines (ERR) Guidelines for the design and management of tailings storage facilities (ERR)

Hazard: Wastewater

Any excrement or domestic waterborne waste, or any water that has been 'used' or is in excess and is not wanted for use, whether untreated or partially treated.

Common sources of harm	Possible consequences if risks of harm from pollution and waste aren't managed	For more information, including controls
 washing vehicles, tools, and equipment near waterways without containment or collection of wash waters processing wastewater wastewater treatment facilities leachate run-off from uncontained waste stockpiles 	Water pollution groundwater pollution pollution Human health	Reducing stormwater pollution: A guide for industry (publication 978) How to prevent water pollution from your business

Earth Resources Regulation guidance

The following guidance (developed by Earth Resources Regulation), has information relevant to all hazards listed in the tables on pages 18 to 25, including compliance and permission requirements:

- Code of practice for mineral exploration
- Exploration work plan guidelines
- Exploration licence guidelines
- Code of practice for small quarries
- Extractive industry work plan guideline
- Work plan guidelines for mining licenses
- Code of practice for low risk mines
- Preparation of Rehabilitation Plans: Guideline for Mining and Prospecting Projects

7. Managing your waste

It is up to everyone to make sure waste goes to the right place. This is to avoid land and groundwater contamination, stockpile fires, abandoned waste, and illegal waste sites.

Under the new laws, waste generators, transporters and receivers will share the responsibility for making sure waste ends up at an EPA-authorised site.

For some businesses, managing waste may involve simply sorting it into the right bin and keeping it out of drains. For other businesses who have hazardous wastes such as asbestos, clinical and medical waste, unprocessed used cooking fats and oils, and so on, it will be more complex.

If you are a small business who only disposes of general waste and paper/cardboard, you may find some useful waste and recycling tips from <u>Sustainability Victoria</u>.

If you have more complex industrial waste, follow these three steps to help you comply with the new laws:

- 1. Classification: what is the waste? Industrial waste must be properly identified and classified. This makes it clear what duties apply to the management of the waste. Under the Act, waste can be either industrial waste or both industrial and priority waste. Some priority wastes are also reportable priority wastes.
 - **Industrial waste** is the broad category covering all waste. This includes household waste once it is gathered at a waste facility (e.g. transfer station, landfill).
 - Priority waste is industrial waste that requires additional controls due to its higher level of hazard, its potential to be mismanaged, or to encourage resource recovery or efficiency.
 - Reportable priority waste is a subset of priority waste and carries
 the highest level of controls. It is reserved for waste types with the
 highest levels of risk. Controls for this type of waste include
 transportation only by permitted vehicles, and mandatory reporting
 to EPA each time the waste is exchanged.

Declaration of use (DoU) is a tool that when the new laws take effect, can be used to support safe storage, reuse and recovery of material from lower-risk wastes which do not require an EPA permit or permission.

The DoU will be a short statement or checklist. It will be valid for up to 12 months, or until your waste changes. You will need to complete a selfassessment that describes your waste, assesses its risk, identifies legitimate uses for it, and provides the end user with details about the quality and safety of your waste. DoUs do not need to be submitted to EPA but may be requested by an EPA authorised officer at any time.

- **2.** Transport: how should waste be transported safely? Waste must be safely contained during transportation. Some waste types have specific containment and isolation requirements.
- **3.** Lawful place: where must the waste go? Industrial waste may only go somewhere lawfully able to receive it, such as a place with an EPA permission.



8. EPA guidance relevant to mining and quarrying

- <u>Assessing and controlling risk A guide for business</u> (publication 1695) how to manage risks, using a four-step process.
- <u>Self-assessment tool for small business</u> (publication 1812) check what actions you can take to manage the risks of your business causing harm to people and the environment.
- Air pollution information on what causes air pollution.
- Air quality how to prevent air pollution.
- <u>Protocol for environmental management: Mining and extractive industries</u> (publication 1191) how to assess potential impacts of emissions from mining and quarrying on the air environment.
- <u>Recommended Separation Distances for Industrial Residual Air Emissions Guideline</u> (publication 1518) how to identify which land uses require separation.
- Liquid storage and handling guidelines (publication 1698) how to store and handle liquid substances.
- <u>Solid storage and handling guidelines</u> (publication 1730) how to store and handle solid materials, including solid waste.
- Reducing erosion and sedimentation risk: guidelines for industry how to put effective controls in place to prevent erosion and sedimentation.
- <u>Management and storage of combustible recyclable and waste materials guideline</u> (publication 1667)
 supports understanding of fire hazards related to management and storage of combustible waste materials.
- How to prevent water pollution from your business how to prevent water pollution.
- Reducing stormwater pollution (publication 978) how your business can avoid polluting stormwater.
- Odour guidance for businesses how to manage odours from your business.
- Noise guidance for businesses how to manage noise from your business.
- How to reduce noise from your business (publication 1481) how to reduce noise from your business.
- <u>Reducing risk in the premixed concrete industry</u> (publication 1806) how to assess, manage and control risks.
- Managing waste how to manage your waste appropriately.
- Manage contaminated land how to manage your contamination risks.

