

Notifiable contamination guideline - Duty to notify of contaminated land

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Proposed guideline

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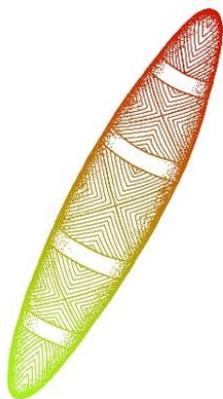
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1 Glossary of key terms

Term or Phrase	Definition and guidance
ADWG guideline values	The ADWG means the Australian Drinking Water Guidelines Paper 6 (https://www.nhmrc.gov.au/about-us/publications/australian-drinking-water-guidelines) – <i>National Water Quality Management Strategy</i> , published by the National Health and Medical Research Council, National Resource Management Ministerial Council, Commonwealth of Australia in 2011, as in force from time to time.
ANZG default guideline values	The ANZG means the Australian and New Zealand Guidelines for Fresh and Marine Water Quality (https://www.waterquality.gov.au/anz-guidelines), published by the Australian and New Zealand Governments and Australian State and Territory Governments in 2018, as in force from time to time
average threshold	(Defined in the Environment Protection Regulations 2021) Means the 95% upper confidence limit on the arithmetic average concentration of a contaminant in or on soil that is equal to the Health Investigation Level (HIL) for that contaminant for the current use of the land, as specified in section 6 of Schedule B1 to the NEPM (ASC) (https://www.legislation.gov.au/Details/F2013C00288/Html/Volume_2). See NEPM (ASC) Sch. B2: section 13.2.
contaminant	A chemical substance the presence of which may result in the land being ‘contaminated land’ within the meaning of section 35 of the <i>Environment Protection Act 2017</i> .
GED	General environmental duty
groundwater	(Defined in the <i>Environment Protection Act 2017</i>) Means any water contained in or occurring in a geological structure or formation or an artificial landfill below the surface of land.
HILs	Health Investigation Levels in the NEPM (ASC)
HSLs	Health Screening Levels in the NEPM (ASC)
land	(Defined in the <i>Environment Protection Act 2017</i>) Means any land, whether publicly or privately owned, and includes— (a) any buildings or other structures permanently affixed to the land; and (b) groundwater
localised elevated value threshold	(Defined in the Environment Protection Regulations 2021) Means the concentration of a contaminant in an individual soil sample that is equal to 250% of the HIL for that contaminant for the current use of the land, as specified in section 6 of Schedule B1 to the NEPM (ASC). This applies to what is sometimes referred to as a ‘hotspot’. Such hotspots may be associated with the source of a contaminant on a site, or they can be a location at which a contaminant has preferentially accumulated.
NAPL	(Defined in the Environment Protection Regulations 2021) Non-aqueous phase liquid (‘NAPL’) means an organic or inorganic liquid that— (a) is not miscible with water; and (b) can exist in soil or groundwater in various forms; and (c) is commonly present as a measurable thickness (phase-separated) or sheen; and

	(d) may be identifiable analytically (in soil or groundwater) when solubility has been reached or observed to be present within the unsaturated soil, rock profile or aquifer matrix.
NEPM (ASC)	National Environment Protection (Assessment of Site Contamination) Measure 1999 (https://www.legislation.gov.au/Details/F2013C00288)
site	(Defined in the <i>Environment Protection Act 2017</i>) Means specified land or a specified parcel of land. For the purposes of section 40, land under a person's management or control that comprises a series of contiguous parcels will be regarded as a single site for notification purposes.
useable groundwater	In this guideline 'useable groundwater' refers to groundwater that is used, or may be used for human consumption or contact, stock watering or irrigation.

2 Introduction

The *Environment Protection Act 2017* (**the Act**) requires certain types of contamination of land and groundwater to be notified to EPA. Notification is important to support EPA in fulfilling its role in reducing the harmful effects of pollution and waste on human health and the environment.

Section 40 of the Act (**duty to notify**) requires a person in management or control of land with contamination that meets the definition of 'notifiable contamination' to notify EPA. Notifiable contamination is defined in Part 2.1 of the Environment Protection Regulations 2021 (**the Regulations**). The Regulations identify the following broad areas of contamination that may be notifiable:

- contamination of soil (including friable asbestos) that exposes a person to that contamination
- contamination of soil that is moving, has moved or is likely to move onto adjacent land
- contamination of any surface water and groundwater that is being used, or may be used
- contamination of soil or groundwater that causes vapour intrusion
- any presence of non-aqueous phase liquid (NAPL) in soil or groundwater
- contaminated soil sourced from that land that can be lawfully retained on site.

Section 41 of the Act requires EPA to be notified in the manner and form approved by EPA. The information that must be notified is set out in section 41(2) of the Act and regulation 14 of the Regulations.

Notifiable contamination, as defined in Part 2.1 of the Regulations, refers to contamination that may impact human health. However, it should be noted that the duty to manage contaminated land under section 39 of the Act requires the consideration of risks of harm to human health and the environment.

This publication provides guidance on what is notifiable contamination and how to interpret the circumstances of the contamination that make it notifiable. Guidance is also provided on completing the notification process and what EPA expects to be included in a person's management response (that is explanation of how they are meeting the duty to manage) for the notifiable contamination. The detail of this is provided in Appendix B (page 43) which includes a user guide to filling out the online form, and a template (also provided separately as a Microsoft Word document) that duty holders will be able to use to pre-populate responses in preparation for filling out the online form.

This guidance should be read in conjunction with:

- [Contaminated Land Policy](https://www.epa.vic.gov.au/about-epa/publications/1915) (publication 1915) (<https://www.epa.vic.gov.au/about-epa/publications/1915>)
- [Contaminated land: Understanding section 35 of the Environment Protection Act 2017](https://www.epa.vic.gov.au/about-epa/publications/1940) (publication 1940) (<https://www.epa.vic.gov.au/about-epa/publications/1940>)
- [Assessing and controlling risks of harm from contaminated land: a guide to meeting the duty to manage for those in management or control of land](https://www.epa.vic.gov.au/about-epa/publications/1977) (publication 1977) (<https://www.epa.vic.gov.au/about-epa/publications/1977>)

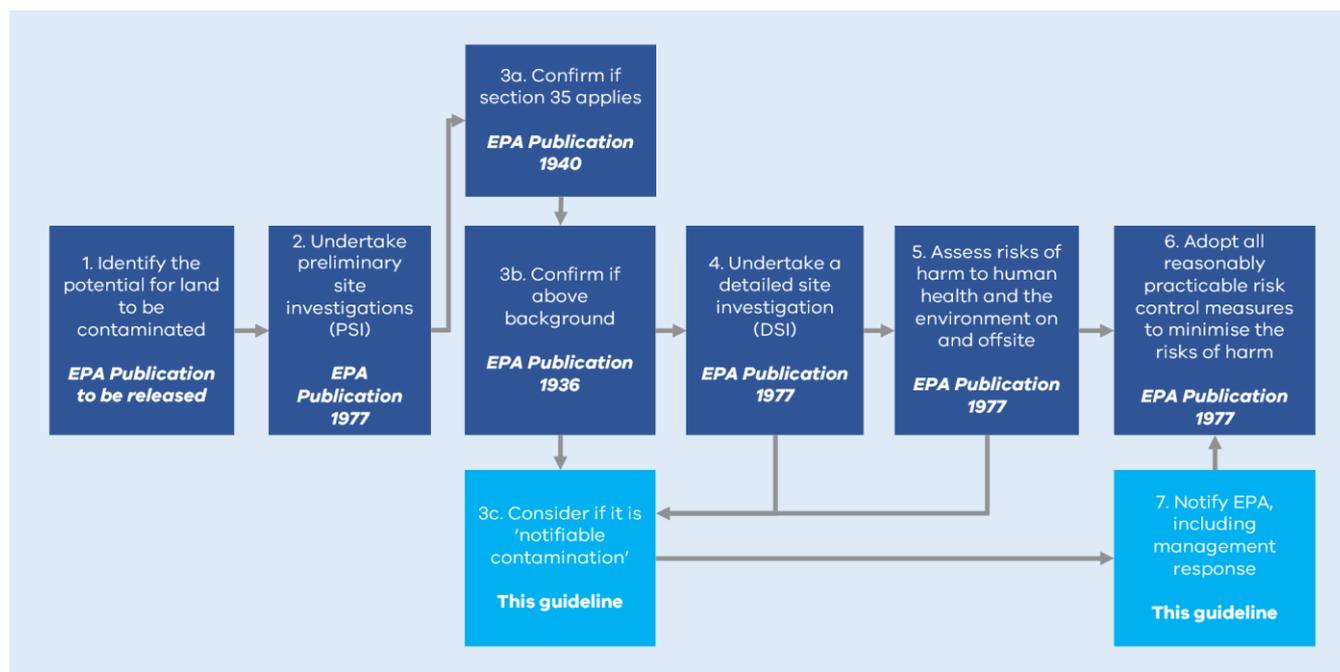


Figure 1: The context of this publication (boxes 3c and 7 – highlighted in lighter blue) in relation to the general components of the Act contaminated land duties, supported by other EPA guidance. This figure provides only generalised account of steps that may apply in relation to contaminated land.

2.1 Who this guideline is for

This guideline is for any person who is in management or control of land where contamination that may be notifiable is present and that person is seeking to confirm whether they have a duty to notify, and if so, to fulfil that duty.

Where a person suspects their land may be contaminated, their first priority is to ascertain whether or not they have a duty to manage any risks of harm arising from that contamination under section 39 of the Act. In the course of meeting the duty to manage (a separate guideline has been produced by EPA to assist with meeting the duty to manage – [Assessing and controlling contaminated land risks](https://www.epa.vic.gov.au/about-epa/publications/1977) (publication 1977) (<https://www.epa.vic.gov.au/about-epa/publications/1977>)), a person may also become aware that the nature and extent of the contamination also makes it notifiable to the EPA. That is where this guideline on the duty to notify is intended to assist.

The content of this guideline is drafted to a technical standard designed to support contaminated land specialists who advise on or manage contaminated land. The content has been structured to take readers through a logical, sequential pathway that will enable them to consider each type of notifiable contamination.

Contamination of land is a complex and at times highly technical environmental issue. It is often necessary for a duty holder to seek specialist advice to understand the nature of contamination issues and what, if any, obligations may arise in relation to a specific site. EPA has published guidance on how to [work with consultants](https://www.epa.vic.gov.au/for-business/find-a-topic/environmental-consultants) (<https://www.epa.vic.gov.au/for-business/find-a-topic/environmental-consultants>) as part of meeting obligations in relation to contamination of land.

2.2 Guideline objectives

This guideline sets out EPA's expectations in relation to:

- circumstances where contaminated land needs to be notified to EPA under section 40 of the Act
- reporting requirements, including the information required for notification
- timeframes when the notification needs to be provided to EPA
- circumstances where a person required to notify is aware a notification has already been made as per section 40(4)(a)
- circumstances that are exempt from the notification requirements as per section 40(4)(b) of Act and detailed in regulation 13 of the Regulations.

This guideline only relates to notifiable contamination under section 40 of the Act. There are other notification obligations that require reporting to the EPA that are not covered in this guidance, including:

- pollution incidents that cause or threaten to cause *material harm* (section 32 of the Act)
- where an imminent state of danger is identified by an environmental auditor in carrying out any of their functions (section 216 of the Act)
- reporting requirements under a permission issued under Part 4 or a remedial notice issued under Part 10 of the Act.

Notifications may also be required under other legislation, such as occupational health and safety laws. If a duty holder is unsure what notification requirements may apply, it is recommended that professional advice is obtained.

3 How to use this guideline

This guideline has been set out as a series of questions to work through to help you answer the question, 'do I have notifiable contamination?' It is recommended you work through it in the order in which it is set out.

Figure 2 represents the order in which these questions are arranged and provides section references to guide you through each type of notifiable contamination. Following this pathway through can provide assurance that you will have considered each type of notifiable contamination.

If you do have notifiable contamination, the guideline also helps you to prepare for and complete your notification to EPA.

The guideline is divided into the following sections:

- **Who is required to notify?** This section (4) explains the scope of the duty to notify, its purpose under the Act, who it applies to and guidance on deciding whether further steps are required.
- **What is notifiable contamination?** This section (4.4) also provides guidance and information to help duty holders understand each of the notifiable circumstances set out in Part 2 of the Regulations. **Figure 2** sets out a pathway for addressing each of the notifiable contamination circumstances, which are then further explained in section 5.
- **Guidance on specific types of notifiable circumstances:** Given the complexity and variability of contamination, this section (5.2-5.13) sets out specific issues and questions that may arise for certain duty holders when assessing whether notification is required.
- **How to prepare and complete a notification:** This part (section 9) provides guidance on preparing and completing a notification to EPA, including what, if any, follow-up is required.

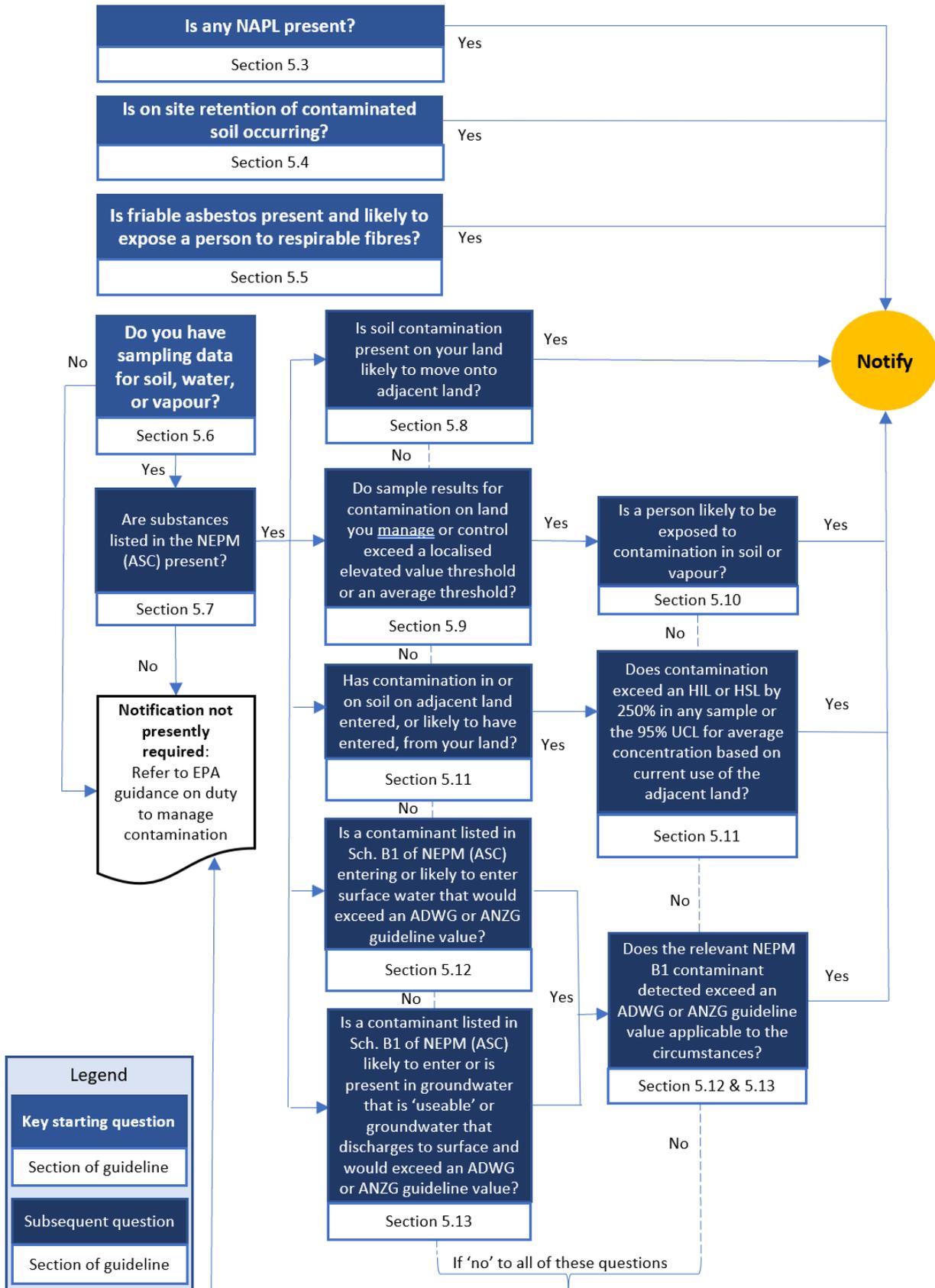


Figure 2: Summary of the key considerations, to work through sequentially, in identifying notifiable contamination set out in Part 2.1 of the Environment Protection Regulations 2021.

4 Who is required to notify?

4.1 Overview

To be a person required to notify EPA under section 40 of the Act **all** the following criteria must apply:

1. You are a person in management or control of land
2. The land or groundwater is contaminated within the meaning of section 35 of the Act
3. The contamination meets the definition of 'notifiable contamination'
4. You have become aware, or reasonably should have become aware, that the land you manage or control is contaminated by notifiable contamination

This section of the guideline provides an overview to assist you decide if you need to notify EPA.

4.2 Who is a person in management or control of land?

A notification needs to be provided to EPA by any person who is in management or control of the land where notifiable circumstances are present. More than one person may have management or control over land.

Notification by one of those persons will generally satisfy the notification obligation for all other persons in management or control of the site (see section 40(4) of the Act). You should not, however, assume that another person has notified already. To ensure the benefit of section 40(4) you would need to have a reliable basis as to why you believe the notifiable contamination has already been notified to EPA, for example through information sharing arrangements in place between the various persons in management or control of the land. A new notification may be required where previously unknown contamination is identified on land already subject to a notice which did not identify that unknown contamination. The requirement to notify would commence upon the duty holder becoming aware of that new information.

The question of who is in management or control of land is one of fact to be determined having regard to any powers or control that a person can exercise over the land and/or any decision making authority a person has in respect of the land. It may be determined having regard to matters including ownership of the land, occupation of the land, for example under a lease or licence agreement or other contracts relating to the land such as construction contract, or by reference to a legal right of way or entry granted in respect of the land. Management or control may also be established under legislation, such as under the *Crown Land (Reserves) Act 1978*. For further guidance on who may be in management or control of land, see [Assessing and controlling risks of harm from contaminated land: a guide to meeting the duty to manage for those in management or control of land](https://www.epa.vic.gov.au/about-epa/publications/1977) (publication 1977) (<https://www.epa.vic.gov.au/about-epa/publications/1977>).

Notification can be completed by a contractor or agent on behalf of a person who is legally required to notify. To accept a notification completed on behalf of a duty holder, that person must satisfy EPA that they are authorised by the duty holder to make the notification.

While there is a requirement for certain contaminated land circumstances to be notified under the Act, anyone can report suspected or confirmed contamination or pollution incidents at any time by calling EPA on 1300 372 842.

4.3 Is the land 'contaminated land' within the meaning of the Act?

Only contaminated land, within the meaning of **section 35** of the Act, can be considered notifiable under section 40.

[Contaminated land: Understanding section 35 of the Environment Protection Act 2017](https://www.epa.vic.gov.au/about-epa/publications/1940) (publication 1940)

(<https://www.epa.vic.gov.au/about-epa/publications/1940>) sets out EPA's understanding of the meaning of 'contaminated land'.

These guidelines have been designed to assist in the interpretation of results obtained from soil, vapour, and water sampling to determine what may be notifiable. The presence of NAPL, friable asbestos, and where contaminated soil is retained on site may be readily identified or assumed based on a visual assessment of the land or what information is known about the retention of contaminated soil, gathered during the course of meeting your duty to manage. In such circumstances further investigation

would be needed to comply with the duty to notify. In most instances of contamination, however, you will only be able to confirm that land is contaminated, and therefore if the contamination is notifiable for the purposes of the duty to notify, by considering the results of soil, vapour, or water sampling.

