



# Manufacturing –

## Guide to preventing harm to people and the environment

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Publication 1822.1 June 2021

Includes information about  
the new environmental laws

### Acknowledgements

Environment Protection Authority Victoria (EPA) gratefully acknowledges the industry groups, local councils and government agencies that contributed to the development of this guide.

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

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As Victoria's environmental regulator, we pay respect to how Country has been protected and cared for by Aboriginal people over many tens of thousands of years.

We acknowledge the unique spiritual and cultural significance of land, water and all that is in the environment to Traditional Owners, and recognise their continuing connection to, and aspirations for Country.



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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 water at risk of harm.

From 1 July 2021, the *Environment Protection Act 2017*<sup>1</sup> (EP Act) and [Environment Protection Regulations 2021](#) (EP Regulations) take effect. These laws require all businesses to take proactive steps to [manage risks](#) of harm from pollution and waste.

By preventing harm and complying with the law, you keep your community safe, [lower your environmental impact](#) and potentially [save time and money](#).

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

#### Purpose of this guide

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

It also provides an overview of your legal obligations under the EP Act, including the [general environmental duty](#) (GED) and highlights parts of the EP Regulations that may apply to your activities.

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

This guide will not tell you what specific controls to put in place to manage your risks – 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.

The **manufacturing sector** includes any business that uses raw materials, parts and components to produce goods such as food, beverage, textiles, footwear, printing, machinery and equipment, chemicals (fertilisers, pesticides, pharmaceutical, medicinal, cleaning products, toiletries, cosmetics, photographic and explosives), pulp and paper, wood products and metals and plastics.



The **EP Act** outlines your broad duties. The **EP Regulations** support the EP Act and help address some risks of harm that need further controls. This includes specific requirements for particular hazards, where appropriate.

Throughout the guide there are specific references to sections of the EP Act (for example, s80) or regulations (for example, reg 16) if you would like to refer to the legislation for the provisions in full.

**Note:** References to ‘you’ are to any person engaging in an activity that may give rise to risks of harm. This will include business owners, whether companies or sole traders.

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<sup>1</sup> *Environment Protection Act 2017* as amended by the *Environment Protection Amendment Act 2018*.

## 2. How to manage your risks

As a business owner, whether a company 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 to manage risks.

**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 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, well maintained, effective and remain the most appropriate option. This process includes monitoring control measures and identifying any changes that may need to be made to improve their effectiveness.



### Useful resources:

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

**Note:** Keeping a risk register or plans can help you demonstrate what steps you have taken to manage your risks.



### Risk management examples

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

#### A. Managing risks from chemical use

Doug owns a printing business that uses solvent inks and generates photographic chemical wastes from the printing process. Doug **identifies** these wastes can be toxic to people and land and water ecosystems if not managed appropriately.



Doug is careful about making sure solvents and other chemical wastes don't enter the environment. This is especially important because during an **assessment**, Doug discovers there is a waterway leading down to a creek close to the boundary of the property.

Doug's priority at the start and end of each day is to check all chemicals are clearly labelled, tightly sealed, stored away from incompatible chemicals, and away from drains, sewers and any source of heat. Doug also ensures any spills have been cleaned up.

Doug refers to EPA's information on liquid and storage handling (publication 1698) and solid storage and handling (publication 1730) for guidance on appropriate storage and management of chemicals onsite. Chemical wastes are reused where possible and others are transported and disposed of at a facility authorised to receive the waste, using the EPA Waste Tracker.

Doug **implements** vapour capture and treatment equipment because of the high risk of vapours from solvent-based chemicals being released into the atmosphere. Alternatives such as water-based inks and low-solvent chemicals are used wherever possible.

Doug prioritises occupational health and safety (OHS) with staff and ensures they wear gloves and a vapour mask when handling chemicals. They keep an inventory of all chemicals and spill response equipment onsite. They follow the safety data sheets to ensure chemicals are stored and handled safely. Doug also regularly **checks** controls are working as intended.

Through regular staff meetings and training, Doug is confident staff know how to manage chemicals appropriately, including what to do if a spill happens, and how to safely dispose of any materials that become contaminated.

## B. Wastewater in cheese manufacturing

Stella manufactures cheese in regional Victoria. Stella **identifies** wastewater as a potential hazard.

Stella **assesses** that wastewater generated from their small plant could harm aquatic life and affect water used by people and livestock downstream if it is not properly managed.

Wastewater generated at the plant consists mainly of whey and curd. It contains high concentrations of suspended solids, dissolved sugar and nutrients. It can also contain salt loads and things like caustics and acids used in cleaning to meet food safety requirements.



They have an onsite wastewater management system and Stella regularly makes sure it is not overloaded or blocked. Stella also confirms it is in good working order and well maintained, for which maintenance records are kept. A further control they **implement** is regular sampling to ensure the treated wastewater is suitable for reuse.

Depending on its contents, Stella might spray treated water from milk processing on the paddocks, where a suitable crop will be planted to prevent excessive nutrients and organics accumulating in the soil. Stella regularly collects soil samples in these paddocks and has them tested to confirm levels are acceptable. Occasionally the high-salt wastewater will be re-directed to fit-for-purpose evaporation lagoons onsite.

The stormwater diversion systems reduce the overall quantity of wastewater they may need to treat while minimising the risk of contaminated run-off leaving the site.

Staff follow operating procedures to ensure there are no spillages. They are trained on what to do if a spill does occur. Milk is delivered in a secondary containment area (bund area) with an impervious lining, and spills are cleaned up immediately.

Stella regularly **checks** that pumps, processing equipment and other machinery are working as intended and are maintained according to manufacturer's specifications.

Stella checks if a licence from EPA is needed for any of their activities. They process less than 200 tonnes of milk or dairy products per year, so at this stage a licence isn't required. Because some of the reclaimed wastewater is used, Stella will need to investigate whether a permit is required or if this activity is exempt. For more information see **4. Permissions**.

### 3. Your legal obligations

Victoria's environment protection laws include a duty focused on prevention, called the [general environmental duty](#) (GED). This duty requires you to put in place [reasonably practicable](#) measures to eliminate or reduce the risks of harm to people and the environment from pollution and waste.

This means you need to proactively [manage your risks](#) of harm as well as deal with the impacts of pollution and waste after they occur. EPA works with people to help them understand the law and what they need to do to comply.

You may already manage some environmental risks through your efforts to comply with Victoria's OHS and dangerous goods laws. For example, using and storing chemicals and fuels safely, and keeping your business clean and tidy. You may also be familiar with 'reasonably practicable', a term used in OHS.

The core duties in the EP Act are outlined on pages 9 to 14 of this guide. In some instances, there may be specific requirements detailed in the EP Regulations. These are signposted throughout the guide.

EPA's compliance and enforcement approach involves encouragement and deterrence to motivate action. For more information see '**Chapter 5. How environment protection law is enforced**'.

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

**'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 and suitability of controls
6. Cost of controls

See [Reasonably practicable](#) (publication 1856) for more information.