More guidance for mining and quarrying can be found at: epa.vic.gov.au/for-business/find-your-industry/energy-petroleum-and-extractive-industries

Note: Some EPA publications haven't been updated to reflect changes relating to new environment protection laws. Guidance should be viewed as general in nature and not a substitute for obtaining legal advice.

9. Where to go for more help



epa.vic.gov.au/for-business / 1300 EPA VIC (1300 372 842)

Industry associations – Contact your industry association for further information about resources, training and opportunities that may be relevant to your business.

<u>Know Your Council</u> – The Victorian Government has compiled a list of all councils in Victoria. Get in touch with your council for information on building regulations and the Victorian planning schemes, and what it means for your operations.

<u>WorkSafe Victoria</u> – For guidance and advice relating to health and safety at your workplace, including storing, handling and transporting dangerous goods.

Consultants – Managing risks can sometimes be complicated. You may need expert help to identify and understand hazards and select appropriate control measures. <u>Fact sheet: Engaging consultants</u> (publication 1702) can help you engage a consultant.

Earth Resources Regulation (ERR) have legislation relating to mineral exploration, mining and quarrying activities. Many of their resources, including Codes of Practice, include information about managing risks, and other compliance and permission requirements, including*:

Exploration

- Code of practice for mineral exploration
- Exploration licence guidelines
- Exploration work plan guidelines

Extractives

- Code of practice for small quarries
- Extractive industry work plan guideline

Mining

- Code of practice for low risk mines
- Mining licence guidelines
- Work plan guidelines for a mining licence
- Preparation of Rehabilitation Plans: Guideline for Mining and Prospecting Projects

Other

- Imported materials management guidelines
- Guidelines for the design and management of tailings storage facilities

*The <u>ERR website</u> provides the most up-to-date information for your sector. With the ongoing reform of the *Mineral Resource (Sustainable Development) Act 1990* there are several publications and webpages that will be replaced and updated. Please refer to the ERR website for up-to-date information.

Appendix: Action plan example

Use this template to list what actions you can take to improve the way you control risks.

Key focus area	Action required	Objective	Action owner (who)	Target completion date	Date action reviewed	Additional comments (post review)
e.g. B	e.g. Review EPA Liquid Storage and Handling Guideline	Improve the way liquids are stored on site and spill containment.	Danica	03/08/2020		

Key focus areas:

A: Understanding the preventative laws	B: Documentation and operational procedures	C: Identification of hazards and risks If any of the following apply, please specify: C(i): Identification of air pollution and odour C(ii): Identification of unreasonable and aggravated noise C(iii): Identification of water pollution (including stormwater)
D: Assessing hazards and risks	E: Managing risks of harm	F: Monitoring risks of harm
G: Reporting notifiable incidents	H: Management of contaminated land	I: Managing waste(s) (including disposal)
J: Permissions for activities	K: Storage of flammable or hazardous material(s)	L: Staff consultation and training and/or community engagement

Recognition statement

EPA acknowledges Victoria's First Nations peoples and their ongoing strength in practising the world's oldest living culture. We acknowledge the Traditional Owners of the land and water on which we live and work and pay our respect to their Elders past and present.

We acknowledge that:

- Land and water is of spiritual, cultural and economic importance to Aboriginal people.
- All places in Victoria exist on the traditional country of Aboriginal Victorians.
- Aboriginal interests, needs and aspirations are integral to EPA's core business.

In recognising and respecting thousands of years of environmental stewardship, Victorian Aboriginal peoples' and their culture is integral to EPA's regulatory remit to protect human health and environment from the harmful effects of pollution and waste. As part of our regulatory approach we seek to engage and work collaboratively to build a culturally safe and inclusive work environment that is inclusive of Aboriginal perspectives and values.

EPA encourages all Victorians to consider the ways in which they too can acknowledge, respect and protect Aboriginal cultural heritage.