For further information on distinguishing naturally occurring substances from those that constitute contamination, see EPA's [Understanding your contaminated land duties](https://www.epa.vic.gov.au/for-business/new-laws-and-your-business/manage-contaminated-land/about-contamination/understanding-your-contaminated-land-duties) (https://www.epa.vic.gov.au/for-business/new-laws-and-your-business/manage-contaminated-land/about-contamination/understanding-your-contaminated-land-duties), in particular the section on Background Levels.

4.4 What is 'notifiable contamination'?

Contamination of land or groundwater is only notifiable when all three of the below apply:

- a) **specific substances** are present
- b) **above specific concentrations**, and in
- c) **specific circumstances**.

The **specific substances** covered by the definition mean at least one of the following:

- substances named in Section 6 of Schedule B1 of the National Environment Protection Measure (Assessment of Site Contamination) 1999 (**NEPM (ASC)**)¹
- friable asbestos in or on land
- NAPL in soil or groundwater
- soil sourced from contaminated land that is to be retained on site (refer to section 5.4 of this guideline for more information).

The **specific concentrations** above which notification is required are the values set out for the corresponding substances:

- the Health Investigation Levels (HILs) and Health Screening Levels (HSLs) in the NEPM (ASC), in relation to substances in soil and vapour;
- the Australian Drinking Water Guidelines (**ADWG**)² or the Australian and New Zealand Guidelines for Fresh and Marine Water Quality (**ANZG**)³ in relation to the substances listed in Section 6 of Schedule B1 of the NEPM (ASC) as applicable to groundwater and surface water⁴; or
- respirable asbestos fibres in excess of 0.01 fibres per mL of air.

The applicable concentrations for HSLs and HILs are further specified for different circumstances.⁵

The **specific circumstances** that make contamination notifiable are:

- where a person is exposed, or is likely to be exposed, to the contamination (including friable asbestos);
- the contamination is migrating from the site onto adjacent land, into useable groundwater⁶ or into any surface water; or
- in relation to waste soil sourced from contaminated land, where it is proposed to be retained on site (refer to section 5.4 of this guideline for more information).

¹ See *Guideline on Investigation Levels for Soil and Groundwater* (Schedule B1), NEPM (ASC), section 6 at https://www.legislation.gov.au/Details/F2013C00288/Html/Volume_2#_Toc351712081

² See *Australian Drinking Water Guidelines Paper 6—National Water Quality Management Strategy* at <https://www.nhmrc.gov.au/about-us/publications/australian-drinking-water-guidelines>

³ See Australian and New Zealand Guidelines for Fresh and Marine Water Quality at <https://www.waterquality.gov.au/anz-guidelines/guideline-values>

⁴ ADWG and the ANZG include a number of substances are not listed in section 6 of Schedule B1 of the NEPM. Notifiable contamination is limited to the substances listed in the NEPM tables in section 6, which relate to human consumption or contact (for example, recreational contact), stock watering or irrigation.

⁵ For regulations 8(a), 8(b) and 11 the threshold concentration is either the **localised elevated value threshold** or the **average threshold**; for regulation 8(c) the threshold is the HIL for the current use of the adjacent land.

⁶ See glossary for explanation of 'useable groundwater'

4.4.1 Exemptions

There are also some circumstances that are exempt from notification under section 41(4)(b) of the Act. The exempt circumstances are those set out in regulation 13 of the Regulations and addressed in section 7 of this guideline. It is important to note the key exemption set out in regulation 13(d), which limits notifiable contamination to:

- substances listed in Section 6 of Schedule B1 to the NEPM (ASC)
- friable asbestos in the circumstances described in regulation 9 and
- NAPL as described in regulation 10.

The effect of regulation 13(d) is that it confirms that the definition of 'notifiable contamination' set out in the Regulations is intended to be exhaustive of *all* the types of contamination that must be notified to EPA. It also means that the part of the definition of 'notifiable contamination' as set out in section 37(b) of the Act, regarding a monetary threshold, does **not** apply for the life of these regulations.

Section 5 of this guideline sets out the circumstances in which notification is required under section 40 of the Act, and also includes the circumstances where contamination is not notifiable. Those circumstances are also summarised in a table in Appendix A.

4.5 Responding to imminent and immediate risks of harm

Some contaminants can pose imminent or immediate risks of harm due to their toxicity, pathogenicity, flammability, or explosivity, particularly when present at higher concentrations. In other scenarios, contamination may have resulted in long term exposures that may lead to the development of chronic health conditions and therefore needs swift response that may include multiple parties. The following circumstances are examples of when you should consider alerting EPA immediately as part of your risk management response:

- occupants or users of the impacted area have reported ill health associated with the contamination
- pathogenic materials and waste, dangerous goods, radioactive substances, unexploded ordinance in an uncontrolled state that may be accessible
- highly flammable or explosive substances in vapour or soils in accessible scenarios that may result in fire or explosion (for example methane above the lower explosive limit)
- groundwater or surface water where it is known to be abstracted for drinking water purposes and/or that reports contaminant concentrations at levels that could pose an acute health risk or an existing long term chronic exposure that warrants swift action to reduce in exposure
- contamination in drinking water service lines that may ingress into water supply, particularly where it has either corrosive properties or acute toxicity
- vapour intrusion leading to indoor air concentrations above levels that could pose an acute health risk, or an existing long term chronic exposure that has potential to result in ill-health
- any other instance where the evidence points towards a likely acute health impact or an existing long term chronic exposure that has potential to result in ill-health
- absence of adequate spill containment (for example bunding) beneath bulk liquid storage vessels in the immediate proximity of waters (including a stormwater drain), where there is a potential to cause a discharge that may have toxic impacts on aquatic life (for example fish kills or similar impacts), or an impact on human health
- discharge (or a high risk of discharge) of any substance, including polluted groundwater, to surface waters at concentrations that may have toxic impacts on aquatic life (for example fish kills), or potential impacts on human health
- friable asbestos in an uncontrolled environment, such that there is a significant risk that asbestos fibres may be released to the air environment and present a risk to people either on-site or off-site.

You should take immediate action to prevent people from being exposed to the contamination or reduce exposure to levels that no longer pose a risk. This may include simple interventions such as provision of alternative water, putting up fencing and signage but may also extend to more significant interventions such as relocation.

Managing the imminent or immediate risk of harm may also include contacting the EPA as soon as practicable. Irrespective of any mandatory notification obligations, EPA may be able to assist in minimising significant or imminent risks of harm from contamination through its broader response powers, and collaboration with other agencies (for example, water corporations, Department of Health, Emergency Management Victoria).

Further, if an environmental auditor appointed under Part 8.3 of the Act becomes aware at any point of an imminent state of danger in relation to land in the course of carrying out any of their functions under the Act, they must notify EPA as soon as practicable through the 24-hour Pollution Watch Line (1300 EPA VIC or 1300 372 842).

4.6 Who should reasonably be aware of notifiable contamination?

Section 40 of the Act only requires a person in management or control of land to notify EPA if they have become aware, or reasonably should have become aware, that they manage or control notifiable contamination.

Section 40(3) of the Act sets out the factors that determine whether a person in management or control of land should be aware of notifiable contamination on or in that land. The factors are:

- a. *the person's skills, knowledge and experience; and*
- b. *whether the person could practicably seek advice regarding the contamination; and*
- c. *any other circumstances of the contamination.*

EPA regards the considerations set out in **Table 1** as relevant to whether or not a person has the requisite skills, knowledge or experience to be capable of identifying notifiable contamination.

Table 1: Considerations for determining whether or not a person reasonably should be aware of notifiable contamination

Skills	<ul style="list-style-type: none"> • Is the duty holder (including staff employed by the duty holder) capable of identifying contamination issues considering the skills possessed or needed by the duty holder as part of its business or undertaking? • Do other participants in the duty holder's sector (who are comparable in terms of size of operations) typically engage or employ environmental managers or other specialists in relation to contamination?
Knowledge	<ul style="list-style-type: none"> • Was the duty holder in control or management of the land, to any extent, at the time the contamination occurred? If yes, and they still have any control or management of that land, then EPA expects to be notified. • Does the duty holder have in its possession assessments or reports that advise of the level of contamination? For example, acquired during purchase of land. • Does the duty holder have, or has the duty holder acquired, knowledge of past practices on their site that are known to cause contamination? For example, materials provided to the duty holder as part of purchase of business or land. • Is the site, or any activity undertaken on the site, of a nature that the likelihood of contamination issues being present is something that reasonably should be known for a person managing or controlling such a site? For example, where bulk chemicals are or were stored, or where underground petroleum storage systems are or were present. • Is the duty holder undertaking an activity, or in management or control of a site known (or ought reasonably to be known) to have hosted activities, that are associated with contamination issues? For example, a site where chemical storage or manufacturing took place? • Has the duty holder been advised by EPA, or any other person, of the likelihood of contamination being present at a site over which they exercise management or control? • Has the duty holder taken reasonable steps to obtain knowledge of the site history or received information (e.g. through a due diligence exercise) that increased their knowledge of the site conditions?
Experience	<ul style="list-style-type: none"> • Has the duty holder owned or occupied a known contaminated site in the past?

- Does the duty holder participate in part of the property sector where contamination risks have historically arisen? For example, has the duty holder owned or developed inner city or industrial land in the past?
- Is the duty holder participating in, or has the duty holder participated in, activities that are known to cause contamination? For example, operating underground storage tanks, undertaking electroplating activities?

Section 40 of the Act does not, on its own, require an investigation be initiated solely for determining whether or not notifiable contamination is present. The obligation in section 40 of the Act arises where a person is aware (or where they should reasonably be aware) of the presence of contamination that satisfies the notifiable circumstances set out in Part 2 of the Regulations.

Where a person suspects their land may be contaminated, their first priority is to ascertain whether or not they have a duty to manage any risks of harm arising from that contamination under section 39 of the Act. In the course of meeting the duty to manage, a person may also become aware that the nature and extent of the contamination also makes it notifiable to the EPA.

4.7 Consequences for failing to notify

A person who is required to notify the EPA of contaminated land but fails to do so may be subject to prosecution. If they are convicted, the Act currently provides for a maximum penalty of:

- 120 penalty units – in the case of a natural person
- 600 penalty units – in the case of a body corporate.

Where more than one person manages or controls the land and has failed to notify of contaminated land, EPA would consider the appropriate compliance and enforcement response in relation to the duty holder(s) by reference to EPA's *Compliance and Enforcement Policy* (<https://www.epa.vic.gov.au/about-epa/what-we-do/compliance-and-enforcement/epas-compliance-approach>).

5 What is notifiable contamination?

5.1 Overview

Before notifying EPA under the duty to notify it is important that you:

- are satisfied you meet all criteria for the type(s) of notifiable contamination in the Regulations and as set out in section 4.4 of this guideline, above, and
- have information necessary to complete your notification in the manner and form required by EPA, including your management response or proposed management response – more detail in section 8 of this guideline.

The key purpose of notification is to assist EPA to better understand the nature and distribution of the common types of land and groundwater contamination in Victoria. This information is important to support EPA's strategic approach to addressing contaminated land issues in a manner that is evidence-led, proportionate and recognises the shared responsibility in achieving environmental protection.

Incomplete or speculative information will not support EPA to fulfil its objectives under the Act. Notifying EPA of *potential* contamination (that is without evidence to confirm its presence) does not itself contribute to you meeting your duty to notify or duty to manage the risks of harm. Importantly, the new contaminated land duties under the Act create positive obligations on persons in management or control of contaminated land to proactively manage risks posed by contamination; you should not expect, or wait for, EPA to issue a remedial notice before taking action to meet your duties. In many instances, a person will only be in a position to notify EPA of notifiable contamination once they have started meeting their duty to manage and so have acquired the requisite information and knowledge to make a notification. If, however, you identify visual or olfactory contamination that you believe constitutes contaminated land, and it is of a scale and extent to pose a risk to human health and the environment, there is the capacity in the process to notify of this to EPA.

If you are not able to confirm the basis upon which you believe you must notify, and you cannot provide the information required by EPA under section 41 of the Act, then EPA will not be able to accept your notification. A mere suspicion that contamination may be notifiable will not be sufficient to enable you to notify EPA. Rather, where such suspicion arises your next step should be to consider whether you are subject to section 39 of the Act (duty to manage).

Similarly, however, having an incomplete understanding of the contamination cannot be used as an excuse to avoid notifying EPA. Section 41 of the Act requires that a duty holder must provide to EPA what is known to the person at the time of notification. Section 41(4) of the Act permits a person to provide further information at a later date to complete the scope of matters set out in section 41 and regulation 14.

5.2 Prescribed notifiable circumstances

The notifiable circumstances set out in the Regulations can be divided into the following segments in which:

- contamination is present in, on or entering **soil** (including onsite retention contaminated soil)
- contamination is present in or entering **water** (surface and groundwater)
- contamination present in soil or groundwater creates vapours in **air**.

Sections 5.3 to 5.13 of this guideline set out a **series of 11 questions** to assist you identify what, if any, contamination you manage or control is notifiable. It takes you through **all** the types of notifiable contamination.

The order of the section is based on **Figure 2**, which shows these questions as a flow chart, and **Appendix A** which presents the key criteria for all the notifiable circumstances. At the end of each subsection there appears a box which indicates if **notification is required** or where **further criteria or information must be considered**.

5.3 Is any non-aqueous phase liquid present?

5.3.1 Overview

The presence of any non-aqueous phase liquid (NAPL)⁷ in groundwater, surface water or an aquifer on or in land is notifiable (regulation 10(3)).

5.3.2 How do I know, or reasonably should know, NAPL is present?

NAPL commonly occurs when petroleum hydrocarbons, chlorinated hydrocarbons or inorganic compounds (such as mercury) are released to the environment (for example as a spill, by leaking from above-ground or underground storage systems, when poured down drains, etc.). In assessing your duty to notify in relation to NAPL you need to consider whether these types of systems, tanks, or chemicals may have been used at your site.

The nature of these chemicals means that they are not miscible with water and are either light (float to the top of the water) or dense (sink to the bottom). When released to land and groundwater they can be present in the unsaturated and saturated zones of the aquifer, and may be observed or visible in a number of ways, such as:

- staining of soils (e.g. visible chemicals within the soil column or geological voids including cracks, fractures, pore spaces);
- sheens or measurable thicknesses of separate phase liquid in a groundwater bore or trenches where water gathers
- analytical results from soil, groundwater or soil vapour samples indicate that the solubility of the chemical has been reached
- analytical results from soil, groundwater or soil vapour samples indicate that the concentrations are approaching a percentage of the pure phase solubility which is indicative of the presence of NAPL (for example volatile chlorinated hydrocarbons at 1 per cent solubility constitute NAPL).

If any of these criteria are satisfied, the contamination is notifiable under regulation 10(3). **See section 9** of this guideline for information on what needs to be notified to EPA.

Guidance on the assessment, management and clean-up of NAPL is included in the following standards and guidance:

- [NEPM \(ASC\)](https://www.legislation.gov.au/Details/F2013C00288) (including Schedule B1 and Schedule B2) (https://www.legislation.gov.au/Details/F2013C00288)
- [Guidelines for conducting audits for land suitability purposes](https://www.epa.vic.gov.au/about-epa/publications/759-3) (publication 759) (https://www.epa.vic.gov.au/about-epa/publications/759-3)
- [The cleanup and management of polluted groundwater](https://www.epa.vic.gov.au/about-epa/publications/840-2) (publication 840) (https://www.epa.vic.gov.au/about-epa/publications/840-2)
- [Hydrogeological assessment \(groundwater quality\) guidelines](https://www.epa.vic.gov.au/about-epa/publications/668) (publication 668) (https://www.epa.vic.gov.au/about-epa/publications/668)
- [Groundwater sampling guidelines](https://www.epa.vic.gov.au/about-epa/publications/669) (publication 669) (https://www.epa.vic.gov.au/about-epa/publications/669)
- [Sampling and analysis of waters, wastewaters, soils and wastes](https://www.epa.vic.gov.au/about-epa/publications/iwrg701) (publication IWRG 701) (https://www.epa.vic.gov.au/about-epa/publications/iwrg701)
- [The design, installation and management requirements for underground petroleum storage systems \(UPSS\)](https://www.epa.vic.gov.au/about-epa/publications/888-4) (publication 888) (https://www.epa.vic.gov.au/about-epa/publications/888-4)

Other sources of information and guidance may be of assistance, such as CRC CARE (2015) [Technical Report 34: A practitioner's guide for the analysis, management and remediation of LNAPL](https://www.crccare.com/files/dmfile/CRCCARETechnicalReport34-PractitionersguideforanalysismanagementandremediationofLNAPL.pdf) (https://www.crccare.com/files/dmfile/CRCCARETechnicalReport34-PractitionersguideforanalysismanagementandremediationofLNAPL.pdf).

⁷ Refer to Glossary of key terms for the legal definition of NAPL.

5.3.3 Management response to NAPL

Under regulation 15, a person in management or control of land where NAPL is present in soil or groundwater must, so far as reasonably practicable:

- clean up the non-aqueous phase liquid; and
- if the source of the non-aqueous phase liquid is located on the land, remove or control the source of the liquid.

Further guidance on clean-up is provided in the following EPA publications:

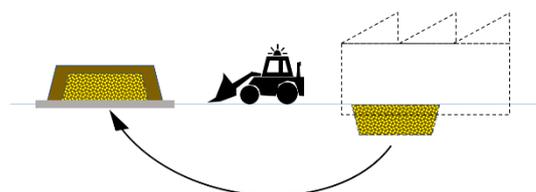
- [Assessing and controlling contaminated land risks: A guide to meeting the duty to manage for those in management or control of land](https://www.epa.vic.gov.au/about-epa/publications/1977) (publication 1977) (<https://www.epa.vic.gov.au/about-epa/publications/1977>)
- [The cleanup and management of polluted groundwater](https://www.epa.vic.gov.au/about-epa/publications/840-2) (publication 840) (<https://www.epa.vic.gov.au/about-epa/publications/840-2>)

Further guidance on likelihood of concentrations remaining at the site, is discussed in Section 6.1 of this guideline.

5.4 Is on-site retention of contaminated soil occurring?

On-site retention of excavated surplus soil is notifiable if:

- it is not fill material
- it is not an activity for which permission is required
- it arises from contaminated land sourced **on-site**
- there are contaminant(s) listed in NEPM (ASC) section 6 Schedule B1.



Soil that is 'fill material' within the meaning of the Regulations is not notifiable. The EPA considers the term 'retention', within the context of regulation 12, refers to circumstances where:

- contaminated soil, sourced from your site, has been excavated, and
- the soil is surplus to requirements, and
- a decision has been made to keep that soil on-site.

Any decision to retain contaminated soil on site must be consistent with your duty to manage risks of harm from contaminated land. Guidance on how you can meet your duty to manage is provided in [Assessing and controlling contaminated land risks: A guide to meeting the duty to manage for those in management or control of land](https://www.epa.vic.gov.au/about-epa/publications/1977) (publication 1977) (<https://www.epa.vic.gov.au/about-epa/publications/1977>).

In some circumstances, the decision to retain contaminated soil on-site will require a development licence covering the activities around establishing the containment infrastructure. Specifically, Schedule 1 of the Regulations prescribes the following as a development licence activity, see Table 2.

Table 2: When retaining contaminated soil on-site requires a development licence

Activity Type	Description of prescribed permission activity
L02 (Contaminated sites—on-site soil retention)	On-site retention of contaminated soil (other than fill material) in a structure designed to contain at least 1000 m ³ of the soil and to prevent further contamination

Retention of soil must be notified to EPA under section 40 of the Act, if:

- it will be contained in a structure designed for *less* than 1,000 m³, or
- it is *of any* volume but **not** contained in such a structure, and
- such retention is an appropriate risk management response under the duty to manage.

Retention of soil sourced on-site from contaminated land may also require approval under the *Planning & Environment Act 1987* and must comply with other Victorian legislation (for example the *Occupational Health and Safety Act 2004* where the site is to remain a workplace).

EPA acknowledges that as part of site redevelopment, it may be necessary to reconfigure the site layout. Circumstances may arise, for example, where soil is retained at a site as part of redevelopment or reconfiguration as a way to minimise risks of harm so far as reasonably practicable. This may be a way of fulfilling a person's duty to manage contaminated land (section 39 of the Act).