The [environment reference standard \(ERS\)](#) is a new tool made under the EP Act. The ERS identifies environmental values the community wants to achieve and maintain. For example, clean water for drinking and swimming, and sound levels that let us sleep at night.

The ERS shows whether environmental values are being met or threatened. It covers four aspects of our environment: ambient air and sound, land and water. Water includes surface water and groundwater.

The ERS provides a reference to help make decisions. It does not set compliance limits. To find out how the ERS is applied go to [epa.vic.gov.au](http://epa.vic.gov.au) ([epa.vic.gov.au/about-epa/laws/epa-tools-and-powers/environment-reference-standard/applying-the-standard](http://epa.vic.gov.au/about-epa/laws/epa-tools-and-powers/environment-reference-standard/applying-the-standard)).



## Summary of environmental duties (in the *Environment Protection Act 2017*)<sup>2</sup>



This legal requirement	Means you have to...
<p><b><u>General environmental duty (s25-27)</u></b></p>	<p><i>Understand</i> how your business activities may give rise to risks of harm to human health or the environment from pollution or waste.</p> <p><i>Put in place</i> reasonably practicable measures to eliminate or reduce identified risks of harm from pollution or waste.</p> <p><i>Use and maintain:</i></p> <ul style="list-style-type: none"> <li>• plant, equipment, processes and systems in a way that minimises risks (for example, maintain machinery and equipment in accordance with manufacturer's specifications)</li> <li>• systems for identifying, assessing and controlling risks</li> <li>• adequate systems to ensure that if risk of harm eventuates, harmful effects are minimised.</li> </ul> <p><i>Ensure</i> all substances are handled, stored, used and/or transported in a way that minimises risks.</p> <p><i>Provide</i> information, instruction, supervision and training to people engaged in activities to enable them comply with the GED (for example, undertake toolbox sessions where practicable).</p> <p><b>Note:</b> It doesn't matter whether an adverse impact on people and/or the environment has or has not occurred. The GED is breached whenever there is a <i>risk</i> of harm not being proportionally managed.</p> <div data-bbox="480 1335 1423 1939" style="border: 1px solid black; padding: 10px; margin-top: 10px;"> <p><b>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 reasonably practicable:</b></p> <ul style="list-style-type: none"> <li>- <i>Minimise</i> 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 for which it was designed, manufactured, installed or supplied.</li> <li>- <i>Provide</i> 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.</li> </ul> </div>

<sup>2</sup> *Environment Protection Act 2017* as amended by the *Environment Protection Amendment Act 2018*.



This legal requirement	Means you have to...
<p><b><u>Duty to take action to respond to harm caused by a pollution incident (s31)</u></b></p>	<p>Restore the areas affected by a pollution incident to their previous state, so far as reasonably practicable.</p> <p>Should a pollution incident occur, the person engaging in the activity that is likely to, or has, caused harm to human health and/or the environment must take action to clean up. They must restore the affected areas to their previous state, so far as reasonably practicable.</p>
<p><b><u>Duty to notify Authority of notifiable incidents (s32-33)</u></b></p>	<p>Contact EPA on 1300 372 842 (1300 EPA VIC) as soon as practicable if a pollution incident happens that causes or threatens material harm<sup>3</sup> to human health or the environment.</p> <p>This applies as soon as the person engaging in an activity that results in a pollution incident becomes aware (or ought to have been aware) of the pollution incident.</p> <p>When notifying EPA <i>provide</i> information about:</p> <ul style="list-style-type: none"> <li>• the type of incident, for example, an oil or fuel spill, or fire</li> <li>• where and when it happened</li> <li>• the harm or possible harm</li> <li>• the circumstances in which it occurred, or how you think it happened, and</li> <li>• proposed action to deal with the incident.</li> </ul>

<sup>3</sup> 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 negligible; has an adverse effect on an area of high conservation value or of special significance; or results in, or is likely to result in, costs in excess of \$10,000 or a higher amount prescribed by the EP Regulations being incurred to take action to prevent or minimise the harm or to rehabilitate or restore the environment to the state it was in before the harm.

<p><b><u>Duty to manage contaminated land (s39)</u></b></p>	<p><i>Minimise</i>, so far as reasonably practicable, risks of harm to human health and the environment arising from contaminated land (vacant or occupied), including groundwater, under your management or control.</p> <p><i>Investigate</i> further and undertake an assessment to understand the risks of the contamination.</p> <p><b>Note:</b> A suitably qualified and experienced professional, such as an <a href="#">environmental consultant</a> or EPA-appointed environmental auditor who specialises in contaminated land can assist you if required.</p> <p><i>Provide</i> and <i>maintain</i> measures to minimise risks of harm to human health and the environment, including undertaking clean-up activities, where reasonably practicable.</p> <p><i>Provide</i> adequate information to any person who might be affected by the contamination. This includes adjacent landowners if contamination is migrating offsite. Adequate information includes information about the contamination, the results of any investigation and risks of harm to human health or the environment.</p> <p>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.</p> <div data-bbox="475 1256 1465 1989" style="background-color: #e1f5fe; padding: 10px; margin-top: 20px;"> <p><b><i>How to work out whether you are in control of the land</i></b></p> <p>Persons in management or control of land include those who hold a legal interest in the land, such as:</p> <ul style="list-style-type: none"> <li>• an owner, occupier or lessee,</li> <li>• committee of management (or similar).</li> </ul> <p>It may also include persons who hold right of way, use, access or entry onto land (when exercising those rights).</p> <p>The extent of the management or control that a person has over the land will be relevant in considering whether that person has complied with the duty to manage contaminated land so far as is reasonably practicable.</p> <p>For more information see <a href="#">Assessing and controlling contaminated land risks: A guide to meeting the duty to manage for those in management or control of land</a> (publication 1977).</p> </div>
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This legal requirement	Means you have to...
<p><b><u>Duty to notify of contaminated land (s40)</u></b></p> <p> regs 8-15.</p> <p>For more information, see <b>Chapter 8. Contaminated land</b> in this guide.</p>	<p>Contact EPA on 1300 372 842 (1300 EPA VIC) as soon as practicable if the land you manage or control is contaminated by notifiable contamination (as set out in the EP Regulations). This includes contamination to groundwater. EPA will publish guidance on the duty to notify in 2021.</p> <p>This duty applies as soon as the person/s who manages or controls the land becomes aware (or ought to have been aware) of the contamination, regardless of when the contamination took place.</p> <p>The duty is intended to expand EPA's knowledge about <a href="#">contaminated sites in Victoria</a>.</p>
<p><b><u>Duties relating to industrial waste (s133-137)</u></b></p> <p> regs 60-64</p> <p>For more information, see <b>Chapter 7. Waste management</b> in this guide.</p>	<p>Ensure <a href="#">industrial waste</a> is deposited or received at a '<a href="#">lawful place</a>' – this means a place or premises authorised to receive that waste. This requirement applies to producers, transporters and receivers of industrial waste.</p> <p>Obtain the consent of the permission holder, occupier or person in management or control of the place authorised to receive the waste before you deposit it.</p> <p>Take all reasonable steps before giving up management or control of industrial waste to another person for the purposes of transport. This is to ensure it will be safely transported to an authorised place. Reasonable steps include (but are not limited to):</p> <ul style="list-style-type: none"> <li>• <i>identifying</i> and <i>classifying</i> the type of industrial waste</li> <li>• <i>describing</i> the industrial waste to the person collecting, consigning, transferring or transporting the industrial waste for disposal</li> <li>• <i>checking</i> that the place the transporter is planning to take the industrial waste can lawfully receive that waste.</li> </ul> <p><b>Note:</b> If you are a facility receiving industrial waste, you must be authorised to receive it.</p>