Whether on-site retention is appropriate or not will depend on consideration of what is *reasonably practicable* to manage the risks of harm (under the duty to manage) in the circumstances, including the availability and suitability of treatment options and whether retaining the soil onsite is a proportionate response to the risk of harm. It may also be relevant to consider how retention on-site would be consistent with the waste management hierarchy principles set out in section 17 of the Act.

There will be circumstances where retention of soil sourced on-site from contaminated land will **not** be suitable. Distinguishing what soil can safely be retained will be framed by considerations of the specific risks the contaminated land you manage poses and EPA's guidance in [Assessing and controlling contaminated land risks: A guide to meeting the duty to manage for those in management or control of land](#) (publication 1977) (<https://www.epa.vic.gov.au/about-epa/publications/1977>).

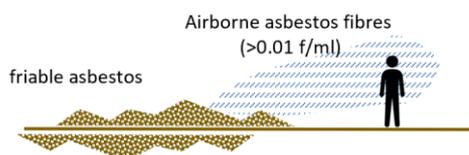
It will **never** be permissible to import contaminated materials from other sites⁸ unless authorised under the Act (for example through a permission, including movement of Category D waste on another part of a 'project site' as defined by the Regulations). Retention can only be lawful where the soil is *already on site* and retention can be achieved in a manner that minimises risks of harm to human health and the environment.

Notification of retained soil will assist in ensuring a record is maintained of that retained soil and associated management requirements are made available to future persons in management or control of the land.

If contaminated soil is to be retained on site, the contamination is notifiable under regulation 12. See section 9 of this guideline for information on what needs to be notified to EPA.

5.5 Is friable asbestos present and likely to expose a person to respirable fibres?

The presence of friable asbestos in or on soil on land is notifiable if a person is, or is likely to be, exposed to airborne asbestos by means of inhalation at fibre levels of above 0.01 fibres per millilitre.



Friable asbestos is defined in the Glossary of key terms. The Act defines 'land' to include buildings or other structures permanently affixed to the land. However, regulation 9 limits the scope of the duty to notify of friable asbestos to circumstances where it is on or in soil on land. Friable asbestos situated on land in circumstances *other* than on or in soil is not notifiable (for example in the form of a flange, gasket or lining remaining attached to piping); however, it will likely be subject to obligations under the *Occupational Health and Safety Act 2004*, as well as waste obligations under the EP Act if it becomes waste.

The presence of friable asbestos on or in soil may be identified through:

- asbestos registers prepared for the site under the Occupational Health and Safety Regulations 2017;
- through detection of fibres in air from monitoring results; or
- visually, where friable asbestos material is present in visible quantities.

The concentration of fibres per millilitre of air can be assessed using the membrane filter method in accordance with the [Guidance Note on the Membrane Filter Method for Estimating Airborne Asbestos Fibres 2nd Edition](#) [NOHSC:3003(2005)] (National Occupational Health and Safety Commission, 2005) (https://www.safeworkaustralia.gov.au/system/files/documents/1702/guidancenote_membranefiltermethodforestimatingairborneasbestosfibres_2ndedition_nohsc3003-2005_pdf.pdf).

⁸ 'Site' is defined in the Act and means 'specified land or a specified parcel of land'.

Whilst air monitoring results may provide definitive evidence of exposure to airborne asbestos fibres, the notifiable circumstances include notification when exposure is likely, not just confirmed.

In considering whether a person is *likely* to be exposed to more than 0.01 fibres per millilitre of air by inhalation, regard should be given to:

- What is known about the presence of asbestos at the relevant site: if there is no reasonable expectation that friable asbestos was used as part of the original buildings or structures at the site (for example as lagging or insulation), then it is unlikely that such sites will be notifiable under section 40.⁹
- Potential for asbestos on or in the soil to be disturbed and thus liberated into the air.
- Data confirming the presence of asbestos on or in the soil – this may include, but is not limited to, soil samples confirming presence of the friable asbestos.¹⁰
- Past land use history, including whether any demolition on the site was completed in a controlled manner in accordance with occupational health and safety legislation.
- Whether the release of asbestos fibres is likely to occur at a rate that would result in airborne concentrations exceeding 0.01 fibres per millilitre.

EPA recognises that judgement will need to be exercised to form a view as to the likelihood that friable asbestos is present on or in the soil, and whether a person is likely to be exposed to respirable fibres. Such judgement may include reliance on advice provided by specialist consultants. A judgement on the likelihood must be based on objective grounds using reasonable assumptions.

WorkSafe Victoria has published compliance codes addressing the removal and management of asbestos in the workplace, including guidance on assessing the likelihood of airborne asbestos fibres to be generated.

EPA also recognises that Victoria's workplace health and safety duties on employers and those in management or control of a workplace aim at minimising the risks to the health and safety of employees and other persons from the presence of friable asbestos. These duties are also about the removal of asbestos and its disposal at a place that can lawfully receive such waste.

If your site contains friable asbestos in or on soil which could expose a person to airborne fibres at >0.01 f/mL, the contamination is notifiable under regulation 9. See **section 9** of this guideline for information on what needs to be notified to EPA.

5.6 Do you have sampling data for soil, water, or vapour?

Whether contamination is notifiable for the remaining notifiable circumstances depends, in part, on the type and concentration of the substances that are present in soil, water (groundwater or surface water) or vapour.

It is reasonable to make assumptions around the potential for land to be contaminated when seeking to meet your duty to manage contaminated land (section 39 of the Act) and when engaging in an activity that may give rise to a risk of harm where contamination is present (section 25 of the Act).

To determine whether certain types of contamination are also notifiable, however, will **require** verification from sampling and analysis results obtained in relation to the contamination. Without such results, it is not possible to determine whether any of the remaining types of notifiable circumstances apply.

If you only *suspect* the land you manage or control is contaminated (that is you have not yet taken samples), EPA recommends that your first action should be considering the management of the risks of harm associated with that contamination (section 39 and 25 of the Act).

Compliance with the duties in section 25 and 39 of the Act may lead you to undertake a level of investigation that includes sampling. *Assessing and controlling contaminated land risks: A guide to meeting the duty to manage for those in management or*

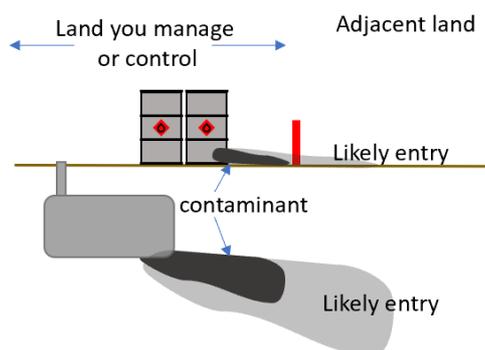
⁹ If friable asbestos is *visible* on or in the soil (for example, as imported material on site such as waste or soil) then its origin is irrelevant.

¹⁰ EPA notes that at present there is no National Association of Testing Authorities (NATA)-accredited method for quantifying the concentration of friable asbestos in soil.

5.8 Is soil contamination present on your land likely to move onto adjacent land?

Contamination of land you manage or control is notifiable where:

- a contaminant from your land is likely to enter and remain on adjacent land; **and**
- the concentration of that contaminant is likely to be above the NEPM (ASC) HIL for that contaminant for the current use of the adjacent land, as specified in section 6 of Schedule B1 to the NEPM (ASC) (reg. 8(c)).



The relevant contaminants and NEPM (ASC) HILs are listed in Table 1A from page 48 of [Schedule B1 to the NEPM \(ASC\)](https://www.legislation.gov.au/Details/F2013C00288/Html/Volume_2) (https://www.legislation.gov.au/Details/F2013C00288/Html/Volume_2).

The current land use of the adjacent land is based on the land use categories in Table 1A(1) of Schedule B1 to the NEPM (ASC). For example, if your land use is industrial and the adjacent land also has industrial land use, then the relevant threshold would be the HIL-D land uses in Category D. If, however, the adjacent land is used for residential purposes then the relevant concentration would be the HIL-A or B (depending on the land use density).

When determining if contamination is likely to enter and remain on adjacent land at a concentration exceeding a specified contaminant HIL, EPA expects you to consider:

- Fate and transport mechanisms that might affect the movement of the contaminant in the environment.
- Features on the site that might affect the potential movement of contamination, such as drainage lines, existing utility pits, stormwater and sewer lines, exposure to wind or precipitation, slope etc.
- Proximity of the contamination on your site to a site boundary.

The word 'adjacent' is not defined in the Act or Regulations and so is to be understood by reference to its ordinary meaning of 'next to or adjoining something else'. In the context of Part 2.1 of the Regulations 'adjacent' refers to land affected or likely to be affected by contamination originating from land under your management or control.

Land where you share a boundary is invariably 'adjacent' land. Land that is not directly connected may still be considered adjacent even where a boundary is not shared.¹¹ In some circumstances, contamination will have travelled a distance that is beyond the site with which you share a boundary. The purpose of section 40 of the Act is to ensure EPA has information relevant to its duties and functions as an environment protection regulator. For example, if a plume of contamination has migrated across several sites and reached a more sensitive land use, then it is important that such circumstances are notified to EPA.

Further, section 41(2) of the Act requires notifications to EPA to include information on the 'nature and extent of the contamination' This means all land impacted by the contamination, whether or not you share a boundary, needs to be identified in your notified information.

If soil contamination on or in your land is likely to enter adjacent land and contaminant concentrations exceed a NEPM (ASC) HIL for the current land use, or the applicable NEPM (ASC) HIL for the adjacent land use, then the contamination is notifiable under regulation 8(c). **See section 9** of this guideline for information on what needs to be notified to EPA.

¹¹ If it was intended to apply only to land that you share a boundary with, then the phrase 'adjacent site' would have been adopted instead of 'adjacent land'.

5.9 Do sample results for contamination on land you manage or control exceed a localised elevated value threshold or an average threshold?

If you manage or control land that has been sampled for contamination and the results of that sampling are above an **average threshold** or equal or above a **localised elevated value threshold**¹² then you **may** need to notify EPA, depending on the circumstances of that contamination.

For contaminants in **soil**, the HILs that apply to localised elevated value thresholds and average thresholds for soil are found in Tables 1A(1) of section 6 of the NEPM Schedule B1.

The NEPM (ASC) provides a discussion about sampling and the use of maximum concentrations and mean concentrations in Section 3.2.1 of Schedule B1. It states that in relation to site characterisation, *'the preferred approach is to examine a range of summary statistics including the contaminant range, median, arithmetic/geometric mean, standard deviation and 95% upper confidence limit (UCL).'* This is why the notification process allows for average thresholds (that is the 95 per cent UCL on arithmetic average) and localised elevated value thresholds (an individual soil sample that is equal to 250 per cent of the HIL), as defined in the **Glossary of key terms**. More detail on how to make these calculations are provided in Section 3.2.1 of [Schedule B1 of the NEPM \(ASC\)](https://www.legislation.gov.au/Details/F2013C00288/Html/Volume_2) (https://www.legislation.gov.au/Details/F2013C00288/Html/Volume_2).

For contaminants that may cause **vapour intrusion** the HIL and HSLs that apply to localised elevated value thresholds and average thresholds are shown in Table 3 below:

Table 3: Summary of vapour intrusion in the Regulations and corresponding NEPM (ASC) references

Regulation number in the Regulations	Sample type	HIL/HSL	Tables s. 6, Sch. B1, NEPM (ASC)
11(1)(a) and 11(1)(b)	soil vapour samples for volatile organic chlorinated compounds	interim soil vapour HIL for volatile organic chlorinated compounds applicable to the current land use	1A(2)
11(1)(c) and 11(1)(d)	soil vapour samples for soil vapour HSL for vapour intrusion	soil vapour HSL for vapour intrusion applicable to the current land use	1A(5)
11(1)(e) and 11(1)(f)	soil samples for vapour intrusion	soil HSL for vapour intrusion applicable to the current land use	1A(3)
11(1)(g) and 11(1)(h)	groundwater sample for vapour intrusion	groundwater HSL for vapour intrusion applicable to the current land use	1A(4)

When evaluating risks outside of the context of notification, statistical approaches such as the average threshold may not be valid. For example, you may not have enough samples of surface water, groundwater or vapour to provide an accurate indication of risk. This is discussed in further detail for soil vapour in Section 5.10, for surface water in Section 5.12 and for groundwater in Section 5.13.

If your sample or samples:

- exceed or equal an average threshold or exceed a localised elevated value threshold for soil, or
- the concentration of a vapour intrusion sample remains, or is likely to remain, above a localised elevated value thresholds or average thresholds

continue with the next questions.

¹² Refer to the *Glossary of key terms* for the definition of localised elevated value threshold.

5.10 Is a person likely to be exposed to contamination in soil or vapour?

A contaminant, on land you manage or control, that is equal to or above a localised elevated value threshold or is above an average threshold is notifiable where the contaminant:

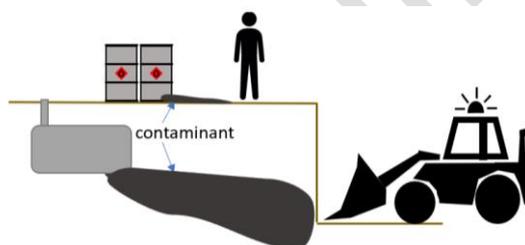
- is in or on soil and a person is, or is likely to be, exposed to the contaminant listed in Table 1A(1) in NEPM (ASC) Schedule B1, **or**
- is associated with a vapour inhalation pathway that exposes, or is likely to expose, a person to the contaminant or by-products of the contaminant that are listed in Tables 1A(2) to 1A(5) in NEPM (ASC) Schedule B1.

In any of these circumstances you will need to evaluate the significance of the sample results in the context of specific criteria for each of these situations **before** you can decide if notification is required.

5.10.1 Is a person exposed, or likely to be exposed, to the contaminant in or on soil?

Contamination is notifiable where a person is, or is likely to be, exposed to the contamination. This includes circumstances where the exposure occurs beyond land you manage or control.

EPA expects you to consider the following factors in assessing whether a person is, or is likely to be, exposed to a contaminant in or on soil:



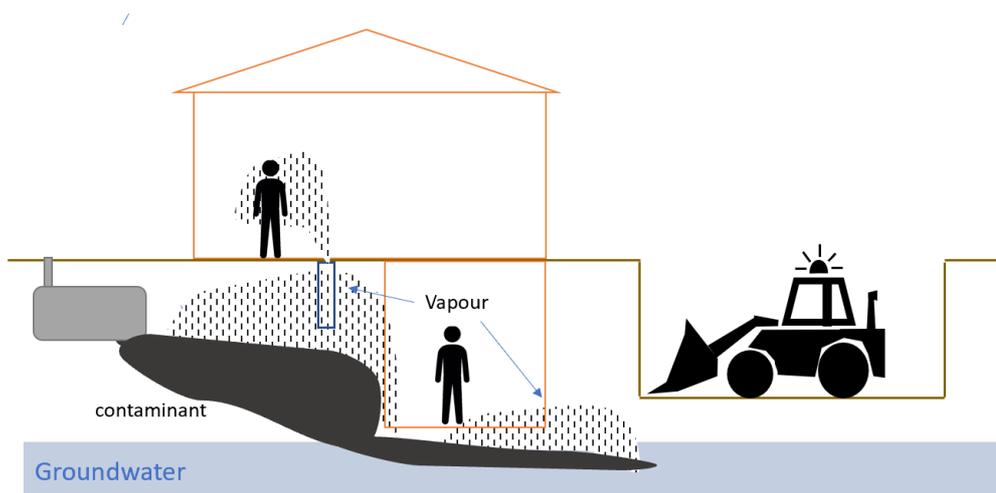
- Whether one or more source-pathway receptor linkages to potentially affected humans are present at the site.
- For the purposes of this evaluation, source-pathway-receptor linkages are considered to be either present or absent. The magnitude or duration of exposure is not considered in this assessment, only the likelihood of a complete linkage.
- The likelihood of a complete source-pathway-receptor linkage is a function of the activities occurring (or likely to occur) at the site, the people who have access to the site, the depth of contamination or the location of the contamination on the site itself (among others).
- The likelihood of exposure is to be considered *before* any management intervention that is or would be applied to reduce the likelihood of exposure.

If a person is exposed, or likely to be exposed to such contaminant levels, the contamination is notifiable under regulation 8(a). **See section 9** of this guideline for information on what needs to be notified to EPA.

5.10.2 Is a person exposed, or likely to be exposed, via vapour inhalation from contamination or any by-product of contamination on land you manage or control?

Vapour intrusion from contaminated land may be notifiable in the following circumstances:

- where soil vapour samples you have obtained show potential to exceed HILs or HSLs for vapour intrusion;
- where soil samples you have obtained indicate potential for vapour intrusion; or
- where groundwater samples you have obtained show potential for vapour intrusion.



The results obtained from one or more of these circumstances are only notifiable where:

- the results exceed either an applicable **average threshold** or meet or exceed a **localised elevated value threshold**; AND
- the concentration of a contaminant remains, or is likely to remain, above those values; AND
- a person is, or is likely to be, exposed to the contaminant or any by-product of the contaminant.

The investigation and screening levels for vapour-related contamination adopt the same land use categories as those for soil (see section 6.3).

In addition to the principles set out in section 6.1, EPA expects you to consider the following factors in assessing whether a person is, or is likely to be, exposed to vapour associated with a contaminant:

- **The conceptual site model:** including consideration of the lateral and vertical distribution of the contamination, the lithology of the land's subsurface, building characteristics, mechanisms by which vapour could migrate into buildings, and any preferential pathway that might play a key role in this migration (for example service lines and sewer pipes).
- **Whether one or more source-pathway receptor linkages to potentially affected humans are present at the site.** For the purposes of this evaluation, source-pathway-receptor linkages are either present or absent. The magnitude or duration of exposure is not considered in this assessment, only the likelihood of a complete linkage. The likelihood of a complete source-pathway-receptor linkage is a function of the likely activities that might occur at the site, the people who have access to the site, the depth of contamination or the location of the contamination on the site itself (among others)

What about immediate exposure risks?

In some circumstances, land and groundwater contamination can have an acute impact on air quality. Where a person may have been, or likely could be, exposed to elevated levels of contaminants in vapour creating an acute risk of harm, you should consider alerting EPA as soon as possible as part of your duty to manage those risks of harm. Where land is also a workplace within the meaning of the *Occupational Health and Safety Act 2004*, then it may also be necessary to notify WorkSafe Victoria.

The NEPM (ASC) recommends that immediate action should be taken where potentially explosive or acutely toxic gas concentrations are present in buildings or in-ground services (for example utility trenches, sumps or drains) that connect a vapour source to a building. Emergency management actions, such as relocation of building occupants, should be implemented as necessary¹³. This includes notification to emergency services and potentially affected parties including service providers.

See also section 4.5 on responding to immediate risks of harm from contamination.

The approach described above involves the use of average and individual results for notifying EPA under regulation 11 of the Regulations and creates a clear pathway for when notification is or is not required.

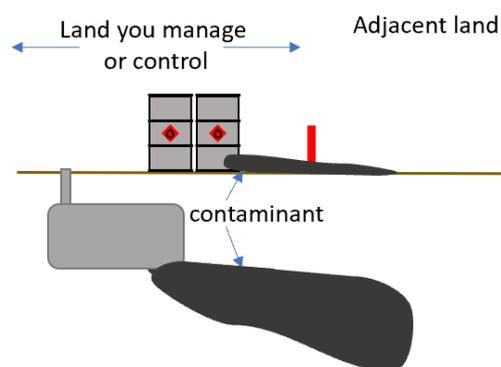
When evaluating vapour intrusion risks outside of the context of notification (for example when identifying reasonably practicable control measures under your duty to manage), these statistical approaches are usually not valid. Vapour intrusion risks vary greatly based on factors that occur on relatively small spatial scales, such as the distribution of individual rooms in a building, or the presence of preferential pathways for vapour movement. Based on this, the use of average estimates across the site, or of individual results compared to 2.5 times the relevant HIL or HSL does not usually provide an accurate indication of health risk. In these circumstances, the industry standard typically involves the direct comparison of measured groundwater, soil, or soil vapour concentrations to HILs or HSLs, without the use of average or of 2.5 times conversion factors.