This legal requirement	Means you have to...
<p><b><u>Duties and controls relating to priority waste (s138-141)</u></b></p> <p> regs 65-70</p>	<p>Classify the <a href="#">priority waste</a> you manage or control in accordance with the EP Act and the EP Regulations.</p> <p>Take all reasonable steps to ensure any priority waste you manage or control is contained so it can't escape and is isolated to ensure resource recovery remains practicable. <b>Note:</b> This requirement applies to producers, transporters and receivers of priority waste.</p> <p>Provide to the person who collects, consigns, transfers or transports the priority waste, information (where reasonably available) about:</p> <ul style="list-style-type: none"> <li>• its nature and type</li> <li>• any risks of harm in relation to the priority waste</li> <li>• any other relevant information necessary for them to comply with the law.</li> </ul> <p>Before deciding to dispose of any priority waste to landfill, take all reasonable steps to <i>investigate</i> if you can re-use or recycle the priority waste. Also investigate how you can avoid producing or generating similar waste in the future.</p> <p>Some ways you can investigate alternatives to waste disposal include (but are not limited to):</p> <ul style="list-style-type: none"> <li>• considering EPA guidelines or other relevant publications</li> <li>• considering the availability of any relevant technology used in resource recovery</li> <li>• consulting someone with relevant expertise and/or industry associations for further guidance.</li> </ul>
<p><b><u>Duties and controls relating to reportable priority waste (s142-143)</u></b></p> <p> regs 71-85</p>	<p>Record and notify transaction details relating to reportable priority waste in accordance with the EP Regulations. You must do this via the <a href="#">EPA's online waste tracker tool</a>, which replaces electronic waste certificates in 2021.</p> <p><b>Note:</b> 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.</p> <p>If you <i>transport</i> reportable priority waste, <i>ensure</i> you have the relevant <a href="#">permission</a>.</p> <p>If someone transports reportable priority waste on your behalf, <i>ensure</i> they have the relevant permission.</p>

### Additional obligations that might apply to your specific activities

In addition to the EP Act duties, the EP Regulations might apply to your activities. The EP Regulations help address some risks of harm that need further controls. This includes where there is known risk of mismanagement or there could be significant impacts on human health or the environment.

In some instances, EP Regulations may also be necessary:

- for the legislation to function
- when duty holders need greater certainty or consistency to comply with the duties listed in the table on the previous pages.

As well as the EP Regulations relating to permissions (page 15), waste management (page 28), contaminated land (page 32), and noise (page 34), consider if any of the following apply to you:

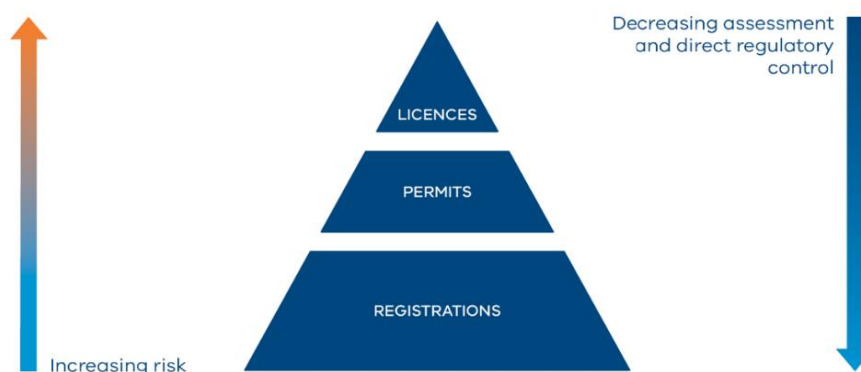
- Certain [chemical substances](#) must not be processed, stored, or used unless EPA has been notified of the intention to do so, and EPA has given you notice that the activity may be undertaken. These substances generally comprise chlorofluorocarbon (CFC) substances that destroy our ozone layer (reg 102).
- There are obligations relating to the emission of some **toxic substances** and their levels. Facilities that have activities associated with one or more of the subset of [ANZSIC codes](#) for the [National Pollutant Inventory](#) (which tracks certain pollution across Australia) must report on their emissions and transfers if thresholds are exceeded (regs 103-108).
- If you use [methyl bromide](#) (for example, for fumigation for pest and disease control), you must, so far as reasonably practicable, replace it with an alternative substance or technology. If it is not reasonably practicable to replace it, you must eliminate or reduce emissions. For pest and diseases control, this can be done by recovering the methyl bromide and returning it to the supplier (reg 111).
- Motor [vehicles](#) that emit visible smoke, or exceed exhaust and noise limits must not be used or sold (regs 135-149). It is an offence to sell a motor vehicle that is subject to a vehicle testing notice (regs 156-158).
- If you have an onsite [wastewater](#) management system, reasonable steps must be taken so it doesn't pose a risk to human health and the environment. It must be maintained in good working order and not overflow. For example, make sure it isn't overloaded because this can cause blockages, runoffs, spills or leaks. There are also duties in relation to providing information on correct operation and maintenance, notifying council if the system poses a risk to human health or the environment or is otherwise not in good working order, and keeping maintenance record (regs 159-163). **Note:** Councils administer permits for the construction, installation or alteration of on-site wastewater management systems. Councils may also take enforcement action for breaches of on-site wastewater management systems permit conditions (reg 171).
- The sale and provision of certain [plastic bags is banned](#) (regs 133-134).

See the [EP Regulations](#) at [epa.vic.gov.au/about-epa/laws/new-laws/subordinate-legislation](http://epa.vic.gov.au/about-epa/laws/new-laws/subordinate-legislation).

## 4. Permissions

Under the environment protection laws, EPA issue [licences, permits and registrations](#). These are collectively referred to as 'permissions' (regs 16-42) and work with the general environmental duty. They ensure certain standards and conditions are met across a range of activities.

The nature of your activities determine if you need a permission, and the level of control that needs to be put in place. Permissions are set by Schedule 1 of the EP Regulations (see the table on the next page for examples and **Appendix B: Prescribed permission activities**).



**Licences** – are for prescribed activities that need the highest level of regulatory control. EPA assesses all licence applications. Licences granted will include customised conditions that EPA regularly checks compliance with.

There are three types of licences: pilot project licence, development licence, and operating licence. The type of licence you may need will depend on your activities:

- a pilot project licence is for research and development of a new technology or technique
- a development licence is for the design, construction and modification of high risk activities
- an operating licence is for ongoing operational activities.

**Permits** – are for prescribed activities that are high risk but low complexity. The conditions of a permit can provide additional direction and clarity about how to manage your risks.

**Registrations** – are for low-risk prescribed activities. Registrations can be automatically granted upon application and may include standard conditions to help you manage your risks.

**Applying for an exemption** – in some situations, EPA may grant an [exemption](#) from a licence or permit. For example, where an activity has a low risk of harm. If you receive an exemption it may be subject to conditions or specific requirements, which you must comply with or risk facing a penalty (EP Act, s44, s46, s80, s82).

### Examples of what permissions are required

Licence	Permit	Registration
Textile works	Onsite wastewater management systems (permit issued by council)	Organic waste processing - small
Printing	Transporting controlled waste into Victoria'	Temporary storage – designated waste
Milk processing (>200 t / year)	Temporary onsite waste treatment	Glass works – small reprocessing

For more information, see EPA's [draft Permissions Scheme Policy](#) (publication 1799), which describes how the three types of permissions work. Details for each permission activity are in Schedule 1 of the EP Regulations (see **Appendix B: Prescribed permission activities**).

### Fees, assurances and other costs

There are [fees](#) for licences (regs 172-185), permits (regs 186-200) and some registrations (regs 201-203). See the [EPA website](#) (epa.vic.gov.au/for-business/fees/calculate-fees-and-fines) for information about how fees are calculated and how to pay them.

There are other fees relating to the emergency storage and use of waste, [better environment plans](#), applications for accredited consignors, site management orders (to revoke or vary) and for exemption applications (regs 209-215).

Some prescribed activities:

- require payment of an environment protection levy or waste levy (regs 43-52)
- may require submission of a [financial assurance](#) (regs 167-168) to EPA. This is to ensure appropriate funds are available if a cleanup is required, and prevent the community bearing the cost. There is a fee for review and release of financial assurances (regs 204-205).

These are highlighted in **Appendix B: Prescribed permission activities**.



## 5. How environment protection 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 environment or community is deliberately or negligently exposed to harm.



For more information, see EPA's [Regulatory strategy](#) (publication 1800) and [Compliance and enforcement policy](#) (publication 1798).

### Who enforces environment protection laws?

EPA has a team of authorised officers (AOs), including environment protection officers (EPOs) and officers for the protection of the local environment (OPLEs), who inspect businesses and premises, provide guidance and advice about compliance, and enforce the law. Councils also have powers to enforce certain environmental laws under the EP Act and EP Regulations. Council officers can also hold statutory appointments under the EP Act, such as a litter enforcement officer.

### What happens if I don't manage my risks?

If an EPA AO reasonably believes you are not complying with your duties, they may give you compliance advice or use a remedial tool (see the table below and on the next pages for an overview) or sanction. The aim of this is to address any risk of harm, waste or contamination present and bring you into compliance with the relevant duties.

### Remedial tools

Remedial tool	What it is
<b>Compliance advice</b>	<p>This may include information about how to comply with the law, interpret standards and/or other support on how to remedy non-compliance.</p> <p>While an AO will record this advice in a report it doesn't mean you necessarily have to follow the advice if you find another suitable way to comply.</p>

Remedial tool	What it is
<a href="#">Remedial notices</a>	<p>These may be issued where an AO reasonably believes you are not complying with the law or where a harmful or unlawful situation exists.</p> <p>A remedial notice can also function as a formal record that EPA has sought action to remedy non-compliance. The range of remedial notices include:</p> <ul style="list-style-type: none"> <li>• <b>Improvement notice</b> – requires you to take action to remedy non-compliance. A notice can request that you proactively address a risk. This means harm doesn't necessarily have to occur for EPA to issue an improvement notice.</li> <li>• <b>Prohibition notice</b> – 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.</li> <li>• <b>Notice to investigate</b> – 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.</li> <li>• <b>Environmental action notice</b> – requires you to address the impact of pollution, waste and contamination. It is 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.</li> <li>• <b>Non-disturbance notice</b> – requires you to stop movement or prevent disturbance of anything at a place or premises. For example, if an AO believes it is necessary to carry out an investigation into non-compliance.</li> <li>• <b>Waste abatement notice</b> – 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. It may be issued by EPA officers or councils. It requires 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.</li> </ul>

Remedial tool	What it is
<a href="#">Site management order</a>	<p>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. It may be used when land is contaminated, or where there is a risk of harm from pollution and waste.</p> <p>Measures required by an order may include installing and maintaining infrastructure, monitoring of contamination on the site and ongoing reporting requirements.</p>
<a href="#">Directions</a>	<p>Issued when an AO believes there is an immediate risk of harm, for example, during an emergency incident.</p> <p>Whether issued verbally or in writing, it is an offence to not follow directions unless there is a reasonable excuse not to.</p>

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. EPA will publish a policy on sanction powers in 2021.

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### What are the powers of an EPA AO?

EPA AOs can enter a place or premises to:

- conduct inspections
- assess and monitor compliance with the EP Act and EP Regulations
- determine whether there is a risk to human health or the environment from pollution and waste.

Possible reasons an AO may inspect your site include a report of pollution (for example, from a community member, local council or WorkSafe) or to check you are complying with your EPA approval, licence, permit or notice. It could also be in response to an emergency notification from an emergency services authority such as Fire Rescue Victoria.

Before starting an inspection, an AO will explain the role of each EPA officer present and the purpose of the inspection (such as responding to a pollution report). The AO will show their authorised officer identification card and discuss any OHS issues.

EPA AOs can:

- examine or test anything at the premises
- take samples away for analysis
- take pictures or recordings if required
- inspect documents
- request information
- take away anything that may be evidence of a breach of the Act.

Anyone at the premises must cooperate with the AO. There are also circumstances which an AO can enter residential premises.

See EPA's [Compliance and enforcement policy](#) (publication 1798) for more information.

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## 6. Common environmental hazards in manufacturing

Hazards you may commonly come across in manufacturing include:

- air contaminants
- chemical spills
- dust
- odour
- stormwater contamination
- noise
- waste
- wastewater.

See the tables on pages 21 to 27 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 areas include, but aren't limited to:

- social surroundings (houses, hospitals, schools, playgrounds, public amenities)
- waterways and bays, sources of drinking water for people or livestock
- parks and recreational areas
- areas of public interest and cultural significance
- land or water with identified plant life, animal life, 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 (for example, OHS) can also indicate that your common sources of harm are being managed appropriately.