If a person is exposed, or likely to be exposed to such contaminant levels, the contamination is notifiable under regulation 11. See section 9 of this guideline for information on what needs to be notified to EPA.

5.11 Has contamination in or on soil on adjacent land entered, or likely to have entered, from your land?

A contaminant that is equal to or above a localised elevated value threshold or is above an average threshold is notifiable where the contaminant is present in or on soil on a site adjacent to your site and the contamination has, or is likely to have, entered from your land.

The applicable HIL in Table 1A(1) for the adjacent site is that of the adjacent land itself (see section 6.3 on land use categories and corresponding investigation levels).



Awareness of these circumstances may arise from sampling you have undertaken or where information is provided by a third party (for example the person in management or control of the adjacent land). Depending on the circumstances, the person in management or control of the adjacent land may themselves be required to notify EPA under section 40 of the Act. For example if the presence of the contamination in their land satisfies the notifiable circumstances (for example a person on their land being exposed to the contamination under regulation 8(a)).

¹³ NEPM (ASC), Schedule B1, section 2.4.13.

Assessing whether a contaminant has, or is likely to have, entered from your land may require consideration of the available evidence, making reasonable assumptions about what activities took place or are taking place on your land and what contaminants are known to be present, and weighing up the likelihood based on that evidence.

Assessing whether your land is likely to be responsible for the contamination that has entered the adjacent land can be challenging. You should presume your land is the source of contamination on adjacent land if there is a real and not remote chance, considering all the circumstances, that it has entered from your land. Considering the precautionary principle in section 20 of the Act, obtaining conclusive evidence of the origin of the contamination should not be used to delay notification.

Factors that may assist in determining if contamination on adjacent land is likely to have entered from your land may include:

- **contaminants of a type associated with your activities or history:** where the contaminant(s) detected on the adjacent land are of a type that are associated with the current or past activities on your land, then EPA considers it is *likely* to have entered from your land; and
- **the conceptual site model for your land:** this shows (among other things) the plausible mechanisms by which contamination could migrate from the source site onto nearby adjacent sites.

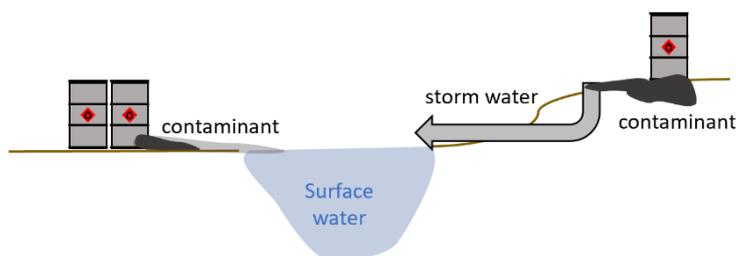
If contamination from your land has entered adjacent land, and that contamination is equal to or above a localised elevated value threshold or is above an average threshold for the use of that land, the contamination is notifiable under regulation 8(b). See section 9 of this guideline for information on what needs to be notified to EPA.

5.12 Is a contaminant listed in Sch. B1 of NEPM (ASC) entering or likely to enter surface water that would exceed an ADWG or ANZG guideline value?

The entry or likely entry of contaminants listed in Table 1C of Sch. B1 to the NEPM (ASC) into surface water must be notified if the concentration of the contaminant in the surface water:

- is, or is likely to be, above the default guideline value for that contaminant specified in the ANZG, or the guideline value for that contaminant specified in the ADWG, **and**
- is likely to remain above that specified concentration (regulation 10(2)).¹⁴

While Table 1C of Schedule B1 to the NEPM (ASC) refers to ecosystem protection, the focus of notification is on human health protection thresholds, for example, human consumption or contact (for example recreational contact), stock watering or irrigation.



Sampling results may indicate notifiable contamination based on water samples where contaminants have already entered surface water, or soil or groundwater samples when considering whether a contaminant is *likely* to enter surface water.

In this instance the point of discharge to the surface water, or the soil or groundwater from where discharge is likely to originate, is the relevant point at which the circumstances are notifiable.

A discharge to surface water can occur directly (for example where a creek runs through the middle of your land or your land is bound by a waterway) or indirectly when conveyed overland across adjacent land or via stormwater pipe.

¹⁴ Note: Only the *type* of contaminants listed in Table 1C of Sch. B1 to the NEPM (ASC) are relevant to notification. The groundwater investigation levels are not relevant. Instead, refer to the guideline and default guideline values in the ADWG and the ANZG for the corresponding substances listed in Table 1C.

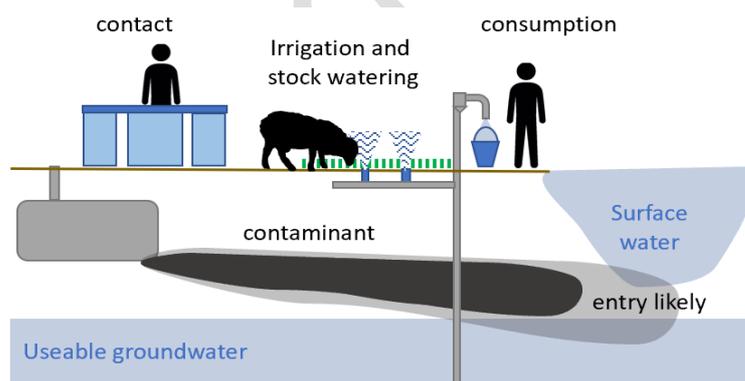
Note: Where a contaminant is entering or likely to enter surface water from groundwater, this is covered regulation 10(1) and is addressed below in section 5.13.

If a NEPM contaminant is entering or likely to enter surface water that would exceed an ADWG or ANZG guideline value, the contamination is notifiable under regulation 10(3). See section 9 of this guideline for information on what needs to be notified to EPA.

5.13 Is a contaminant listed in Sch. B1 of NEPM (ASC) likely to enter or is present in groundwater that is 'useable' or groundwater that discharges to surface and would exceed an ADWG or ANZG guideline value?

The presence, entry or likely entry of a **type of contaminant** listed in Table 1C of the NEPM (ASC) into groundwater is notifiable if the groundwater:

- discharges, or is likely to discharge, to surface water, **or**
- is used, or may be used, for:
 - human consumption¹⁵ or contact (for example recreational contact)¹⁶ or
 - stock watering¹⁷ or
 - irrigation¹⁸.



Contamination will only be notifiable where **the concentration of the contaminant** in the groundwater is above (and is likely to remain above):

- the default guideline value for that contaminant specified in the ANZG (for recreational contact, stock watering or irrigation) **or**
- the guideline value for that contaminant specified in the ADWG.

¹⁵ EPA notes that human consumption is addressed as an environmental value in the Environment Reference Standard for surface water (human consumption after treatment), but for groundwater it is potable water (raw water or potable supply). While both refer to the same ADWG, EPA regards that reference to 'consumption' equates to reference in the regulations to 'human consumption or contact'.

¹⁶ The ANZG sets out guidelines applicable to recreational contact and water quality (section 5.2 of [ANZECC and ARMCANZ 2000](#)) and incorporated reference to the National Health and Medical Research Council (2008) [Guidelines for Managing Risks in Recreational Water](#) noting in particular the footnote 'a' on page 155 (Note: The footnote refers to 'Table 9.1', but this should be a reference to 'Table 9.3), which suggests use of a conversion factor to relate drinking water guidelines to recreational contact. For some contaminants a more sensitive threshold may be more appropriate than the general conversion factor suggested by footnote 'a'.

¹⁷ The ANZG sets out guidelines applicable to livestock drinking water at the following website: <https://www.waterquality.gov.au/anz-guidelines/guideline-values/default/primary-industries/stock-water-guidance>.

¹⁸ Guidelines applicable to irrigation are set out in section 4.2 of the [ANZECC & ARMCANZ \(2000\)](#) provide the background and rationale for irrigation water.

Assessing the likelihood of surface water and groundwater discharge?

If the contaminants of a type listed in Table 1C of Sch. B1 to the NEPM (ASC) are detected in groundwater on your site, or you conclude that such contaminants in the soil are likely to move into the groundwater, then you will need to consider the likelihood of that groundwater:

- discharging into surface water; or
- being used for human consumption or contact, stock watering, or irrigation.

This requires consideration of the location of surface water bodies and drainage/ stormwater discharges in the proximity of your land.

In assessing if there is an actual or likely discharge to surface water you will need to identify surface water bodies at, adjacent to, or within approximately 2 kms down hydraulic gradient of your land. This is an approximate distance to consider, and it may vary depending on the drainage/stormwater connections at your site and the aquifer properties as to how groundwater and surface water interact. Contaminants can enter surface water through a range of pathways including through overland flow and through groundwater.

You will also need to consider if there is an actual or possible use of the groundwater in the vicinity of your site. Consider both registered and unregistered bores. This is best completed by conducting a groundwater bore search on state government websites (for example Department of Environment, Land, Water and Planning, Visualising Victoria's Groundwater, VicUnearthed) to understand whether groundwater is used and for what purpose close to your land. Further guidance on this process is provided in [Hydrogeological assessment \(groundwater quality\) guidelines](#) (publication 668) (<https://www.epa.vic.gov.au/about-epa/publications/668>). Note: that groundwater use is unregulated if it is shallower than 3m below ground surface.

Where a groundwater water quality restricted use zone (GQRUZ) has been determined through a section 53X audit under the *Environment Protection Act 1970* (1970 Act) this would *not* be notifiable.

When notifying of surface water or groundwater notifiable contamination, the statistical approaches (such as the average threshold) may not be valid where there are not enough sampling points (for example the dataset must be statistically significant) or where spatial or temporal variability in the dataset makes statistical approaches inappropriate.

If a NEPM contaminant is likely to enter or is present in groundwater that is 'useable' or groundwater that discharges to surface and would exceed an ADWG or ANZG guideline value, the contamination is notifiable under regulation 10(1). See **section 9** of this guideline for information on what needs to be notified to EPA.

6 Additional considerations for notifiable contamination

The complexity of contamination and the variability of how contamination manifests in different sites requires judgment to be exercised when ascertaining what may be notifiable.

In this section, EPA sets out guidance on how to evaluate a range of elements of the duty to notify to support notification decisions.

6.1 When EPA considers that circumstances are 'likely' for the purposes of notification

The Regulations set out circumstances that are notifiable where it is *likely* that:

- a person is exposed to contamination
- contamination will enter adjacent land
- contamination on adjacent land has entered from your land
- contamination will enter groundwater or surface water
- contamination will remain above a specified concentration.

The meaning of 'likely' needs to be understood in the context of each of these instances, however, there are some general principles about how to interpret this term. Generally, the word 'likely' has been interpreted to mean a 'real and not remote chance or possibility'.¹⁹

Principally, consideration should be made of:

- the nature and extent (both vertical and lateral) of the contamination
- the uses of the land or activities that occur in that location
- the conceptual site model.

When considering whether circumstances are notifiable because one or more of those circumstances are 'likely', understanding the extent of sampling that has been completed may help to delineate likelihood – particularly to support a finding that something is not likely.

Where sufficient sampling has not been completed or does not meet the NEPM (ASC) or AS4482.1 standards for sampling, then reasonable assumptions should be made on the data to reach a finding of circumstances being 'likely' or 'not likely'. Gaps in the data should not be relied upon as a reason for finding that circumstances are not likely.²⁰

When considering the reference to a contaminant being 'likely to remain', a narrower set of factors are relevant. In this context the use of 'likely' is limited to temporal considerations. EPA regards the purpose of this expression is to *exclude* circumstances where there is an elevated concentration of a contaminant of short duration.

6.2 Do I take my 'management response' into account in assessing what is notifiable circumstances?

No. The intent of the legislation and specifically section 40 of the Act is met by notifiable circumstances being based on the circumstances *before* taking into account management measures (in other words, before meeting your duty to manage). Information on the presence of contamination before mitigation or management provides EPA with an understanding of the nature and extent of contamination across Victoria generally and supports EPA to fulfil its duties and functions as a regulator.

Further, the notification process includes a requirement to provide a management response whether it be in place or a *proposed* management response. A duty holder's management response or proposed response (how they will meet their duty to manage) will help EPA determine what, if any, response is required from EPA. Where management responses rely on administrative

¹⁹ Note: the word 'likely' has been consistently interpreted in the context of environmental protection to mean a 'a real and not remote chance or possibility'. See [Pace Farm Egg Products Pty Ltd v Newcastle City Council](#) [2006] NSWCCA 403; 151 LGERA 260 at [54]- [56]); and NSW [Environment Protection Authority v Sydney Drum Machinery Pty Ltd](#) (No 4) [2016] NSWLEC 59. The meaning of 'likely' should **not** be interpreted as meaning 'more likely than not' or more than a 50 per cent chance.

²⁰ Note: The principles of environmental protection in Chapter 2 of the Act should be considered here, particularly, section 20 which states that: *If there exist threats of serious or irreversible harm to human health or the environment, lack of full scientific certainty should not be used as a reason for postponing measures to prevent or minimise those threats.*

controls (such as site induction requirements, site registers and procedures) then it is important that EPA is aware of the underlying presence of the contamination *despite these controls*, because the effectiveness of such controls is highly dependent on the compliance attitude of site occupants. The selection of risk controls is explained in [Assessing and controlling contaminated land risks: A guide to meeting the duty to manage for those in management or control of land](#) (publication 1977) (<https://www.epa.vic.gov.au/about-epa/publications/1977>).

So, when assessing for the presence of an exposure or migration pathway, or the likelihood of that pathway, the notifiable circumstances are those applicable *before* consideration of management responses that may aim to disrupt or limit the exposure/migration pathway.

6.3 Applicable investigation or screening levels based on the relevant 'land use' categories

Regulations 8 and 11 refer to the 'current use' of land in reference to the HILs and HSL set out in the NEPM (ASC).²¹

The NEPM (ASC) land use categories are:

- **Category A:** residential with garden/accessible soil (home grown produce <10 per cent fruit and vegetable intake, (no poultry), also includes children's day care centres, preschools and primary schools
- **Category B:** residential with minimal opportunities for soil access includes dwellings with fully and permanently paved yard space such as high-rise buildings and flats
- **Category C:** public open space such as parks, playgrounds, playing fields (for example ovals), secondary schools and footpaths. It does not include undeveloped public open space (such as urban bushland and reserves) which should be subject to a site-specific assessment where appropriate
- **Category D:** commercial/industrial such as shops, offices, factories, and industrial sites.

Further detail on these categories is set out in section 3.2 of Schedule B7 to the NEPM (ASC) [Guideline on health-based investigation levels](#) (https://www.legislation.gov.au/Details/F2013C00288/Html/Volume_19).

Assessing which of the NEPM (ASC) land use categories may apply should be based on the actual use. The zoning categories under the Victoria Planning Provisions (VPPs) may provide some assistance where it is not feasible to determine the NEPM (ASC) land use category from other means.

6.4 What if my current land use does not fit into the NEPM (ASC) land use categories?

The Regulations define notifiable circumstances by express reference to the tables in the NEPM (ASC). If the actual or zoned land use of your site (or a relevant adjacent site) does not reasonably fit within the NEPM (ASC) categories, then you may not be required to notify EPA under section 40 of the Act. For example, the NEPM (ASC) land use categories do not describe land that is used for agricultural purposes (in respect of soil), but regulation 8(a) does address groundwater that is or may be used for irrigation or as stockwater. It is important to consider the elements of the environment that are or may be contaminated to confirm if a notification is required. EPA may have also issued guidance in your sector that provides more information about complying with the general environmental duty (GED) and the duty to manage contaminated land.

Generally, EPA considers that land in urban and regional city areas will be covered by one of the four land use categories. Infrastructure corridors, roads and reserves should be regarded as land used for industrial or commercial purposes. If you are unsure of which land use applies in your specific situation, it is best to be conservative and use the NEPM (ASC) land use that applies to the most sensitive receptor and user on your land.

Even where contamination is not notifiable due to the land use category, as a person in management or control of such land you must still manage any risks of harm associated with the contamination under your duty to manage. This may include notifying other persons that may be affected by the presence of that contamination. You will also be required to minimise any risks of harm from that contamination when engaging in an activity that disturbs or involves the relevant contaminated land (to meet your general environmental duty).

²¹ **Note:** the definitions for *average threshold* and *localised elevated value threshold* (included in the Glossary of key terms) which bring in the phrase 'current use of land' into regulation 8.

6.5 What if the current land use – on my site or an adjacent site - changes?

The notifiable circumstances covered by section 40 of the Act are not time bound. If your land use type changes or the land use of adjacent land changes and you are aware of the presence of a contaminant that would, once the land use changes, give rise to notifiable circumstances, then you will be required to notify EPA.

In practice, many land use changes – particular to more sensitive uses – are addressed more directly by the *Planning and Environment Act 1987* and the Victoria Planning Provisions – requiring potential contamination to be identified and addressed. Nevertheless, it will remain your duty to notify EPA should such changes result in a change in notifiable circumstances of your land.

If additional notifications need to be made (for example, for changes in concentrations, discovery of additional contamination, if additional elements of the environment are contaminated, etc.), then you will need to contact EPA to update your notification.

6.6 What if my land has naturally elevated concentrations above the levels specified in the incorporated standards?

In some parts of Victoria there are naturally higher levels of certain substances that, when deposited or discharged through human activity, are regarded as contaminants. Such circumstances fall outside of the definition of 'contaminated land' where the levels of the substance found on your site are not higher than the naturally occurring levels in the vicinity of your land. In such circumstances, section 40 of the Act does not apply because such land does not fulfil the definition of contaminated land under section 35 of the Act. See [Contaminated land: understanding section 35 of the Environment Protection Act 2017](https://www.epa.vic.gov.au/about-epa/publications/1940) (publication 1940) (<https://www.epa.vic.gov.au/about-epa/publications/1940>) for more information on the definition of contaminated land.

If, however, the presence of the substance arises from being translocated from another region or from its original strata, then the definition in section 35 of the Act may be applicable. For example, arsenic-containing material extracted at depth and deposited on the surface or near surface of the land is not regarded as 'naturally occurring' simply because the underlying geology has naturally elevated levels of arsenic. Accordingly, such contamination may be notifiable if the presence of that material also meets the other criteria for notifiable contamination.

Even where such land is not considered contaminated, the GED will still apply to activities involving that land, that generate waste or pollution that creates a risk of harm to human health or the environment. Further, naturally occurring substances must also be managed in accordance with other provisions in the Act, such as the waste obligations where such substances become 'waste' within the meaning of the Act.

6.7 Can I notify EPA of other contaminants?

Yes. Non-notifiable contamination may be reported to EPA voluntarily through the Part B form you are using for notifiable contamination. If you have only non-notifiable contamination, EPA does not expect notification. Compliance with the duty to manage however is still expected.

EPA recognises that there are limitations in the NEPM (ASC) where not all contaminants of concern have investigation thresholds for all elements of the environment that may pose a risk to human health and the environment. Through assessment of the land, including consideration of the past and current activities, additional contaminants that are not notifiable may have been identified. If this is the case and you are able to provide this information, the online notification form for your notifiable contamination (template provided in section 11/Appendix B) has been designed to accept it. If you also have information about your management response (how you are meeting your duty to manage) to non-notifiable contamination you can also provide this on the online notification form.