## 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
<ul style="list-style-type: none"> <li>• Air emissions (for example, from ozone-depleting aerosols from e-waste, or organic waste processing such as compost and soil mixes)</li> <li>• Uncovered solvents and handling of volatile organic compounds (VOCs)</li> <li>• Inappropriate containment of toxic or hazardous materials such as gas, vapours and solvents</li> <li>• Discharges from air pollution control systems such as air filters and oxidisers</li> <li>• Furnaces</li> <li>• Operating poorly maintained machinery such as boilers</li> <li>• Improper operation of process vents</li> <li>• Cooking of raw materials</li> <li>• Incineration of materials</li> <li>• Bulk storage tank failure</li> <li>• Equipment leaks (for example, fuels, chemicals).</li> </ul>	 <p>Air pollution    Vegetation damage    Human health</p> <p>Dust    Animal health    Cultural heritage</p>	<p>Check air quality in Victoria – <a href="#">EPA AirWatch</a></p> <p><a href="#">Air pollution</a></p> <p><a href="#">Air quality</a></p> <p><a href="#">Vehicle emissions and air quality</a></p> <p><a href="#">Recommended separation distances for industrial residual air emissions – guideline</a> (publication 1518)</p> <p><a href="#">Reducing risks in the pre-mixed concrete batching industry</a> (publication 1806)</p>







## 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
<ul style="list-style-type: none"> <li>Leaking containers, including chemical storage drums</li> <li>A site layout and design that fails to contain liquids if there is a spill (for example, inadequate bunding)</li> <li>Bulk storage tank failure</li> <li>Inappropriate storage and handling of chemicals and wastes, including solvents, paints, glues and additives</li> <li>Poorly managed deliveries such as damage of chemical containers</li> <li>Storing incompatible chemicals together</li> <li>Poor management of spill kits</li> <li>Leaks from poorly maintained infrastructure such as pipes</li> </ul>	 Water pollution  Land and groundwater pollution  Air pollution  Offensive odour  Human health  Vegetation damage  Animal health  Cultural heritage	<p><a href="#">Liquid storage and handling guidelines</a> (publication 1698)</p> <p><a href="#">Solid storage and handling guidelines</a> (publication 1730)</p> <p><a href="#">Industrial waste resource guidelines: motor vehicle repair and service premises</a> (publication IWRG642)</p>

## Hazard: Dust

Earth or other matter, in fine, dry particles.

Common sources of harm	Possible consequences if risks of harm from pollution and waste aren't managed	For more information, including controls
<ul style="list-style-type: none"> <li>Operations including sawing, drilling, sanding, sandblasting, cutting and grinding of materials</li> <li>Carpentry and woodwork (for example, medium density fibreboard)</li> <li>Angle grinding, cutting or shredding materials</li> <li>Exposed piles of mulch and other bulk gardening supplies</li> </ul>	 Air pollution  Dust  Vegetation damage  Fire  Human health  Cultural heritage	<p>Check air quality in Victoria – <a href="#">EPA AirWatch</a></p> <p><a href="#">Reducing erosion and sedimentation risk: guidelines for industry</a></p>


## Hazard: Dust

Earth or other matter, in fine, dry particles.

Common sources of harm	Possible consequences if risks of harm from pollution and waste aren't managed	For more information, including controls
<ul style="list-style-type: none"> <li>• Cement and concrete preparation and mixing</li> <li>• Uncovered soil and waste stockpiles</li> <li>• Poor housekeeping</li> <li>• Unsealed roads</li> </ul>		<p><a href="#">Construction techniques for sediment pollution control</a> (publication 275)</p> <p><a href="#">Recommended separation distances for industrial residual air emissions – guideline</a> (publication 1518)</p> <p><a href="#">How to control dust from your business</a></p> <p><a href="#">Work-based dust examples</a></p>

## Hazard: Odour

Gases in the air that can cause an unpleasant smell.

Common sources of harm	Possible consequences if risks of harm from pollution and waste aren't managed	For more information, including controls
<ul style="list-style-type: none"> <li>• Poor storage and stockpiling of waste</li> <li>• Food processing</li> <li>• Cooking raw materials</li> <li>• Leather tanning</li> <li>• Incineration</li> <li>• Chemicals, such as paints and solvents, stored without containment</li> <li>• Fumes from refueling</li> </ul>	 <p>Air pollution    Offensive odour    Human health</p>	<p><a href="#">Odour guidance for businesses</a></p> <p><a href="#">Recommended separation distances for industrial residual air emissions – guideline</a> (publication 1518)</p>


## Hazard: Odour

Gases in the air that can cause an unpleasant smell.

Common sources of harm	Possible consequences if risks of harm from pollution and waste aren't managed	For more information, including controls
<ul style="list-style-type: none"> <li>Improper storage and treatment of effluent</li> <li>Stagnant waters</li> <li>Fumes from machinery exhausts and ventilators</li> <li>Leaking ductwork</li> <li>Inadequate systems to capture and treat odours</li> </ul>		<a href="#">Odour work-based examples</a>

## Hazard: Stormwater contamination

Surface run-off from rain and storms that enters our waterways (such as creeks, rivers, wetlands and bays) can contain pollutants such as sediments, fertilisers, nutrients, chemicals, litter, and human and animal faeces. Stormwater drains do not lead to a treatment plant but connect to nearby creeks, rivers, wetlands and bays.

Common sources of harm	Possible consequences if risks of harm from pollution and waste aren't managed	For more information, including controls
<ul style="list-style-type: none"> <li>Detergents and cleaning agents (for example, spills or leaks)</li> <li>Oil, grease and lubricants (for example, spills and leaks)</li> <li>Spills during decanting of chemicals</li> <li>Using chemicals outside contained areas</li> <li>Inappropriate / inadequate containment of washdown water from cleaning of vehicles, machinery and equipment</li> <li>Contaminated run-off that has been in contact with wastes</li> <li>Wastewater system equipment failure</li> </ul>	 <p>Water pollution    Human health    Cultural heritage</p>	<p><a href="#">Reducing stormwater pollution: A guide for industry</a> (publication 978)</p> <p><a href="#">Construction techniques for sediment pollution control</a> (publication 275)</p> <p><a href="#">How to prevent water pollution from your business</a></p>



## Hazard: Stormwater contamination

Surface run-off from rain and storms that enters our waterways (such as creeks, rivers, wetlands and bays) can contain pollutants such as sediments, fertilisers, nutrients, chemicals, litter, and human and animal faeces. Stormwater drains do not lead to a treatment plant but connect to nearby creeks, rivers, wetlands and bays.

Common sources of harm	Possible consequences if risks of harm from pollution and waste aren't managed	For more information, including controls
<ul style="list-style-type: none"> <li>Inappropriate handling and/or disposal of liquid or solid wastes (for example, from raw food processing or livestock effluent from holding yards/pens)</li> </ul>		<p><a href="#">Liquid storage and handling guidelines</a> (publication 1698)</p> <p><a href="#">Solid storage and handling guidelines</a> (publication 1730)</p>








## Hazard: Noise

Unwanted sound (including vibration) that's annoying, disturbing or harmful.

Common sources of harm	Possible consequences if risks of harm from pollution and waste aren't managed	For more information, including controls
<ul style="list-style-type: none"> <li>Continuous use of machinery and equipment such as cutting machinery, metal fabrication, blast chillers, cooling towers, exhaust fans, heating, ventilation and air conditioning systems, dust collection systems and compressors</li> <li>Excessive vibrations (for example, caused by unmaintained equipment)</li> <li>Damaged or unfunctional mufflers on loud equipment</li> <li>Vehicle movements and beepers</li> <li>Improper use of power tools</li> </ul>	 <p>Animal health</p>  <p>Human health</p>	<p><a href="#">Noise guidance for businesses</a></p> <p><a href="#">Noise control guidelines</a> (publication 1254)</p> <p><a href="#">How to reduce noise from your business</a> (publication 1481)</p> <p><a href="#">Commercial, industrial and trade noise: the law</a></p> <p><a href="#">Transport noise</a></p>

## Hazard: Waste

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
<ul style="list-style-type: none"> <li>• Excess/unwanted liquid and solid chemicals and chemical containers</li> <li>• Storing wastes with incompatible chemicals</li> <li>• Improper handling and management of hazardous waste (for example, paints, solvents, cleaning chemicals, and contaminated spill kits), resulting in leaks and spills</li> <li>• Mismanagement and spillage of plastic pellets</li> <li>• Inappropriately stored packaging and containers</li> <li>• Improper storage, transport or disposal of manufacturing byproducts and excess raw materials (for example, cleaning agents, dyes, inks, paints, pesticides, solvents, animal from tanneries, food waste, offcuts and defective products)</li> </ul>	 Water pollution  Land and groundwater pollution  Air pollution  Fire  Offensive odour  Human health  Cultural heritage	<p><a href="#">Managing waste</a></p> <p><a href="#">Industrial waste resource guidelines</a></p> <p><a href="#">Managing plastic resin pellets (nurdles)</a> (publication 1701)</p> <p><a href="#">Reducing risks in the pre-mixed concrete batching industry</a> (publication 1806)</p> <p><a href="#">Industrial waste resource guidelines: grease interceptor trap waste – classification for reuse</a> (publication IWRG421)</p> <p><a href="#">Managing e-waste</a></p> <p><a href="#">Waste classification assessment protocol</a> (publication 1827)</p> <p><a href="#">Waste disposal categories – characteristics and thresholds</a> (publication 1828)</p> <p>EPA will publish information on managing industrial waste in 2021.</p>



## 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
<ul style="list-style-type: none"> <li>• Chemical and pharmaceutical processing</li> <li>• Inappropriate treatment or storage of wastewater from food and beverage processing</li> <li>• Washing vehicles, tools, and equipment without containment or collection of wash waters</li> </ul>	<div data-bbox="727 584 831 674"></div> <div data-bbox="727 680 831 736">Water pollution</div> <div data-bbox="847 584 967 674"></div> <div data-bbox="847 680 967 736">Land and groundwater pollution</div> <div data-bbox="983 584 1086 674"></div> <div data-bbox="983 680 1086 736">Human health</div> <div data-bbox="727 763 831 853"></div> <div data-bbox="727 860 831 916">Cultural heritage</div>	<p><a href="#"><i>Reducing stormwater pollution: A guide for industry</i></a> (publication 978)</p> <p><a href="#"><i>Construction techniques for sediment pollution control</i></a> (publication 275)</p> <p><a href="#"><i>How to prevent water pollution from your business</i></a></p> <p><a href="#"><i>Liquid storage and handling guidelines</i></a> (publication 1698)</p> <p><a href="#"><i>Solid storage and handling guidelines</i></a> (publication 1730)</p>

## 7. Waste management

It is up to everyone to safely manage their waste. Waste generators, transporters and receivers must all make sure waste goes to a place authorised to receive it.

This requirement supports waste reuse and recovery. It also helps to avoid land and groundwater contamination, stockpile fires, abandoned waste, and illegal waste sites.

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, it is more complex. Some examples of hazardous waste include asbestos, clinical and medical waste, unprocessed used cooking fats and oils.

### Industrial and priority waste

**Industrial waste** is waste any business produces. This includes any waste transported from commercial, industrial and trade activities, or from laboratories for fee or reward. Kerbside waste that is collected by, or on behalf of a council or waste and resource recovery group, is not considered industrial waste until it reaches a waste or resource recovery facility such as a transfer station.

If you produce industrial waste there are specific requirements you must meet. If you have high risk industrial waste, more care and controls are needed.

Follow these three steps to help you comply with the new laws:

- 1. Classify your waste.** Waste must be properly identified and classified so it is clear what duties apply to managing the waste. Most common wastes are listed in Schedule 5 of the EP Regulations. Based on hazard and mismanagement risk, the majority of these have been pre-classified into three types:



- **Industrial waste** as defined above, includes household waste once it is gathered at a waste facility (such as a transfer station or landfill). Other examples include aluminium, steel, glass, textiles, paper, plastic and solid food waste.
- **Priority waste** is a higher risk industrial waste. It requires additional controls due to its higher level of hazard, its potential to be mismanaged, or to encourage resource recovery or efficiency. Examples include e-waste, liquid food and beverage processing waste, some industrial wastewaters, shredder floc, treated timber.
- **Reportable priority waste** is the highest risk industrial waste. It requires the highest level of controls. Only permitted transporters can transport this type of waste. Examples include certain paints and resins, heavy metals such as copper and mercury, herbicides and pesticides, and other hazardous chemicals.

### Use EPA's Waste Tracker to notify EPA of all reportable priority waste transactions

Waste Tracker logs all reportable priority waste transactions. Examples of waste transactions include when waste moves from producer to transporter, and transporter to receiver. Waste Tracker helps to make sure waste is transported appropriately and taken to a lawful place. You can access Waste Tracker via the EPA portal.

- 2. Arrange for appropriate transport.** Waste must be safely contained during transportation, and the transporter must be provided with sufficient information about the waste. Some waste types have specific containment and isolation requirements. For example, asbestos must be packaged during transportation to landfill.
- 3. Ensure the waste goes to the right place.** All industrial waste must go somewhere lawfully able to receive it, such as a place with an EPA permission. Examples include licensed landfills and waste treatment facilities. Some wastes are banned from going to landfill. This includes liquid wastes, tyres and e-waste. **Note:** If you arrange a contractor to manage your site waste, you still have a responsibility to take all reasonable steps to ensure it goes to a lawful place. For example, you should check your contractor engages reputable waste operators and ask questions about how your waste will be managed.

**Note** EPA will publish more guidance on managing industrial waste in 2021. You can also find useful waste and recycling tips at [sustainability.vic.gov.au](https://sustainability.vic.gov.au).



### Finding a lawful place to send your waste

A lawful place is somewhere lawfully authorised to receive industrial waste. Often this will be a facility with a permission. Examples include landfills, resource recovery facilities, and transfer stations. When engaging a waste transporter, ask for information in writing that shows where they plan to take your waste and check that the waste transporter is authorised to receive your waste.

See [How to establish lawful place](#) (publication 1946) for more information.



Some lower risk waste can be lawfully taken to a place that does not hold a permission. Two other options can provide for lawful place in certain circumstances:

**Declaration of use (DoU)** - is a tool that supports the safe use and recovery of materials from low-risk waste. It does not apply to material from high-risk wastes, which need a permission. Applying waste to land is only allowed through a DoU for a limited number of wastes. These include:

- commercial garden and landscaping organics that don't contain any physical or chemical contamination
- untreated timber, including sawdust
- natural organic fibrous waste.

**Determination** – is a tool that allows you to safely use specified types of low-risk waste. This may include processed solid organic waste, manures, fill material and aggregates. EPA makes determinations and sets required specifications for the lawful deposit and receipt of industrial waste, subject to conditions or limitations.