6.8 Are the footnotes to the tables in Section 6 of Schedule B1 of the NEPM (ASC) applicable?

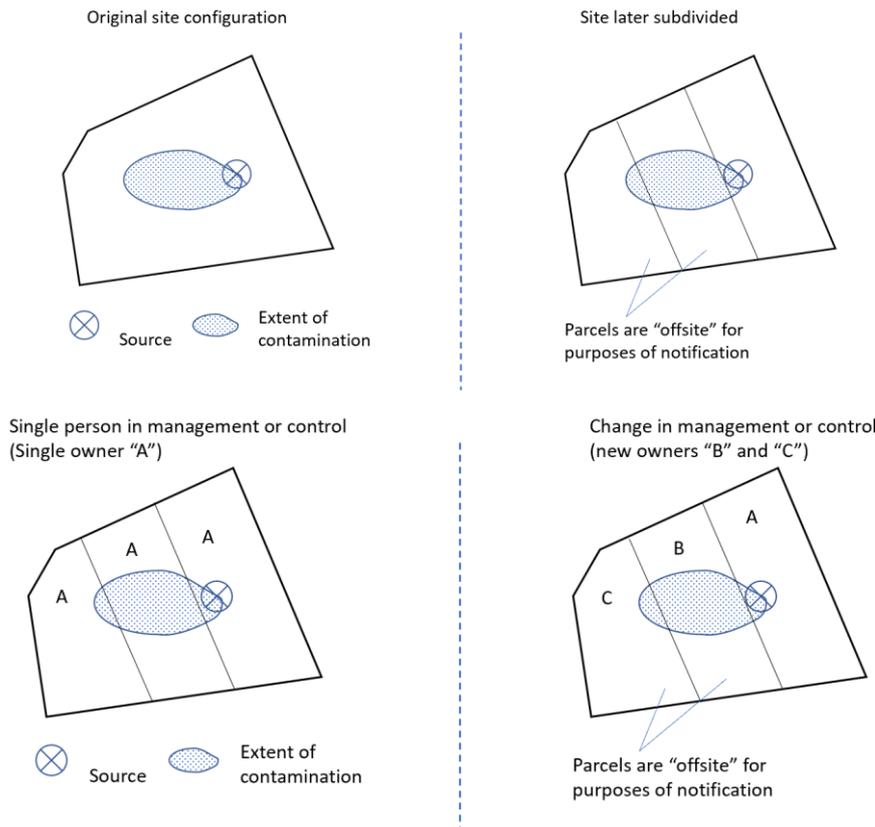
Potentially. The tables in section 6 of Schedule B1 of the NEPM (ASC) represent investigation and screening levels based on generalised conditions. In some instances, the values cited in the tables are qualified by one or more assumptions – identified through the use of footnotes to the tables. The applicability of some of these footnotes – such as the land use categories – are outlined in more detail elsewhere in this guideline.

Where this guideline is silent on the assumptions and qualification set out in the footnotes, and where relevant, a person may take those footnotes into account when determining the trigger level applicable to their circumstances. For example, the HIL for arsenic in soil in Table 1A sets a level that *assumes* 70% bioavailability of the arsenic. In some parts of Victoria, a lower bioavailability may be assumed in relation to arsenic where such an assumption is supported by objective evidence. In such circumstances, it is appropriate to adjust the investigation levels in line with the applicable circumstances of your site rather than rigidly apply the HIL specified in the table.

6.9 Do I have a duty to notify individual parcels of land that are connected or can I notify these as a single unit?

Where contamination has moved across a number of sites (that is more than one parcel of land) that is under the management or control of the same person, EPA will only require a single notification to address these circumstances. When completing the online notification form (refer to Appendix B) you will be asked to include all the relevant land title and parcel details for the area of land that you are notifying.

Similarly, if a single, contaminated site is subdivided before notification is made, upon relinquishing management or control of a part of the site which does not include the source area, the contamination on that site will be regarded as 'off-site' for the purposes of notifying EPA. If the original site was notified to EPA, then further notification would not be required. If, however, notification had not been required (for example, due to its use for industrial purpose and contamination being below HIL-D levels) and a change in the use of the land occurs to a more sensitive use of that land, then notification may be required.



6.10 Do I ever need to re-notify EPA or update an existing notification?

Potentially. Re-notification or updates to your notification may be required because:

- contamination that is notifiable was discovered *after* a notification was made, including where a new and more sensitive use commences on the site resulting in different lower thresholds applying to that use
- new information becomes available that materially changes anything already notified to EPA
- information was being gathered at the time of notification where a staged assessment was being completed, but was not available or presentable to EPA at the time (for example groundwater monitoring data).

6.11 Do I need to notify EPA of changes to my management response?

Generally, no. But you may need to update EPA if you significantly change how you are meeting your duty to manage through your management response, or if your actual management response changes from what you proposed.

If you discover any material omission from your original notification when implementing your management response (for example a new, previously unidentified notifiable circumstances becomes evident) then you may need to notify EPA of any significant adjustments to the management response (how you are meeting your duty to manage for the notifiable contamination), particularly where a higher risk potential is concluded as a result of the additional information obtained.

If EPA visits your site to inspect your management response/your actions to meet your duty to manage, then you should be able to demonstrate how the response has been updated in reaction to any new information or any material change in circumstances from those upon which the original management response was based.

7 When is notification not required?

7.1 Overview

The Regulations set out a number of exemptions to the duty to notify where notifiable contamination is otherwise present on land you manage or control. The exempted circumstances are:

- **Industrial waste stockpiles (regulation 13(a)):** A stockpile of industrial waste at a place or premises authorised to receive industrial waste, other than retention of soil described in regulation 12 (detailed below in section 7.2).
- **Sites under a 1970 Act remedial notice (regulation 13(b)):** Contamination of land in relation to which a notice was served by EPA under section 31A, 31B, or 62A of the *Environment Protection Act 1970* for land or groundwater contamination, that was in force immediately before the repeal of that Act or had been revoked if there has been no material change in the condition of the land after the notice was served or revoked (material change is explained below in section 7.3).
- **Sites which had an environmental audit completed under the 1970 Act prior to 1 July 2021 (regulation 13(c)):** A site where a certificate of environmental audit or a statement of environmental audit has been issued by an environmental auditor under the *Environment Protection Act 1970*, if—
 - (i) no potentially contaminating activities have been carried out on the land after the certificate or statement was issued (see section 7.4 below); and
 - (ii) there has been no material change in the condition of the land after the certificate or statement was issued (explained in section 7.3 below); and
 - (iii) there are no adverse effects on land adjacent to the land.
- **Contamination from a waste or chemical substance not in section 6 of Schedule B1 of NEPM (ASC) (regulation 13(d)):** contamination of land arising from a particular waste or a chemical substance that is not specified in section 6 of Schedule B1 to the NEPM (ASC), other than contamination arising from—
 - (i) asbestos described in regulation 9
 - (ii) non-aqueous phase liquid described in regulation 10(3).

These substances can be voluntarily notified to EPA – this is discussed in section 6.7.

As of 1 July 2021, if an environmental auditor has been engaged to conduct an environmental audit and notified EPA of this engagement but the audit is not complete (such that neither a certificate nor statement of environmental audit has been issued) then the exemption in regulation 13 does not apply. In this situation the person in management or control of the land may need

to notify EPA under the duty to notify if notifiable contamination is present. Further, the notification must be made when the person in management or control of the land becomes aware or reasonably should have been aware that notifiable contamination is present. As this may arise in the course of an audit, the duty holder cannot wait until the audit is finished before notifying EPA.

7.2 Stockpiles of industrial waste

Waste that is comprised of, or includes, contaminated soil that has been lawfully received at a place authorised to receive such waste is not notifiable to EPA under section 40 of the Act despite instances where it may satisfy one or more notifiable circumstances. For example, where contaminated soil is transferred to a site that is lawfully able to receive that soil under Part 6 of the Act (for example a permissioned landfill, or where an EPA determination applied²²), then the receiving site is not required to notify EPA. This exemption does not apply to stockpiles of industrial waste that were present at a site unlawfully from the commencement of the Act (1 July 2021) and otherwise meet the definition of 'notifiable contamination'.

7.3 Activities involving industrial waste, including waste soil, are regulated under Part 6.4 of the Act. Material changes at sites subject to a 1970 Act remedial notice or environmental audit

The exemption in regulation 13(b) and (c) in relation to 1970 Act remedial notices and environmental audits (where certificates or statements of environmental audit have been issued), applies provided there has been no **material change** in the condition of the land after the notice was served or revoked, or after the audit certificate or statement was issued.

A 'material change' aims to distinguish changes of *minor or insignificant* nature from those that, if applicable, tend to impact assumptions that may have been made in relation to the original circumstances that have important implications for the ongoing circumstances. Material changes may include instances where a spill or dumped waste occurred after the audit was completed or the notice revoked.

Under the Act, if EPA issues a remedial notice in respect of land you manage or control, or an environmental audit is commenced, you will **not** be exempt from the duty to notify under section 40 of the Act. EPA will, however, take into account the relevance of this duty when considering the requirements to be contained in remedial notices or give consideration to this if EPA chooses to review the audit scope.

7.4 Activities undertaken on land since a 1970 Act audit was completed

Where land had been the subject of a certificate of environmental audit or a statement of environmental audit under the 1970 Act but potentially contaminating activities have occurred on that land since, then any notifiable contamination identified at the land must be notified to EPA.

For example, if land was:

- cleaned up to an industrial use standard,
- new industrial activities were commenced, and
- new notifiable contamination caused,

then such a site will be notifiable despite the existence of a statement of environmental audit.

EPA regards 'potentially contaminating activities' to include any failure to have fulfilled a statement of environmental audit's conditions regarding management of the contamination. If notifiable contamination is identified for such land, it will be notifiable.

If, since an audit was completed, it becomes apparent that an adverse effect has been sustained on adjacent land, then a person in management or control of land may need to notify EPA despite an audit having been completed for their land, if one or more of the notifiable circumstances that relate to off-site impacts is satisfied.

For example, if a statement of environmental audit was completed, but later it was identified that a person was exposed to vapour intrusion on adjacent land because of contamination on your land, then that contamination would be notifiable.

²²For example, [EPA Determination - Specifications acceptable to the Authority for receiving fill material](http://www.gazette.vic.gov.au/gazette/Gazettes2021/GG2021S301.pdf) (http://www.gazette.vic.gov.au/gazette/Gazettes2021/GG2021S301.pdf)

Similarly, if an ongoing condition under the audit (for example installing and monitoring groundwater wells) uncovers that land adjacent is or is likely to be adversely affected by contamination from your site, then the duty to notify may apply.

7.5 Do section 53V audits count in relation to the exemptions under regulation 13?

No. The exemption from notification in regulation 13(d) applies only in relation to circumstances where a Certificate or a Statement of Environment Audit has been issued under section 53X of the 1970 Act. The exemption for 53X audits was included due to the breadth of their scope. Section 53V reports do not cover the same comprehensive scope, meaning they are unlikely to have resulted in the same degree of disclosure of contamination to EPA as would be made through a section 53X audit.

Proposed guideline

8 What does EPA expect in a management response?

Assessing and controlling contaminated land risks: A guide to meeting the duty to manage for those in management or control of land (publication 1977) sets out the standard of conduct EPA expects for duty holders under section 39 of the Act.

Under the duty to notify, EPA requires information on what management response a person notifying has in place or is proposing to put in place – that is, how they are meeting their duty to manage under section 39 of the Act. The benefit of providing EPA with this information is that it will enable EPA to determine whether a duty holder is complying with their duty to manage. This allows EPA to see which sites may be required to provide further information or be inspected by EPA to confirm whether their approach appropriately meets the duty to manage, and which sites EPA is satisfied are being managed to an acceptable standard.

Appendix B sets out the information that EPA requires to be provided in a management response as part of notification in the Part B form. The amount of information needed to be provided will depend on what contamination has been notified for, for example, how many elements of the environment are contaminated or how many types of notifiable contamination have been identified.

In your Part B form you will need to include reference to the evidence you have (or are in the process of gathering) to support your statements and conclusions relating to the assessment and control of risk of harm to human health and the environment. You will be required at the end of the section of the management response component of the Part B form to list all relevant assessments, documents and reports that need to be made available to EPA on request. There are limitations with attachments being able to be uploaded with the Part B form, but the list allows you to demonstrate to EPA your supporting evidence.

EPA will assess your Part B form in accordance with an internal triaging process. If EPA requires further information, you will be initially requested to provide the assessments/reports/documents referenced in the management response. EPA may require you to provide all, or a selection, of your referenced assessments/reports/documents. EPA will be in contact with the notifier by phone or email, to specify what you are required to provide, and will provide a link to an EPA location where the relevant assessments/reports/documents can be uploaded.

If your management response does not provide sufficient detail or does not adequately demonstrate the manner in which you are meeting your duty to manage, EPA may seek further assurance on the effectiveness of your response by gathering more information (using broader information gathering powers) or requiring involvement of a suitable professional, such as an environmental auditor.

Throughout this process, EPA's goal is to be satisfied that the duty holder can demonstrate they understand the contamination, their obligations under the duty to manage, and that they are taking all reasonably practicable steps to minimise the risks of harm to human health and the environment (or if they are the polluter – restoring the land).

9 Content of notification

9.1 What information must be provided to EPA?

The manner and form of the notification is discussed in Division 2, section 41 of the Act, and specifies that the notification should be in the form approved by the Authority. Regulation 16 of the Regulations also requires that information on the management response, or proposed management response, to the notifiable contamination by the person in management or control of the land be provided as part of the notification. The management response shows how you are meeting your duty to manage.

The notification process has been broken into two parts:

- Part A: Initial contact with EPA (phone) to confirm your intention to notify and create a notification record in EPA's system
- Part B: completion of the online form to provide detailed information.

9.1.1 Part A

To begin your notification (which we call Part A of the notification) you will need to call EPA on 1300 372 842 (1300 EPA VIC) and provide:

- name and contact details of the notifier
- duty holder (if not notifier) and their contact details
- relationship of the notifier to the duty holder
- whether you are notifying for a single site, six or less sites, or multiple sites (more than six) – if multiple sites, see 9.1.2 below.

If you are notifying of a single site or less than six sites you will also be asked:

- site address(es)
- some information about why you think a notification is necessary for the site(s)
- whether you have a management response for your notifiable contamination (this is a requirement of notification, as noted above).

You will be asked if there are any of the following high-risk circumstances at your site:

- risk of contamination entering utilities – do you have reason to believe that contamination may be entering into utilities such as water or sewerage pipes?
- imminent risk of explosion or fire – do you have reason to believe the contamination poses an explosive or flammable risk?
- imminent risk to human health and environment – do you have reason to believe the site poses an imminent risk to human health or the environment?

If you answer 'yes' to any of these questions, EPA's Contact Centre staff will create a pollution report with your assistance, to enable EPA to address the immediate risk or circumstances.

Once you have completed Part A of your notification over the phone, EPA will email you a link to complete Part B of your notification via an online form.

9.1.2 Part A Multiple site notifications

If you are notifying for multiple sites (more than six), to save you time, you won't need to stay on the phone providing individual site details. Instead, EPA will create a general notification record for you, and then email you a spreadsheet into which you will need to enter general site information for each of the sites for which you are notifying; address, latitude and longitude where available, why you need to notify, whether you have a management response, if any of the above high-risk circumstances are met. Once you send this back to us as per the instructions in the email, it will allow us to create the

individual notification records, without you waiting on the phone. You will then receive an email for each site, with a link to complete Part B of your notifications. Part B is required for all sites with notifiable contamination.

9.1.3 Part B

As noted above, after completing the Part A component of the notification process, the notifier will be sent a unique link to access the Part B form. This form will need to be completed using a significant amount of site information, so it is recommended that you read the quick reference guide (in Appendix B) before starting the online form. A Microsoft Word version of the form fields is also included with this guideline as Attachment B1, and available to download from EPA's website (<https://www.epa.vic.gov.au/about-epa/publications/2008>), to help you prepare for completing it.

Please note if on clicking submit for your Part B form, you receive a "Failed submission error", to avoid having to enter the form data again, keep your window open and call EPA's Contact Centre on 1300 372 842 (1300 EPA VIC). Advise that you are in the process of submitting your Contaminated Land Notification (CLN) Part B form, and provide your CLN reference number, and the date and time of your attempted submission. The Contact Centre staff member will take these details so EPA can help by finding the source of the error.

10 What you might expect from EPA

After submitting the notification to EPA, you can expect the following:

- An acknowledgement/receipt of Part A of your notification.
- A confirmation of your submission of Part B of your notification, at the completion of the online form. This will include a reminder that the duty to manage applies to your notifiable contamination.
- EPA to make an initial assessment of the risk of harm associated with your notifiable contamination.
- Where EPA considers that the notifiable contamination warrants a closer assessment, your management response will be considered. If required, this may include a request to provide documents or further clarity on your notification.
- Where EPA's further assessment determines that regulatory action is required to address the management of your notifiable contamination, EPA will contact you to communicate our regulatory approach in accordance with the *Compliance and Enforcement Policy*.

11 Referenced documents and standards

The following references represent standards that help inform the state of knowledge on contamination risks of harm:

- Australian and New Zealand Governments and Australian State and Territory Governments, 2018, [Australian and New Zealand Guidelines for Fresh and Marine Water Quality](http://waterquality.gov.au/guidelines/anz-fresh-marine) (waterquality.gov.au/guidelines/anz-fresh-marine)
- CRC CARE, 2015, [Technical Report 34: A practitioner's guide for the analysis, management and remediation of LNAPL](https://www.crccare.com/publications/technical-reports) (https://www.crccare.com/publications/technical-reports).
- Department of Health, 2017, [Health based guidance values for PFAS for use in site investigations in Australia](http://health.gov.au/internet/main/publishing.nsf/Content/2200FE086D480353C%20A2580C900817CDC/$File/fs-Health-Based-Guidance-Values.pdf) (health.gov.au/internet/main/publishing.nsf/Content/2200FE086D480353C%20A2580C900817CDC/\$File/fs-Health-Based-Guidance-Values.pdf). Australian Government, Canberra.
- EPA Victoria, 2021, [Contaminated Land Policy](http://www.epa.vic.gov.au/about-epa/publications/1915) (publication 1915) (www.epa.vic.gov.au/about-epa/publications/1915)
- EPA Victoria, 2021, [Contaminated land: Understanding section 35 of the Environment Protection Act 2017](https://www.epa.vic.gov.au/about-epa/publications/1940) (publication 1940) (https://www.epa.vic.gov.au/about-epa/publications/1940)
- EPA Victoria, 2021, [Assessing and controlling risks of harm from contaminated land: a guide to meeting the duty to manage for those in management or control of land](https://www.epa.vic.gov.au/about-epa/publications/1977) (publication 1977) (https://www.epa.vic.gov.au/about-epa/publications/1977)
- EPA Victoria, 2021, [Proposed methodology for deriving background level concentration when assessing potentially contaminated land](https://www.epa.vic.gov.au/about-epa/publications/1936) (publication 1936) (https://www.epa.vic.gov.au/about-epa/publications/1936)
- EPA Victoria, 2021 [Guide to the Environment Reference Standard](https://www.epa.vic.gov.au/-/media/epa/files/publications/1992.pdf) (publication 1992) (https://www.epa.vic.gov.au/-/media/epa/files/publications/1992.pdf)
- EPA Victoria, 2015, [Guidelines for conducting audits for land suitability purposes](https://www.epa.vic.gov.au/about-epa/publications/759-3) (publication 759) (https://www.epa.vic.gov.au/about-epa/publications/759-3)