### Reusing and recycling packaging materials

Companies that own retail brands may, unless they are signatories to the Australian Packaging Covenant, be responsible for the packaging of consumer products, the plastic bags sourced, and the plastic bags provided or available to customers.

Brand owners may also be required to take responsibility for recovering, reusing and recycling the materials used in their packaging.

There are also record keeping requirements that may be relevant to the brand owner related to how much packaging was used, the different types (for example, paper and cardboard, glass, plastic), how much was reused or recycled, and what information was made available to customers about recovery rates (regs 93-99).

### Littering and illegal dumping

[Littering and illegal dumping](#) is a significant problem in Victoria. Some common examples of illegally disposed waste include industrial waste, soil, e-waste and packaging. Offences relating to the unlawful deposit of waste covers litter<sup>4</sup>, dangerous litter<sup>5</sup>, waste of more than 50 litres, and waste of more than 1000 litres. EPA and other litter enforcement authorities, including councils, Victorian Police and Parks Victoria, enforce these unlawful deposits (Part 6.3, EP Act).

It is also an offence to distribute unsolicited documents. For example, placing leaflets under a windshield wiper or a poster on a wall without consent of the owner. It is also an offence to damage public bins or drive a vehicle with an unsecured load or make someone else drive such a vehicle (regs 54-59).

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<sup>4</sup> 'Litter' means a quantity of waste that does not exceed 50 litres.

<sup>5</sup> 'Dangerous litter' means litter that is wholly or partly comprised of one or more of the following: a) oil, fuel, grease, paint or solvents; b) a lit cigarette or a lit cigarette butt; c) glass; d) a syringe; e) any substance, material or other thing prescribed by the regulations.

### **Accredited consigners**

Those who produce industrial waste may want to seek additional advice and assistance if they are unsure about waste obligations. One option is to engage an [accredited consigner](#).

An accredited consigner is an appointed professional who has the approval of EPA to classify your waste and can assist you to meet some of your other waste duties.

It is not a requirement to work with an accredited consigner, but it is an option available to you.

## 8. Contaminated land

Land is contaminated if waste, a chemical substance, or a prescribed substance<sup>6</sup> is:

- on or under the land in a concentration above the background level, and
- creates a risk of harm to human health or the environment (reg 8).

When land is contaminated, it can cause acute and chronic health problems such as allergic reactions, hypersensitivity, respiratory illness, reproductive problems, cancer, and birth defects.

Contaminated land can also harm the environment, for example, the soil, water, and air quality.

Contamination is often the result of past activities. This includes industrial, agricultural, and commercial activities that involved storing and/or moving liquids, chemicals and/or wastes. Manufacturing or processing facilities are examples of where land could be impacted by contamination.

Contamination is often underground and not seen from the surface of a site. You may suspect land is contaminated based on the site history. Because it can be hidden or invisible, sampling and laboratory analysis is often required to confirm contamination.

What is required at your site depends on the specific circumstances, including the history of the site. EPA will publish guidance on how to manage contamination in 2021.

The key duties that address contaminated land risks and actions you can take to help you comply with the law are outlined in the table below.

### Activities which could cause contamination include:

asbestos disposal, battery recycling, chemical storage or blending, fuel storage, pest control, bulk consumable storage.

**Victoria Unearthed** is an online tool which gives access to more information about potential and existing contaminated land.

### Contaminated land duties

<b>1. General environmental duty (GED)</b>	<p>Consider the risk of harm regarding the activities you are proposing to engage in. Could anything make contamination worse (for example, exposing someone to the contamination) or involve groundwater that may be contaminated? Activities such as earthworks, resurfacing and major landscaping can uncover contamination that was previously unknown or not detected. You must have systems to identify, assess and minimise these risks. You must also <i>train</i> those involved to identify and respond appropriately to 'unexpected finds' that suggest contamination is present or more widespread at the site. This may include training staff on safety measures for excavating soil, internal reporting processes and types of possible finds. For example, using photographs of what asbestos fragments look like when uncovered in soil and buried infrastructure such as piping.</p>
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<sup>6</sup> A substance identified by EPA as having the potential to cause harm to human health and the environment.



<b>2. Duty to manage contamination</b>	<p>This duty requires a person <b>managing or controlling</b> land to, so far as reasonably practicable:</p> <ul style="list-style-type: none"> <li>- <i>reflect</i> on direct knowledge (for example, environmental reports) they have about the condition of the land, and</li> <li>- <i>consider</i> indirect knowledge about the potential for contamination to be present (for example, site history, council’s own records, and other data such as Victoria Unearthed).</li> </ul> <p>(A suitably qualified and experienced professional, such as an <a href="#">environmental consultant</a>, who specialises in contaminated land, can assist you, if required).</p> <p>If you know where contamination is or could be present based on available evidence, you have a duty to manage contamination risks.</p> <div data-bbox="1054 215 1487 439" style="background-color: #e1f5fe; padding: 10px;"> <p>See <b>page 11</b> for information about how to work out whether you are in control of the land.</p> </div>
<b>3. Duty to notify of certain contamination</b>	<p><i>Notify</i> EPA of the presence of contamination when you are aware that your land is contaminated in certain circumstances (as set out in the EP Regulations). This applies even if you didn’t cause the contamination.</p> <p>The circumstances that make contamination notifiable relate to the contaminants being above one or more investigation levels or guideline values <i>and</i> where that contamination:</p> <ul style="list-style-type: none"> <li>• is exposing a person to that contamination, or</li> <li>• has entered adjacent land from your land.</li> </ul> <p>Guidance to assist you figure out whether you need to notify EPA will be published in 2021.</p> <p>A suitably qualified and experienced professional can help you work out what is notifiable. They can advise you on information (for example, reports and investigations) you have about the nature and extent of the contamination. You don’t need to start an investigation purely for the purposes of figuring out if you need to notify EPA unless you strongly suspect such circumstances are present. This situation is more likely to arise as you fulfill your duty to manage contamination.</p>

The duties outlined above sit within a broader risk management and response scheme under the EP Act. They are explained in more detail on page 9-12 of this guide. Land contamination issues will also continue to be addressed under other regulatory processes, in particular the *Planning and Environment Act 1987* and the *Environment Effects Act 1978*.

For more information, see EPA’s [Contaminated land policy](#) (publication 1915) and [Assessing and controlling contaminated land risks: A guide to meeting the duty to manage for those in management or control of land](#) (publication 1977).

## 9. Noise

Environment protection laws require anyone who engages in an activity that creates noise which may be harmful to people or the environment to manage those risks of harm. This includes manufacturing activities. Noise is defined as both sound and vibration.

This is regardless of whether the noise you are trying to prevent and/or control has a legally prescribed limit. The general environmental duty (GED) requires you to eliminate or minimise the risks of harm from your noise so far as is reasonably practicable.

There is a greater risk of harm from poorly managed noise when it happens near homes, schools, hospitals, and other noise sensitive areas<sup>7</sup>.

Further to your GED noise obligations, you must make sure your business doesn't emit **unreasonable** or **aggravated** noise.