- EPA Victoria, 2016, [The clean up and management of contaminated groundwater](https://www.epa.vic.gov.au/about-epa/publications/840-2) (publication 840) (https://www.epa.vic.gov.au/about-epa/publications/840-2)
- [EPA Victoria, 2006, Hydrogeological assessment \(groundwater quality\)](https://www.epa.vic.gov.au/about-epa/publications/668) (publication 668) (https://www.epa.vic.gov.au/about-epa/publications/668)
- EPA Victoria, 2000, [Groundwater sampling guidelines](https://www.epa.vic.gov.au/about-epa/publications/669) (publication 669) (https://www.epa.vic.gov.au/about-epa/publications/669)
- [EPA Victoria, 2009, Sampling and analysis of waters, wastewaters, soils and wastes](https://www.epa.vic.gov.au/about-epa/publications/iwrg701) (publication IWRG 701) (https://www.epa.vic.gov.au/about-epa/publications/iwrg701)
- EPA Victoria, 2015, [The design, installation and management requirements for underground petroleum storage systems \(UPSS\)](https://www.epa.vic.gov.au/about-epa/publications/888-4) (publication 888) (https://www.epa.vic.gov.au/about-epa/publications/888-4)
- [Globally harmonized system \(GHS\) of Classification and Labelling of Chemicals](http://safeworkaustralia.gov.au/classifying-chemicals#the-ghs) (safeworkaustralia.gov.au/classifying-chemicals#the-ghs) and the [Hazardous Chemical Information System](http://hcis.safeworkaustralia.gov.au/) (hcis.safeworkaustralia.gov.au/)
- [National Environment Protection \(Assessment of Site Contamination\) Measure 1999](http://legislation.gov.au/Details/F2013C00288) (Commonwealth): (legislation.gov.au/Details/F2013C00288)
 - [Schedule B1 Guideline on Investigation Levels for Soil and Groundwater](http://legislation.gov.au/Details/F2013C00288/Html/Volume_2) (legislation.gov.au/Details/F2013C00288/Html/Volume_2)
 - [Schedule 4, Guideline on Site-Specific Health Risk Assessment Methodology](http://legislation.gov.au/Details/F2013C00288/Html/Volume_5) (legislation.gov.au/Details/F2013C00288/Html/Volume_5)
 - [Schedule 6, Guideline on The Framework for Risk-Based Assessment of Groundwater Contamination](http://legislation.gov.au/Details/F2013C00288/Html/Volume_9) (legislation.gov.au/Details/F2013C00288/Html/Volume_9)
 - [Schedule B7 Guideline on Derivation of Health-Based Investigation Levels](http://legislation.gov.au/Details/F2013C00288/Html/Volume_19) (legislation.gov.au/Details/F2013C00288/Html/Volume_19)
- NHMRC, NRMCC (2011) [Australian Drinking Water Guidelines Paper 6—National Water Quality Management Strategy](http://nhmrc.gov.au/about-us/publications/australian-drinking-water-guidelines). National Health and Medical Research Council, National Resource Management Ministerial Council, Commonwealth of Australia, Canberra (nhmrc.gov.au/about-us/publications/australian-drinking-water-guidelines)
- Standards Australia, 2005, AS 4482.1—2005, Guide to the sampling and investigation of potentially contaminated soil, Part 1: Non-volatile and semi-volatile compounds.
- Standards Australia, 1999, AS 4482.2—1999, Guide to the sampling and investigation of potentially contaminated soil, Part 2: Volatile substances.
- State Government of Victoria, 2017, [Occupational Health and Safety Regulations 2017](http://legislation.vic.gov.au/in-force/statutory-rules/occupational-health-and-safety-regulations-2017/008) (legislation.vic.gov.au/in-force/statutory-rules/occupational-health-and-safety-regulations-2017/008)
- State Government of Victoria, 2021, [Environment Reference Standard](http://www.gazette.vic.gov.au/gazette/Gazettes2021/GG2021S245.pdf) (http://www.gazette.vic.gov.au/gazette/Gazettes2021/GG2021S245.pdf)
- State Government of Victoria, 2021, [Environment Protection Regulations](https://www.legislation.vic.gov.au/as-made/statutory-rules/environment-protection-regulations-2021) (https://www.legislation.vic.gov.au/as-made/statutory-rules/environment-protection-regulations-2021)

Appendix A: Summary of notification triggers by segment of the environment

Segment	Contaminant	Exceedance levels	Concentration thresholds	Circumstances	Reg ref
Soil	NEPM ASC, Sch. B1, s 6	HILs for soil: Table 1A(1)	> average threshold; or ≥ localised elevated value threshold	a person is, or is likely to be, exposed	8(a)
				contaminant has entered adjacent land from, or likely from, your land	8(b)
			likely above the HIL for a contaminant applicable to the current use of the adjacent land	contaminant is present in or on soil on your land and is likely to enter and remain on adjacent land	8(c)
	Friable asbestos		> 0.01 fibres/mL inhalation exposure	a person is, or is likely to be, exposed to airborne asbestos fibre by inhalation.	9
	Soil sourced from contaminated land	<1,000 m ³ (contained in a structure) or any volume otherwise	> fill material thresholds	<ul style="list-style-type: none"> it is not fill material is not an activity for which permission is required it arises from contaminated land sourced on-site, and they are contaminant(s) listed in NEPM (ASC) section 6 Schedule B1. The soil can safely be retained on site with the risks of harm suitably managed (as the duty to manage should have been considered before deciding to retain).	12
Soil/ groundwater	NAPL	Any presence in soil or groundwater	commonly present as a measurable thickness (phase-separated) or sheen; may be identifiable analytically when solubility has been reached or observed to be present within the unsaturated soil, rock profile or aquifer matrix.		10(3)
Water	NEPM ASC, Sch. B1, s 6	ANZG	is, or is likely to be, above, and remain above, the guideline or default guideline value for that contaminant	entry or likely entry of a contaminant into groundwater if the groundwater discharges, or is likely to discharge, to surface water, or the groundwater is used, or may be used, for (i) human consumption or contact; (ii) stock watering; or (iii) irrigation;	10(1)
		ADWG: Guidelines Paper 6	OR is, or is likely to be, above, and remain above, the guideline or default guideline value for that contaminant specified in the ADWG	OR entry or likely entry of a contaminant into surface water, likely to remain above specified concentration	10(2)
Vapour	NEPM ASC, Sch. B1, s 6	Soil vapour samples: Interim soil vapour HILs for VOCs: Table 1A(2);	> 95% UCL on the arithmetic average concentration for the current land use and likely to remain above that average concentration OR	a person is, or is likely to be, exposed to the contaminant or any by-product of the contaminant.	11(1)(a) & (b)
		Soil vapour samples: Soil HSLs for vapour intrusion: Table 1A(3);	the concentration in an individual sample is equal to or above 250% of the concentration for the current land use and likely to remain above that concentration		11(1)(c) & (d)
		Groundwater samples: GW HSLs for vapour intrusion Table 1A(4);			11(1)(e) & (f)
		Soil samples: Soil Vapour HSLs for vapour intrusion: Table 1A(5)			11(1)(g) & (h)

Appendix B: How to complete your Part B: Contaminated Land Notification

Overview

This quick reference guide provides an overview of the steps involved when completing the Part B Form for a Contaminated Land Notification (CLN), in accordance with the Duty to Notify. The process to make a notification (which we call Part A of the notification) will require you to call EPA on 1300 372 842 (1300 EPA VIC). Details on this step are provided in *Notifiable contamination guideline: Duty to notify of contaminated land*, section 9.1.1, and for multiple site notifications, 9.1.2. Once you have completed Part A of your notification, EPA will send you a unique link to complete Part B via an online form. This form will need to be completed using a significant amount of site information, so we recommend that you read this quick reference guide before starting the online form. A Microsoft Word version of the fields that need to be entered into the form is also included with *Notifiable contamination guideline: Duty to notify of contaminated land* as Attachment B1, should you wish to draft your responses in advance or have a record of your notification. This is highly recommended by EPA. We have also provided this as a separate document for download at <https://www.epa.vic.gov.au/about-epa/publications/2008>.

If on clicking submit for your Part B form, you receive a “Failed submission error”, to avoid having to enter the form data again, keep your window open and call EPA’s Contact Centre on 1300 372 842 (1300 EPA VIC). Advise that you are in the process of submitting your Contaminated Land Notification (CLN) Part B form, and provide your CLN reference number, and the date and time of your attempted submission. The Contact Centre staff member will take these details so EPA can help by finding the source of the error.

Please note: Complete **all mandatory fields** (denoted with a red asterisk in the online form). In this guideline, all fields are mandatory unless otherwise stated. Where you are entering free text fields, please make sure that you define any acronyms used. When completing the online form, do not close the browser while you are entering information into the form (that is make sure your computer doesn't automatically shutdown/restart if it is left idle). Unfortunately, at this stage there is no option to save information while the form is being completed. Completing the Microsoft Word document prior to using the online form will be of assistance in case there are any issues with the online form/your computer. This will also provide you with an easily accessible record of the information provided to EPA – at this stage we are unable to automatically provide you with a copy of your submission.

1

Access the Part B form by clicking on the link that has been sent to your nominated email address. You should see the following screen appear with the CLN number pre-populated. Please check that the CLN number in the form is the same that you were provided with via email.

Contaminated Land Notification - Part B

Please ensure you have read the **Notifiable contamination guideline: Duty to notify of contaminated land**, available [here](#), before completing your Part B form. The [Guideline](#) provides both general guidance on the duty to notify, and the information you will need to enter in this form, including on your management response. There is a template in the guideline you can use to ensure you have all the necessary information before commencing the completion of this form, and some tips and specific guidance on the Part B form.

This Part B form link is to be used for one-time submission only. In case of the need to provide updated information or where you later realise you've made an error, please contact EPA on 1300 372 842 (1300 EPA VIC)

Contaminated land notification reference number

CLN-40000000

Relevant section(s) of regulations notifying*

What section(s) of the Regulations are you notifying under?

-Please Select-

2

The first field identifies which section of the Regulations you are notifying under. Please tick all that apply. The selection here drives which fields appear later in the form, ensuring you can provide the required information for your notification type(s). The drop-down list includes the following options:

- Section 8(a) – Soil contamination on-site
- Section 8(b) – Soil contamination has extended off-site
- Section 8(c) – Soil contamination may have entered off-site
- Section 9 – Asbestos in or on soil
- Section 10(1) – Groundwater contamination
- Section 10(2) – Surface water contamination (freshwater)
- Section 10(2) – Surface water contamination (marine water)
- Section 10(3) – Non-aqueous phase liquid
- Section 11(1)(a) – Vapour intrusion from soil vapour (chlorinated compounds – average sample)
- Section 11(1)(b) – Vapour intrusion from soil vapour (chlorinated compounds – individual sample)
- Section 11(1)(c) – Vapour intrusion from soil vapour (petroleum hydrocarbons – average sample)
- Section 11(1)(d) – Vapour intrusion from soil vapour (petroleum hydrocarbons – individual sample)
- Section 11(1)(e) – Vapour intrusion from soil (average sample)
- Section 11(1)(f) – Vapour intrusion from soil (individual sample)
- Section 11(1)(g) – Vapour intrusion from groundwater (average sample)
- Section 11(1)(h) – Vapour intrusion from groundwater (individual sample)
- Section 12 – On-site retention of contaminated soil



For more details on determining the notification type, please refer to the main section of the guideline **Notifiable contamination guideline: Duty to notify of contaminated land**.

3

The next section of the form to complete is the **General Information** tab. Click on the blue and white arrow symbol to expand the section. There are 10 sections or questions to fill out in this section of the form.

Relevant section(s) of regulations notifying*
What section(s) of the Regulations are you notifying under?

-Please Select-

This is a required question

- General Information
- Contaminant Measures
- Management Response Report
- Other information

Title Details – please provide any title details you have, as described in a crown survey or freehold survey and registered with Victorian Land Registry Services. This is a free text field.

Area of assessment – this section of the form allows you to select the area of your land that you are making the notification for (provide a polygon). This may be the site boundary or part of your land that has been assessed as having notifiable contamination present.

Step 1 – in the left hand corner of the screen, type the address of your land. As you type, the form should suggest addresses that match. Select the appropriate address that matches your land. The map will then zoom to this location.

Step 2 – to draw the polygon, select the  icon in the right hand corner of the screen. This tool will allow you to draw a polygon that will identify the area of assessment. Click your mouse each time you want to define a point of the polygon. When successful, a blue shaded area will show the area that you have selected. You can edit this polygon, redraw it, or delete it using the tools in the left hand corner of the screen. Please see the screenshot below for an example of the area of assessment field.

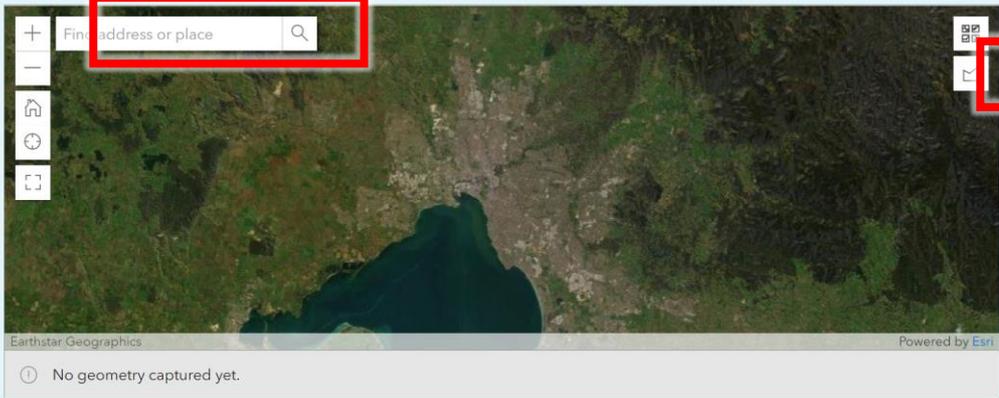
Proprietary

General Information

Title details*
The title deed for a parcel of land as described in a crown survey or freehold survey and registered with Victorian Land Registry Services

Area of assessment*
What is the area of the site that is has been assessed (noting that in some situations this is not the whole site)?

Find address or place



Earthstar Geographics Powered by Esri

No geometry captured yet.

Key cause(s) of contamination*
What are the known or suspected causes of contamination? Multiple options may be selected as appropriate

Key cause(s) of contamination – Please select the known or suspected causes of notifiable contamination on your land. There is a drop down list of activities. You can select multiple options (options are listed in Attachment B2 – Drop down list 1 – Key contaminating activities).

Current land use – Choose one land use option from the drop down list that best describes the current land use (options listed in Attachment B2 – Drop down list 2 – Land use).

Proposed land use – Choose one land use option from the drop down list (options listed in Attachment B2 – Drop down list 2 – Land use) that best describes the proposed land use. If there is no proposed change in use, please select the same land use as you did for the previous field (current land use).

Predominant soil type – Please select the main type of soil on your land. If this varies across the site, choose the one that best describes most of the soil, or the soil where the contamination is present. Selection options are as follows (based on the NEPM (ASC) soil descriptors):

- Sand
- Fill – sand
- Silt
- Fill – silt
- Clay
- Fill - clay

Underground storage tank identified – Please confirm if there is or has ever been an underground storage tank present at the site. You can select ‘Yes’ or ‘No.’

Risk of contamination entering utilities – Please confirm if you have reason to believe that contamination may be entering into utilities such as water or sewerage pipes. You can select ‘Yes’ or ‘No.’

If you select ‘Yes’, you will be asked to provide more information in a free text field.

Imminent risk of explosion or fire – Please confirm if you have reason to believe the contamination poses an explosive or flammable risk? You can select ‘Yes’ or ‘No.’

If you select ‘Yes’, you will be asked to provide more information in a free text field.

Imminent risk to human health and environment – Please confirm if you have reason to believe the site poses an imminent risk to human health or the environment? You can select ‘Yes’ or ‘No.’

If you select ‘Yes’, you will be asked to provide more information in a free text field.

4

The questions in the next section of the form will populate based on your selection(s) in the first question – that is, your notification type(s). For completeness this guide steps through all the information required to be entered for the different sections of the Regulations that you may notify under. Please only complete the sections that are relevant to your notification type as identified in the first question.

- Soil
- Asbestos
- Water
- Non-Aqueous Phase Liquid (NAPL)
- Vapour

SOIL

Details of possible exposure to contamination (for 8(a), 8(b) and 8(c)) – This is a free text field for you to provide a brief description on how a person might be exposed to the soil contamination.

Soil contamination extent (for 8(b)) – please describe how and to what extent you have been able to confirm that contamination from your site has reached the adjacent site (that is, what investigation and sampling has confirmed this). Also, please confirm how you became aware of these circumstances.

Soil contamination possible extent (for 8(c)) – please describe how and to what extent contamination is likely to move off-site from your land. Where you have not been able to confirm this with off-site delineation investigation or sampling, we would like you to provide whatever information you have available. There will be the opportunity later in the form to detail attempts to delineate contamination and any management response activities that you may have undertaken.

Soil contamination possible extent land use (for 8(b) and 8(c)) – please confirm the adjacent land use that contamination has or is likely to be migrating onto. Please select the most sensitive land use where there are mixed uses or multiple off-site properties affected (the list is included in Attachment B2 – Drop down list 2).

ASBESTOS

Friable asbestos – please confirm if there is friable asbestos in or on the soil on land such that a person is, or is likely to be, exposed to airborne asbestos levels exceeding 0.01 f/mL by means of inhalation, by selecting ‘Yes’ or ‘No.’ If you select ‘Yes’, you will be asked to provide more information in a free text field.

If you would like to provide information about other forms of asbestos contamination (for example fibre cement sheeting fragments, fibres detected in soil, etc.) you can provide this in the first question for soil above ‘Details of possible exposure to contamination.’

WATER

GROUNDWATER

Details of groundwater contamination – there is space in the form to briefly describe the contamination in groundwater or contamination that is likely to enter groundwater. Please confirm how the use of groundwater may be affected.

Groundwater use – what are the known or suspected (environmental values) of groundwater? That is, based on the segment classification, what can groundwater be used for. You will be able to make multiple selections from the following drop down list:

- Water known to be used and extracted
- Water dependent ecosystems and species
- Potable water supply
- Potable mineral water supply
- Irrigation
- Stock watering
- Primary contact recreation
- Industrial and commercial
- Traditional owner cultural values
- Buildings and structures
- Geothermal properties

You may note that there is an extra option in this list ‘Water known to be used and extracted.’ This item is to be used when it is known that groundwater is being used at the site or in close proximity to the site (for example within 1 km). For example, there is no reticulated supply in the area and groundwater bores are being used for domestic and/or irrigation purposes.

For ‘likely’ contamination that is, where you have not installed groundwater bores or do not have on-site groundwater sampling results, this section will need to be completed to the best of your knowledge and based on available regional groundwater quality information.

Groundwater restricted / precluded use – related to the previous question, which of the known or suspected uses of groundwater are threatened or precluded by the groundwater contamination? That is, if contamination is present, which environmental values are affected, regardless of whether someone is actually known to use the water for this use. The same drop down list as the previous question will be available for you to make multiple selections (where relevant).

For ‘likely’ contamination that is, where you have not installed groundwater bores or do not have groundwater sampling results, this section will need to be completed to the best of your knowledge and based on available regional information.

Geology – confirm the predominant geology of the aquifer being sampled at the site. You will be able to choose from a drop down list of the dominant Victorian geologies (included in Attachment B2 – Drop down list 3 - Victorian Geologies). If the geological formation you want to select is not in the list, please choose from the generic ‘other’ geology descriptors in the list (for example ‘Other – Sandstone’).

Groundwater depth (mbgl) – confirm the depth to groundwater in metres below ground level (mbgl) at your land. If it varies in depth across the site, please provide the shallowest groundwater depth in your notification.

Where groundwater has not been sampled on site, please provide the inferred regional depth of groundwater based on available information.

Groundwater depth (mAHD) (non mandatory field) – it is preferable, if you have surveyed groundwater bores, to also provide the groundwater level in metres above Australian Height Datum (mAHD).

Groundwater flow direction – in what direction has groundwater flow been estimated (based on site data) or inferred based on regional information? You will be provided with the following options to select from:

- North
- North east
- East
- South east
- South
- South west
- West
- North west

Groundwater flow rate (m/year) (non mandatory field) – if you have completed detailed assessment of groundwater contamination and have estimated the groundwater flow rate, please provide it in metres/year (noting that this is measured as the hydraulic conductivity (m/day) x hydraulic gradient (m/m) / porosity (unitless, fraction between 0 and 1) x 365).

Groundwater segment – specify the groundwater segment based on measured salinity or inferred regional information. The list provided is from Table 5.2 of the Environment Reference Standard and also included in Attachment B2 – Drop down list 4 - Groundwater Segments.

SURFACE WATER

Freshwater or marine water fields will appear in the form based on the selection of the notifiable contamination selected in the first question of the form. In this section, the questions are the same for each receiving water body, but they will appear separately in the form. When completing this part of the form, consideration should be given to how land and groundwater interact with surface water bodies at or in the vicinity of the site. EPA has provided guidance (in section 5.12 of this guideline) that the assessment should be made at the point of discharge to surface waters. Where surface water sampling has not been completed, duty holders still need to consider ‘likely’ interactions and discharges.

Details of surface water contamination (freshwater / marine water) – briefly describe the contamination entering surface water, including known or suspected uses of water and how they may be impacted by contamination. Where you have not sampled the water body, please provide information based on regional information or to the best of your knowledge.