The EP Regulations prescribe what is unreasonable noise from [commercial, industrial and trade premises](#) including manufacturing facilities. The EP Regulations also set the levels at which noise is considered be aggravated.

The EP Regulations do not set operating hours for businesses. Instead, the [Noise Protocol](#) sets noise limits and methods to assess the noise for the purpose of the EP Regulations.

The noise emitted from the premises is unreasonable if it exceeds the noise limit for the relevant time of day when measured in a noise sensitive area. The noise limits are lower at more sensitive times, such as at night.

Some noise sources are not assessed using the EP Regulations. This includes noise from, for example, intruder, emergency or safety alarms and lawnmowing (see reg 117 for the full list).

However, the noise can be considered unreasonable when you have regard to the factors identified in the definition of unreasonable noise in the EP Act.

Under the EP Act, unreasonable noise is noise that is unreasonable regarding:

- its volume, intensity or duration
- its character, the time, place and other circumstances in which it is emitted
- how often it is emitted, or
- any prescribed factors in the EP Regulations.

**Note:** The GED and unreasonable noise in section 166 of the EP Act apply independently. However, meeting the GED can help you to meet the regulatory noise limits.

**Getting help to manage noise** – You can get a noise and vibration impact assessment to help you manage noise or predict the effects of implementing noise and vibration controls you plan to use. You can engage an acoustic consultant to help you do this.

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<sup>7</sup> The EP Regulations prescribe some noise sensitive areas where noise limits apply. These include childcare centres, kindergartens, primary and secondary schools; as well as tourist establishments, caravan parks and camping grounds (in defined rural areas only). The noise limits at childcare centres, kindergartens, primary and secondary schools only apply when the noise sensitive area is in operation.

EPA also publishes guidelines to help manage your risk. These guidelines may be used to decide whether noise from sources that are not assessed under the EP Regulations is unreasonable.

EPA will publish further guidance about the noise framework in 2021.

## 10. Where to go for more help



### **1300 EPA VIC (1300 372 842).**

[epa.vic.gov.au/for-business/find-your-industry/manufacturing](https://epa.vic.gov.au/for-business/find-your-industry/manufacturing) – Some helpful general publications include:

- [\*Assessing and controlling risk – A guide for business\*](#) (publication 1695) – how to manage risks, using a four-step process.
- [\*Self-assessment tool for small business\*](#) (publication 1812) – check what actions you can take to manage the risks of your business causing harm to people and the environment.
- [\*Supporting you to comply with the general environmental duty\*](#) (publication 1741.1) – information about the general environmental duty, state of knowledge and the role of industry guidance.
- [\*Fact sheet: Engaging consultants\*](#) (publication 1702) – information about engaging consultants to identify and understand hazards and select appropriate control measures.

**Note:** Some EPA publications haven't been updated to reflect changes which take effect from 1 July 2021. Guidance should be viewed as general in nature and not a substitute for obtaining legal advice.

[Know Your Council \(knowyourcouncil.vic.gov.au\)](https://knowyourcouncil.vic.gov.au) – 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.

[WorkSafe Victoria \(worksafe.vic.gov.au\)](https://worksafe.vic.gov.au) – for guidance and advice relating to health and safety at your workplace, including storing, handling and transporting dangerous goods, and controlling exposure to crystalline silica.

[Victorian Building Authority \(vba.vic.gov.au\)](https://vba.vic.gov.au) – for information about Victoria's building regulatory framework.

[Department of Environment, Land, Water and Planning \(planning.vic.gov.au/guide-home/using-victorias-planning-system\)](https://planning.vic.gov.au/guide-home/using-victorias-planning-system) – for information about Victoria's planning system.

[VicRoads \(vicroads.vic.gov.au\)](https://vicroads.vic.gov.au) – For information about Victoria's road regulatory framework.

## Appendix A: Action plan example

Use this template to list 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)
<i>For example, B</i>	<i>For example, Review EPA Liquid storage and handling guideline</i>	<i>Improve the way liquids are stored on site and spill containment.</i>	<i>Danica</i>	<i>03/08/2021</i>		

### Key focus areas:

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

## Appendix B: Prescribed permission activities

If you undertake any of the activities below, there are specific things you must do to comply with the law. This includes applying for the relevant permission and paying a fee (if applicable). This is a summary of the activity types listed in Schedule 1. See **Schedule 1** and **Part 3.5** of the [EP Regulations](#) for further detail on the prescribed permission activities and other regulations relating to permissions, including prescribed exemptions.

### Legend -

Environment protection levy applies	☉ Waste levy applies	☒ <a href="#">Financial assurance</a> may be required	✱ Council issued permit
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Waste treatment, disposal, transport and recycling		
Reportable priority waste management ☉☒	Other waste treatment incineration	Other waste treatment – e-waste more than 500 tonnes
Other waste treatment – e-waste more than 500 tonnes or less	Sewage treatment	Industrial wastewater treatment
Industrial wastewater treatment	Landfills – excluding municipal landfills servicing less than 5000 people ☉☒	Municipal landfills servicing less than 5000 people
Disposal to land	Organic waste processing – large	Organic waste processing – small
Waste to energy	Waste tyre storage – large	Waste tyre storage – small
Reportable priority waste (transport) – high risk	Reportable priority waste (transport) – other	Transporting waste into Victoria
Transporting waste out of Victoria	Waste and resource recovery – large ☒	Waste and resource recovery – medium ☒
Waste and resource recovery – small	Reclaimed wastewater supply or use	Biosolids supply or use
Supply or use of reportable priority waste	Containment of Category D waste soil	Discharge or deposit of waste to aquifer
Temporary onsite waste treatment	Onsite wastewater management systems ✱	Temporary storage – biomedical waste
Temporary storage – asbestos	Temporary storage – designated waste	
Primary industry and allied operations		
Animal industries – waste not solely to land	Livestock saleyards or holding pens – waste solely to land	Livestock saleyards or holding pens – waste not solely to land
Fish farms		



Extractive industry and mining		
Extractive industry and mining		
Animal derived by-products and food		
Abattoirs	Rendering	Animal skin tanning works
Seafood processing	Petfood processing	Food processing
Food processing	Milk processing	Edible oil or fat processing
Beverage manufacturing		
Textiles		
Textile works		
Wood and wood derivatives		
Timber preserving works	Fibreboard works	Paper pulp mills
Chemical works	Coal processing	Oil or gas refining
Bulk storage ☐	Container washing	
Non-metallic minerals		
Cement works	Bitumen or asphalt batching	Ceramics
Mineral wool works	Glass works – manufacturing	Glass works – large reprocessing
Glass works – small reprocessing		
Metals and engineering		
Primary metallurgical	Metal melting	Metal galvanising
Metal finishing	Can and drum coating	Vehicle assembly
Printing		
Printing		
Utilities		
Power generation	Carbon geosequestration	Water desalination
Others		
General discharges or emissions to the atmosphere	Contaminated sites – onsite soil retention ☐	Road tunnel ventilation systems
Operation outside of hours or extended operations	Conducting more than six outdoor concerts	Dry-cleaning
Receiving waste acid sulphate soil for treatment		