Surface water use (freshwater / marine) – confirm the known or suspected uses of water (based on the [Environment Reference Standard 2021](#) environmental values) using the following drop down list:

- Water known to be used and extracted
- Largely unmodified ecosystems and species
- Slightly to moderately modified ecosystems and species
- Highly modified ecosystems and species
- Human consumption after appropriate treatment
- Agriculture and irrigation
- Human consumption of aquatic foods
- Aquaculture
- Industrial and commercial
- Water-based recreation (primary contact)
- Water-based recreation (secondary contact)
- Water-based recreation (aesthetic enjoyment)
- Traditional owner cultural values

As discussed above for groundwater, you may note that there is an extra option in this list ‘Water known to be used and extracted.’ This item is to be used when it is known that surface water is being used at the site or in close proximity to the site (for example within 1 km). For example, a landowner that backs onto a creek is collecting water for domestic and/or irrigation purposes.

Surface water restricted/precluded use (freshwater / marine water) – related to the previous question, which of the known or suspected uses of groundwater are threatened or precluded by the groundwater contamination? The same drop down list as the previous question will be available for you to make multiple selections (where relevant).

NON-AQUEOUS PHASE LIQUID (NAPL)

NAPL contained in – where NAPL has been identified at the site, please confirm where it is present in:

- Soil
- Groundwater
- Surface water
- Drain/utility pit

NAPL density – please confirm the nature of the NAPL:

- Light (LNAPL)
- Dense (DNAPL)
- Both (LNAPL and DNAPL)

NAPL thickness – how thick is the NAPL layer, or how thick is it likely to be:

- Sheen
- 0-10 cm
- 10-50 cm
- 50 – 100 cm
- >100 cm
- Unknown thickness

NAPL depth – specify the depth that the NAPL was found (in metres below ground level).

VAPOUR

Where soil vapour, indoor air, soil or groundwater has been sampled for the purposes of investigating potential vapour intrusion from contaminated land, and they are at concentrations exceeding the notifiable contamination threshold, further information needs to be provided as per the following questions in the form. These questions apply for all types of notifiable vapour contamination.

Details of vapour intrusion – briefly describe the nature and extent of contamination, including how a person could be exposed.

Vapour contamination possible extent land use – where vapour contamination may or does extend off-site, please specify the most sensitive land use that applies. Where it has been confirmed that vapour contamination does not extend off-site, use this field to confirm the most sensitive use onsite. The list of land uses is that same list provided in the **General** section of the form (included in Attachment B2 – Drop down list 2 – Land use).

ON-SITE RETENTION OF CONTAMINATED SOIL

On-site retention of contaminated soil – you need to confirm if there is notifiable onsite soil containment on your land by choosing 'Yes' or 'No'.

If you select 'Yes' the following fields and questions will appear:

Details of on-site contaminated soil retention – provide an explanation (using the free text box) of the types of contaminants and volumes of impacted soil, the location on the site where the soil is being retained and details about how the soil is being retained so as to prevent further contamination.

Please note: you will have the opportunity to provide further detail about your management response later in the form.

5

Contaminant Measures: The next section of the form will populate based on your selection(s) in the first question. The form will assume that you have contaminant measures (contaminant concentrations) for each element that you notify of e.g. soil, groundwater, surface water, vapour, etc. A snapshot of the fields that need to be completed for each exceedance is included below. Please note: When entering this data, EPA is looking for a representation of the notifiable contamination at your site for all notifiable contaminants. For example, where there are multiple samples of soil that have lead exceedances of HIL A (or other threshold applicable to the land use), you need to enter the maximum concentration or the average threshold calculated using the 95% upper confidence limit (UCL) of the mean (or average).



Please note that if you are notifying of likely contamination (e.g. for surface water or groundwater) and you do not have actual concentration data from your site, you will need to enter 0.00 (zero) into the contaminant concentration field below.



Please note, when evaluating risks outside of the context of notification, statistical approaches such as the average threshold may not be valid. For example, you may not have enough samples of surface water, groundwater or vapour to provide an accurate indication of risk. This is discussed in further detail for soil vapour in the *Notifiable contamination guideline*; section 5.10.2, for surface water in section 5.12 and for groundwater in section 5.13.

Contaminant Measures

Enter data for each contaminant measure

Type of notification*
What part of the EP act requires you to report on this contaminant?
-Please Select-
This is a required question

Contaminant*
Choose a single contaminant that you have concentration information for

This is a required question

Type of measurement*
Is the concentration from an individual sample or 95% upper confidence limit?
 Individual Sample Average sample (i.e. 95% UCL)
This is a required question

Unit of measurement (unless otherwise specified)
Unless otherwise stated, the contaminant concentration and applicable threshold concentration are given in the following unit of measurement
This is a required question

Contaminant concentration*
The measure on contaminant in the sample, based on the measure method

This is a required question

Applicable threshold standard*
The guideline or standard that provides the notification threshold for that contaminant
-Please Select-
This is a required question

Applicable threshold concentration*
The value of the threshold concentration

This is a required question

For each contaminant measure you need to enter the following information:

Type of notification – this is a dropdown list that you can choose from. It is pre-populated based on the previous information you have submitted, but also has the option for you to notify EPA of additional or non-notifiable contamination. To enter this type of information and data you will need to choose the ‘Informational’ drop down options (these are included in Attachment B2 – Drop down list 5 – Notification type (contaminant measures)). It is not mandatory to provide additional or non-notifiable contamination information, this is at your discretion.

Contaminant – the contaminant list will be populated automatically based on what you have entered in the previous field (‘type of notification’). This chemical list is based on the notifiable contaminants in the Regulations. There is also a chemical list for any other non-notifiable contaminants that you would like to include. There is a function in this field that if you start typing in the

contaminant that relevant contaminants will appear for selection. These lists have not been included with this guidance, but if you have queries about the form, you can contact EPA via the Contact Centre (1300 EPA VIC).

Type of measurement – confirm if the concentration is from an ‘Individual sample’ or ‘Average sample (that is, 95% UCL)’ of the mean (or average). We note that for some elements of the environment, for example groundwater and vapour samples there are quite often not enough samples to use ‘average sample’, however the form has been built to be adaptable for different elements and contaminants.

Unit of measurement (unless otherwise specified) - is pre-populated based on the previous information you have submitted. Please make sure that you enter the contaminant concentration based on these units, as the units are not able to be changed in the form.

- Soil – mg/kg
- Water – mg/L
- Vapour – mg/m³ (or mg/kg for soil, mg/L for groundwater)

Contaminant concentration – is where the numerical concentration can be entered, to 8 decimal places.

Applicable threshold standard – a dropdown list of potential standards for notifiable contamination is pre-populated based on the previous information you have submitted. Some examples of the thresholds are as follows, but they haven’t been included in this guidance in full.

- HIL A to HIL D
- ADWG
- Recreational water guidelines
- ANZG (irrigation), (stock watering)
- Interim HIL A to Interim HIL D
- Soil HSL A to soil HSL D

Applicable threshold concentration - is where the numerical threshold standard that you think applies and can be entered to 5 decimal places.

For subsequent contaminants you can enter more data by pressing the  button at the end of this section of the form. You can also keep a count of the contaminant measures that you’ve entered based on the count at the top right hand corner of the section.

Where a single contaminant concentration exceeds a number of thresholds (that is, a groundwater concentration exceeds the ADWG, ANZG (stock watering) and ANZG (irrigation) thresholds), please either enter all of the exceedances as separate fields (that is, 3 separate entries with the different thresholds) OR choose the most sensitive threshold and provide one entry with the most sensitive threshold.



We understand that it may be cumbersome to enter your contaminant measure data into the form. However, if you structure your data based on the fields above, it may assist when gathering it together and in entering the data more efficiently into the online form.

6

For the notifiable contamination, EPA requires you to provide a **Management Response**. The form steps you through a series of questions to confirm your approach. Some of the questions will be driven by what elements of the environment you have notified for in earlier sections of the form. In the questions you will need to include reference to the evidence you have (or are in the process of gathering) to support your statements and conclusions relating to the assessment and control of risk of harm to human health and the environment. You will be required at the end of this section to list all relevant assessments, documents and reports. These documents will need to be made available to EPA on request. The form does not have capability to upload attachments.

Identify hazards and risks:

Assessment of nature and extent of notifiable contamination – for each of the elements you have selected, you will be asked what steps have been undertaken to understand the extent and magnitude of the contamination. The drop down is as follows, but if you would like to describe another step or approach, you can choose 'other' and enter your own description as free text. You can make multiple selections from this list.

- Cleanup plans
- Disclosure advice provided to off-site affected parties
- Disclosures from former occupants
- Ecological risk assessment
- Environmental site assessment reports
- Human health risk assessment
- Interim risk minimisation measures
- Monitoring plans
- Management response works schedule
- Site management plans
- Site records
- Other

If you are currently completing an environmental audit or preliminary risk screen assessment (PRSA), please select 'other' and include this as a note. Please also provide the environmental audit ID number (EA) which is allocated to the environmental auditor when they advise EPA of their audit engagement.

Please note that if you have more information that you would like to provide about asbestos in soil, fibre cement sheeting fragments or building structures, you will be able to provide them in the 'identification and removal of contamination sources' field below.

Likely surface water or groundwater contamination - if you notified of likely surface water (Reg 10(2)) or groundwater (Reg 10(3)) contamination (including where you did not have water sample results but identified that contamination was likely), please select 'yes' and then space will be provided for you to add further details of why this is and what contaminants this relates to. *For example, a contaminant was identified in soil that would likely be in groundwater above the ADWG or ANZG.*

Identification and removal of contamination sources - What steps have been taken to identify and stop the source/s of contamination on or from your land? This section will give you space to include any relevant information for example removed disused underground fuel storage tanks, located and repaired leaking underground process lines, etc.

Date of most recent assessment - When did you most recently assess the contamination on or from your land? List the most recent date of assessment, including the reference to relevant report(s) which is also required to be provided in a field below.

Reference to conceptual site model – Please provide details of where the most recent conceptual site model has been described or updated by including the reference to the relevant report(s).

Assessment of nature and extent of notifiable contamination that is migrating from your land – You will be asked if there is contamination migrating from your land. If you answer ‘yes’ you will be asked to describe the nature and extent of any contamination that is migrating from land you manage or control (as specified in this form) onto surrounding areas. What environmental values may be affected by the contamination?

For example provide a copy of current conceptual site model developed for the land. Information on contamination source, whether the source is current, what action was undertaken to stop the source. (for example leaking underground chemical storage tank and pipes were removed and replaced.) If the source was upgradient or from off-site, please include relevant information.

Please reference relevant reports with figures/graphs/charts of levels and extent of contamination, lateral and vertical delineation.

Please reference relevant reports with figures/sketches/maps detailing areas affected by contamination.

Types of assessments completed - Confirm what assessment of risks of harm have been completed, underway or are planned in relation to the notified contamination by selecting from the following dropdown list (multiple selections possible):

- Assessment of lower explosive limits (LELs)
- Basic due diligence assessment
- Preliminary/detailed site investigation, Tier 1 using NEPM B1 investigation levels
- Targeted or site-specific ecological risk assessment
- Testing reticulated drinking water supply in addition to standard assessment of groundwater use
- Tier 2 site-specific human health risk assessment
- Other

If you are currently completing an environmental audit or preliminary risk screen assessment (PRSA), please select ‘other’ and include this as a note. Please also provide the environmental audit ID number (EA) or PRSA ID number (PRSA) which is allocated to the environmental auditor when they advise EPA of their audit engagement.

If you would like to describe another step or approach, you can choose ‘other’ and enter your own description as free text.

Summary of exceedances of risks of harm - Describe the key findings on the nature of the risks of harm identified in relation to the notified contamination. For example, several Tier 1 values exceeded – comment for land, groundwater, surface water, vapours, on and off site. Include references to relevant reports.

Implement risk control measures:

Are there interim management actions planned or completed - Are there short term actions undertaken or planned to be undertaken, to minimise the risks of harm? Choose from ‘Yes’ or ‘No’.

If you select 'Yes' you will be asked to provide more information in a free text field: What short term actions have been undertaken or are planned to be undertaken, to minimise the risks of harm? What actions have been taken or are planned to be undertaken to address contamination that has migrated off land you manage or control (if relevant).

Please include the following:

- the element of the environment impacted by the action or contamination (for example soil, groundwater, surface water, vapour, NAPL, asbestos)
- details of interim management actions (for example capping, lower explosive limit (LEL) monitoring, site management plan, remediation, etc.)
- whether actions are planned or completed
- whether the action is on-site, off-site or both

Are there long term management actions planned or completed - Are there long term actions undertaken or are planned to be undertaken, to minimise the risks of harm? Choose from 'Yes' or 'No'.

If you select 'Yes' you will be asked to provide more information in a free text field: What long term actions have been undertaken or are planned to be undertaken, to minimise the risks of harm? What actions have been taken or are planned to be undertaken to address contamination that has migrated off land you manage or control (if relevant).

Please include the following:

- the element of the environment impacted by the action or contamination or the notification type (for example soil, groundwater, surface water, vapour, NAPL, asbestos)
- details of interim management actions (for example capping, LEL monitoring, site management plan, remediation, etc.)
- whether actions are planned or completed
- whether the action is on-site, off-site or both

Schedule for planned management response(s) - What is your schedule for planned contamination management responses? For example [Project planning timeline and deliverables, etc.](#)

Additional information about non-notifiable contamination - What, if any, other contaminants (that are not notifiable) are you aware are present on or have migrated from the land? If you answer 'yes' to this question you will be provided with space to provide more information. Please also specify what elements of the environment are impacted. [For example PFAS contamination, microbiological. Provide comment for land, groundwater, surface water, vapours, on and off site as applicable. The type of sample may also be relevant to include for example food or biota sample.](#)

Changes to the land use, ownership, etc. - Are you aware of any plans to develop, sell, lease, subdivide the land? If you answer 'yes', please specify what actions you will take? How will the presence of contamination be addressed in these circumstances? What is the planned timeframe for these actions? Can you provide the details of the change?

Validation:

Validation and review of risk control measures - What steps have you taken to validate or verify the risk control measures implemented are effective? How do you propose to review and manage your risk controls into the future (if relevant)? For example [how are you monitoring, documenting, sharing information, meeting ongoing obligations, management plans and responsibilities.](#)

Retaining waste soil on-site sourced from contaminated land:

Source of soil at the site - Describe the setting from which the soil has been sourced from on-site. Please provide supporting figures detailing the locations. [For exaple soil is from on-site, north-east corner, Area 26 as shown on Figure 2 of report ABC](#)

Volume of soil retained - What volume of soil is to be retained on site (in m³)?

Assessment completed in accordance with Regulations and EPA guidance - Provide the evidence that the assessment has been undertaken on the waste soil in accordance with Regulation 62 and *Waste disposal categories - characteristics and thresholds* (publication 1828).

Controls in place - What controls are in place or proposed to manage any risks of harm associated with the contaminated soil? Please only provide a summary and reference the relevant report/assessment that contains more information.

Identification and documentation of soil placement - How can the retained soil be identified? How is it marked (for example barrier or marker layer, stored in a sign posted fenced area, etc.)? What information is in place to maintain and document the retained soil placement (for example, [marking on title, recorded in site management plan with surveyed/GPS coordinates etc.](#))?

Reporting:

List relevant assessments and reports - What are the relevant assessments, documents or contamination reports (noting that any relevant documents or reports need to be provided to EPA on request)?

Please include the report title, date, author – grouped by environmental sector (for example. soil, groundwater, surface water, air, vapour, etc.).

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The last part of the form asks you to provide some information about yourself and the submission:

- Submitter: your full name
- Submitter position: what role are you playing for the duty holder submission
- Date of assessment: the date the notification form was completed

You will also need to check the following acknowledgement:

'I acknowledge this as my first Part B form submission, and that any subsequent submission using the same notification reference number will not be accounted for by EPA in any action it takes.'

You can then press the 'Submit' button to upload the information.



When you press 'submit' you will receive a message on screen:



Thank you for providing your Duty to Notify of Contaminated Land Part B form. You have now met your duty to notify.

Please note that EPA may contact you at any time to seek further information regarding your notification.

You also have an ongoing duty under section 39 of the *Environment Protection Act 2017* to manage contaminated land. This requires you to minimise risk of harm to human health and the environment from the contaminated land so far as reasonably practicable.

Further information and guidance on your duties under the EP Act is available at www.epa.vic.gov.au. If you have any queries contact us via contact@epa.vic.gov.au or 1300 EPA VIC quoting your CLN reference number (from the email requesting you complete your Part B form).



Note: you can only use the Part B form link for a single submission. If you have new information relating to an already submitted contaminated land notification, you **must** contact EPA again through the Contact Centre. **Do not resubmit this form with updated information as it will delete any previously submitted information.**

Complete your Part B: CONTAMINATED LAND NOTIFICATION

Attachment B1 – Word template of fields to be completed in Part B form

Summary of information that needs to be provided in the Part B form online. Please note that this is the full list of information required for all notifiable contamination (that is, all the triggers/notification types set out in the Regulations) and you may not need to complete it all. All fields are mandatory for the relevant notification type, unless otherwise stated in column 2 of this form.

Heading in Part B form Question to be answered in Part B form	Types of information to include / any dropdown lists in the form
Relevant section(s) of regulations notifying What section(s) of the Regulations are you notifying under?	<ul style="list-style-type: none"> • Section 8(a) – Soil contamination on-site • Section 8(b) – Soil contamination has extended off-site • Section 8(c) – Soil contamination may have entered off-site • Section 9 – Asbestos in or on soil • Section 10(1) – Groundwater contamination • Section 10(2) – Surface water contamination (freshwater) • Section 10(2) – Surface water contamination (marine water) • Section 10(3) – Non-aqueous phase liquid • Section 11(1)(a) – Vapour intrusion from soil vapour (chlorinated compounds – average sample) • Section 11(1)(b) – Vapour intrusion from soil vapour (chlorinated compounds – individual sample) • Section 11(1)(c) – Vapour intrusion from soil vapour (petroleum hydrocarbons – average sample) • Section 11(1)(d) – Vapour intrusion from soil vapour (petroleum hydrocarbons – individual sample) • Section 11(1)(e) – Vapour intrusion from soil (average sample) • Section 11(1)(f) – Vapour intrusion from soil (individual sample) • Section 11(1)(g) – Vapour intrusion from groundwater (average sample) • Section 11(1)(h) – Vapour intrusion from groundwater (individual sample) • Section 12 – On-site retention of contaminated soil
General information	
Title details The title deed for a parcel of land as described in a crown survey or freehold survey and registered with Victorian Land Registry Services	Free text field
Area of assessment What is the area of the site that is has been assessed (noting that in some situations this is not the whole site)?	Define polygon within online form
Key cause(s) of contamination What are the known or suspected causes of contamination? Multiple options may be selected as appropriate	Attachment B2 - Drop down list 1 - Key contaminating activities
Current land use Choose one option that describes the current land use	Attachment B2 - Drop down list 2 – Land use
Proposed land use Choose one option that describes the planned or future land use	Attachment B2 - Drop down list 2 – Land use
Predominant soil type Choose one option that describes the main type of soil. If there's more than one type, choose the one that best describes most of the soil	<ul style="list-style-type: none"> • Sand • Fill – sand • Silt • Fill – silt • Clay • Fill - clay
Underground storage tank identified Has there ever been an underground storage tank on the site at any point in the site's history?	<ul style="list-style-type: none"> • Yes • No

Risk of contamination entering utilities Do you have reason to believe that contamination may be entering into utilities such as water or sewerage pipes?	<ul style="list-style-type: none"> • Yes • No
> Description of risk of contamination entering utilities Provide details of how contamination may be entering into utilities	If you select 'Yes' in the previous field, this prompt will appear
Imminent risk of explosion or fire Do you have reason to believe the contamination poses an explosive or flammable risk?	<ul style="list-style-type: none"> • Yes • No
> Description of risk of explosion or fire Provide details of how contamination poses an explosive or flammable risk	If you select 'Yes' in the previous field, this prompt will appear
Imminent risk to human health and environment Do you have reason to believe the site poses an imminent risk to human health or the environment?	<ul style="list-style-type: none"> • Yes • No
Description of risk to human health and environment Provide details of the imminent risk to human health or the environment	If you select 'Yes' in the previous field, this prompt will appear
Soil	
Details of possible exposure to contamination How might a person be exposed to the soil contamination?	For 8(a), 8(b) and 8(c) notifications
Soil contamination extent Please describe how and to what extent contamination from your site has reached the adjacent site. How have you become aware of these circumstances?	For 8(b) notifications
Soil contamination possible extent Please describe how and to what extent contamination is likely to move offsite	For 8(c) notifications
Soil contamination possible extent land use What is the land use of the offsite location that the contamination is migrating onto?	For 8(b) and 8(c) notifications
Asbestos	
Friable asbestos Is there friable asbestos present in or on the soil on land such that a person is, or is likely to be, exposed to airborne asbestos levels exceeding 0.01 f/mL by means of inhalation?	<ul style="list-style-type: none"> • Yes • No
Description of friable asbestos Provide details of presence of friable asbestos	If you select 'Yes' in the previous field, this prompt will appear
Water	
Groundwater	
Details of groundwater contamination Briefly describe the contamination in groundwater or contamination that is likely to enter groundwater, and how it may be impacted by contamination	Free text field
Groundwater use What are the known or suspected uses (environmental values) of groundwater?	<ul style="list-style-type: none"> • Water known to be used and extracted • Water dependent ecosystems and species • Potable water supply • Potable mineral water supply • Irrigation • Stock watering • Primary contact recreation • Industrial and commercial • Traditional owner cultural values • Buildings and structures • Geothermal properties

Complete your Part B: CONTAMINATED LAND NOTIFICATION

Groundwater restricted/precluded use Of the known or suspected uses of groundwater, which ones are precluded by the contamination?	Same list as the previous field
Geology What is the predominant geology of the aquifer being sampled at the site?	Attachment B2 - Drop down list 3 – Victorian Geologies
Groundwater depth (mbgl) How deep is the groundwater? (in metres below ground level)	Enter numerical value, to 8 decimal places
Groundwater depth (mAHD) What is the groundwater level? (in metres using Australian Height Datum)	Non mandatory field Enter numerical value, to 8 decimal places
Groundwater flow direction In what direction is the groundwater presumed to flow?	<ul style="list-style-type: none"> • North • North east • East • South east • South • South west • West • North west
Groundwater flow rate (m/year) What is the groundwater flow rate (m/year)?	Non mandatory field Enter numerical value, to 8 decimal places
Groundwater segment What is the groundwater segment based on measured salinity?	Attachment B2 - Drop down list 4 – Groundwater Segments
Surface water (freshwater)	
Details of surface water contamination (freshwater) Briefly describe the contamination entering surface water, including known or suspected uses of water and how they may be impacted by contamination	Free text field
Surface water use (freshwater) What are the known or suspected uses of water?	<ul style="list-style-type: none"> • Water known to be used and extracted • Largely unmodified ecosystems and species • Slightly to moderately modified ecosystems and species • Highly modified ecosystems and species • Human consumption after appropriate treatment • Agriculture and irrigation • Human consumption of aquatic foods • Aquaculture • Industrial and commercial • Water-based recreation (primary contact) • Water-based recreation (secondary contact) • Water-based recreation (aesthetic enjoyment) • Traditional owner cultural values
Surface water restricted/precluded use (freshwater) What are the impacts to these water bodies?	Same list as previous field
Surface water (marine water)	
Details of surface water contamination (marine water) Briefly describe the contamination entering surface water, including known or suspected uses of water and how they may be impacted by contamination	Free text field
Surface water use (marine water) What are the known or suspected uses of water?	<ul style="list-style-type: none"> • Water known to be used and extracted • Largely unmodified ecosystems and species

	<ul style="list-style-type: none"> • Slightly to moderately modified ecosystems and species • Highly modified ecosystems and species • Human consumption after appropriate treatment • Agriculture and irrigation • Human consumption of aquatic foods • Aquaculture • Industrial and commercial • Water-based recreation (primary contact) • Water-based recreation (secondary contact) • Water-based recreation (aesthetic enjoyment) • Traditional owner cultural values
Surface water restricted/precluded use (marine water) What are the impacts to these water bodies?	Same list as previous field
Non-Aqueous Phase Liquid (NAPL)	
NAPL contained in Is NAPL present on the site?	<ul style="list-style-type: none"> • Soil • Groundwater • Surface water • Drain/utility pit
NAPL density Is the NAPL light or dense?	<ul style="list-style-type: none"> • Light (LNAPL) • Dense (DNAPL) • Both (LNAPL and DNAPL)
NAPL thickness How thick is the NAPL layer, or how thick is it likely to be?	<ul style="list-style-type: none"> • Sheen • 0-10 cm • 10-50 cm • 50 – 100 cm • >100 cm • Unknown thickness
NAPL depth What depth was NAPL found (metres below ground level)?	Enter numerical value, to 8 decimal places
Vapour	
Details of vapour intrusion Briefly describe the nature and extent of contamination, including how a person could become exposed to it.	Free text field
Vapour contamination possible extent land use What is the land use of the off-site location that the vapour contamination is migrating onto?	Attachment B2 - Drop down list 2 – Land use
On-site retention of contaminated soil	
On-site retention of contaminated soil Is there notifiable onsite soil containment on your site?	<ul style="list-style-type: none"> • Yes • No
Details of on-site contaminated soil retention Provide an explanation of the types of volumes of soil and the location on the site where the soil is being retained and details regarding arrangements for how the soil is being retained so as to prevent further contamination	If you select 'Yes' in the previous field, this prompt will appear
Contaminant Measures In this section of the report, for each element you are notifying of, and for each sample, you will need to submit the following information. We suggest that you format your data tables to be able to readily notify in the online form in this format.	
Type of notification What part of the EP act requires you to report on this contaminant?	Attachment B2 - Drop down list 5 – Notification type (contaminant measures)
Contaminant Choose a single contaminant that you have concentration information for	A full list has not been provided as there are too many chemicals to include. However, there is a function in this field that if you start typing in the contaminant that relevant contaminants will appear for selection.
Type of measurement Is the concentration from an individual sample or 95% upper confidence limit?	<ul style="list-style-type: none"> • Individual sample • Average sample (that is, 95% UCL of the mean (or average))
Unit of measurement	Automatically populated <ul style="list-style-type: none"> • Soil – mg/kg

Complete your Part B: CONTAMINATED LAND NOTIFICATION

Unless otherwise stated, the contaminant concentration and applicable threshold concentration are given in the following unit of measurement	<ul style="list-style-type: none"> Water – mg/L Vapour – mg/m³ (or mg/kg for soil, mg/L for groundwater)
Contaminant concentration The measure of contaminant in the sample, based on the measure method	Enter numerical value, to 8 decimal places
Applicable threshold standard The guideline or standard that provides the notification threshold for that contaminant	For example: <ul style="list-style-type: none"> HIL A to HIL D ADWG Recreational water guidelines ANZG (irrigation), (stock watering) Interim HIL A to Interim HIL D Soil HSL A to soil HSL D
Applicable threshold concentration The value of the threshold concentration	Enter numerical value, to 8 decimal places
Management Response Assessment and control of risks of harm For the following questions you will need to include reference to the evidence you have (or are in the process of gathering) to support your statements and conclusions relating to the assessment and control of risk of harm to human health and the environment. You will be required at the end of this section to list all relevant assessments, documents and reports that need to be made available to EPA on request.	
Identify hazards and risks The following questions will populate based on what environmental elements you have notified under earlier in the form.	
Soil assessment of nature and extent of notifiable contamination steps What steps have been taken to understand the nature and extent of the notified contamination with respect to soil? Note: if you select 'other' you can include further description of the works undertaken. If you are currently completing an environmental audit or preliminary risk screen assessment (PRSA), please select 'other' and include this as a note. Please also provide the environmental audit ID number (EA) which is allocated to the environmental auditor when they advise EPA of their audit engagement.	Attachment B2 -Drop down list 6 – Assessment type: <ul style="list-style-type: none"> Clean up plans Disclosures from former occupants Disclosure advice provided to off-site affected parties Ecological risk assessment Environmental site assessment reports Human health risk assessment Interim risk minimisation measures Management response works schedule Monitoring plans Site management plans Site records Other
>Soil assessment of nature and extent of notifiable contamination other steps Include further description of the works undertaken.	If you select 'Other' in the previous field, this prompt will appear
Asbestos assessment of nature and extent of notifiable contamination steps What steps have been taken to understand the nature and extent of the notified contamination with respect to asbestos?	Attachment B2 -Drop down list – Assessment type
>Asbestos assessment of nature and extent of notifiable contamination other steps Include further description of the works undertaken.	If you select 'Other' in the previous field, this prompt will appear
Groundwater assessment of nature and extent of notifiable contamination steps What steps have been taken to understand the nature and extent of the notified contamination with respect to groundwater?	Attachment B2 -Drop down list – Assessment type

<p>>Groundwater assessment of nature and extent of notifiable contamination other steps</p> <p>Include further description of the works undertaken.</p>	If you select 'Other' in the previous field, this prompt will appear
<p>Surface water assessment of nature and extent of notifiable contamination steps</p> <p>What steps have been taken to understand the nature and extent of the notified contamination with respect to surface water?</p>	Attachment B2 -Drop down list 6 – Assessment type
<p>>Surface water assessment of nature and extent of notifiable contamination other steps</p> <p>Include further description of the works undertaken.</p>	If you select 'Other' in the previous field, this prompt will appear
<p>NAPL assessment of nature and extent of notifiable contamination steps</p> <p>What steps have been taken to understand the nature and extent of the notified contamination with respect to NAPL?</p>	Attachment B2 -Drop down list 6 – Assessment type
<p>>NAPL assessment of nature and extent of notifiable contamination other steps</p> <p>Include further description of the works undertaken.</p>	If you select 'Other' in the previous field, this prompt will appear
<p>Vapour assessment of nature and extent of notifiable contamination steps</p> <p>What steps have been taken to understand the nature and extent of the notified contamination with respect to vapour?</p>	Attachment B2 -Drop down list 6 – Assessment type
<p>>Vapour assessment of nature and extent of notifiable contamination steps</p> <p>Include further description of the works undertaken.</p>	If you select 'Other' in the previous field, this prompt will appear
<p>Is surface water or groundwater contamination likely?</p>	<ul style="list-style-type: none"> • Yes • No
<p>>Likely surface water or groundwater contamination</p> <p>If you notified of likely surface water (Reg 10(2)) or groundwater (Reg 10(3)) contamination (including where you did not have water sample results but identified that contamination was likely), please provide further details of why this is and what contaminants this relates to.</p> <p><i>e.g. contaminant was identified in soil that would likely be in groundwater above the ADWG or ANZG.</i></p>	If you select 'Yes' in the previous field, this prompt will appear
<p>Identification and removal of contamination sources</p> <p>What steps have been taken to identify and stop the source/s of contamination on or from your land?</p> <p><i>e.g. removed disused underground fuel storage tanks, located and repaired leaking underground process lines.</i></p>	Free text field
<p>Date of most recent assessment</p> <p>When did you most recently assess the contamination on or from your land? List the most recent date of assessment, and refer to relevant reports to be provided below.</p>	Free text field
<p>Reference to conceptual site model</p> <p>Provide details of where the most recent conceptual site model has been described or updated, including the reference of the relevant report(s).</p>	Free text field
<p>Have you assessed the nature and extent of notifiable contamination that is migrating from your land</p>	<ul style="list-style-type: none"> • Yes • No
<p>>Assessment of nature and extent of notifiable contamination that is migrating from your land</p>	If you select 'Yes' in the previous field, this prompt will appear

Complete your Part B: CONTAMINATED LAND NOTIFICATION

<p>Describe the nature and extent of any contamination that is migrating from land you manage or control (as specified in this form) onto surrounding areas. What environmental elements and values may be affected by the contamination?</p> <p><i>e.g. provide a copy of current conceptual site model developed for the land, information on contamination source, whether the source is current, what action was undertaken to stop the source (e.g. leaking underground chemical storage tank and pipes were removed and replaced.) If the source was upgradient or from off-site, please include relevant information.</i></p> <p><i>Reference to relevant reports with figures/graphs/charts of levels and extent of contamination, lateral and vertical delineation.</i></p> <p><i>Reference to relevant reports with figures/sketches/maps detailing areas affected by contamination.</i></p>	
<p>Types of assessments completed</p> <p>What assessment of risks of harm have been completed, underway or are planned in relation to the notified contamination?</p>	<ul style="list-style-type: none"> • Assessment of lower explosive limits (LELs) • Basic due diligence assessment • Preliminary/detailed site investigation Tier 1 using NEPM B1 investigation levels • Targeted or site-specific ecological risk assessment • Testing reticulated drinking water supply in addition to standard assessment of groundwater use • Tier 2 site-specific human health risk assessment • Other
<p>>Other types of assessments completed</p> <p>Include further description of the works undertaken.</p>	<p>If you select 'Other' in the previous field, this prompt will appear</p>
<p>Summary of exceedances of risks of harm</p> <p>Describe the key findings on the nature of the risks of harm identified in relation to the notified contamination.</p> <p><i>e.g. several Tier 1 values exceeded – comment for land, groundwater, surface water, vapours, on and offsite. Include references to relevant reports.</i></p>	<p>Free text field</p>
<p>Implement risk controls</p>	
<p>Are there interim management actions planned or completed?</p> <p>Are there short term actions undertaken or are planned to be undertaken, to minimise the risks of harm?</p>	<ul style="list-style-type: none"> • Yes • No
<p>>Interim management actions planned or completed</p> <p>What short term actions have been undertaken or are planned to be undertaken, to minimise the risks of harm? What actions have been taken or are planned to be undertaken to address contamination that has migrated off land you manage or control?</p> <p>Please include the following:</p> <ul style="list-style-type: none"> • the element of the environment impacted by the action or contamination (e.g. soil, groundwater, surface water, vapour, NAPL, asbestos) • details of interim management actions (e.g. capping, LEL monitoring, site management plan, remediation, etc.) • whether actions are planned or completed • whether the action is on-site, off-site or both 	<p>If you select 'Yes' in the previous field, this prompt will appear</p>
<p>Are there long term management actions planned or completed?</p> <p>Are there long term actions undertaken or are planned to be undertaken, to minimise the risks of harm?</p>	<ul style="list-style-type: none"> • Yes • No
<p>>Long term management actions planned or completed</p>	<p>If you select 'Yes' in the previous field, this prompt will appear</p>

<p>What long term actions have been undertaken or are planned to be undertaken, to minimise the risks of harm? What actions have been taken or are planned to be undertaken to address contamination that has migrated off land you manage or control?</p> <p>Please include the following:</p> <ul style="list-style-type: none"> the element of the environment impacted by the action or contamination (e.g. soil, groundwater, surface water, vapour, NAPL, asbestos) details of interim management actions (e.g. capping, LEL monitoring, site management plan, remediation, etc.) whether actions are planned or completed whether the action is on-site, off-site or both 	
<p>Schedule for planned management response(s)</p> <p>What is your time-frame / schedule for planned contamination management responses?</p> <p><i>e.g. Project planning timeline and deliverables.</i></p>	Free text field
<p>Is there any additional information about non-notifiable contamination?</p>	<ul style="list-style-type: none"> Yes No
<p>>Additional information about non-notifiable contamination</p> <p>What, if any, other contaminants (that are not notifiable) are you aware of being present on or have migrated from the land? Please also specify what elements of the environment are impacted.</p> <p><i>e.g. PFAS contamination, microbiological. Provide comment for land, groundwater, surface water, vapours, on and off site as applicable. The type of sample may also be relevant to include e.g. food or biota sample.</i></p>	If you select 'Yes' in the previous field, this prompt will appear
<p>Are there any changes to the land use, ownership, etc.</p>	<ul style="list-style-type: none"> Yes No
<p>>Changes to the land use, ownership, etc.</p> <p>Are you aware of any plans to develop, sell, lease, subdivide the land? If so, what actions will you take? How will the presence of contamination be addressed in these circumstances? What is the planned timeframe for these actions? Can you provide details of the change?</p>	If you select 'Yes' in the previous field, this prompt will appear
Validation	
<p>Validation and review of risk control measures</p> <p>What steps have you taken to validate or verify the risk control measures implemented are effective? How do you propose to review and manage your risk controls into the future (if relevant)?</p> <p><i>e.g. how are you monitoring, documenting, sharing information, meeting ongoing obligations, management plans and responsibilities</i></p>	Free text field
Retaining waste soil on-site sourced from contaminated land This field will populate if you have selected this in the notification	
<p>Source of soil at the site</p> <p>Describe the setting from which the waste soil has been sourced from on-site. Please provide supporting figures detailing the locations.</p> <p><i>e.g. soil is from on-site, north-east corner, Area 26 as shown on Figure 2 of report ABC.</i></p>	Free text field
<p>Volume of soil retained</p> <p>What volume of waste soil is to be retained on site (in m³)?</p>	Free text field
<p>Assessment completed in accordance with Regulations and EPA guidance</p>	Free text field

Complete your Part B: CONTAMINATED LAND NOTIFICATION

Provide the evidence that the assessment has been undertaken on the waste soil in accordance with Regulation 62 and <i>Waste disposal categories - characteristics and thresholds</i> (publication 1828).	
Controls in place What controls are in place or proposed to manage any risks of harm associated with the waste soil?	Free text field
Identification and documentation of soil placement How can the retained waste soil be identified? How is it marked (e.g. barrier or marker layer, stored in a sign posted fenced area, etc)? What information is in place to maintain and document the retained waste soil placement (e.g. marking on title, recorded in site management plan with surveyed/GPS coordinates etc.)?	Free text field
Reporting	
List relevant assessments and reports What are the relevant assessments, documents or contamination reports (noting that any relevant documents or reports need to be provided to EPA on request)? Please include the report title, date, author – grouped by environmental element or notifiable contamination (e.g. soil, groundwater, surface water, air, vapour, etc.).	Free text field
Submitter Provide your full name	Free text field
Submitter position What role are you playing for the duty holder in this submission?	Free text field
Date of assessment What date was the assessment for this notification completed?	mm/dd/yyyy
I acknowledge by submitting this form it will overwrite any previous submissions for this notification reference number	

Attachment B2 – Drop down lists

Drop down list 1 – Key contaminating activities

Abattoir
Abrasive blasting
Airport
Asbestos production/disposal
Asphalt manufacturing
Automotive repair/engine works
Battery manufacturing/recycling
Bitumen manufacturing
Boat building and maintenance
Breweries/distilleries
Brickworks
Canal
Cement manufacture
Ceramic works
Chemical manufacturing/storage/blending
Childcare/Preschool
Coke works
Compost manufacturing
Commonwealth land
Concrete batching
Council works depot
Defence works
Docklands
Drum re-conditioning facility
Dry cleaner
Dyeworks
Electrical/electrical components manufacture
Electricity generation/power station
Electroplating
Engineering works
Explosives industry
Farming
Fibreglass reinforced plastic manufacture
Foundry
Gasworks
Glass manufacture
Hospital
Imported fill
Iron and steel works
Landfill
Lime works
Manufacturing (other)
Market garden/orchard
Metal coating
Metal smelting/refining/finishing
Mining and extractive industries

Mixed farming uses
Non-council works depot
Nursery (plants)
Pest control depots
Petroleum industry/terminal/refinery
Printworks
Prison
Public open space/recreation
Pulp or paper works
Quarry
Former quarry (filled)
Railway activities
Reservoir
Residential (high density)
Residential (low to medium density)
Salt works
School/university
Scrap metal recovery
Service station/fuel storage
Substation
Ship building/breaking yards
Shooting range or gun clubs
Spray painting works
Stockyards/stock dipping sites
Tannery (and associated trades e.g. leatherworks)
Textile manufacturer/operations
Timber preserving/treatment
Tyre manufacturing
Utility depot
Waste depot
Waste treatment/incineration/disposal
Water treatment plant
Wastewater/sewage treatment plant/septic tank
Woolscouring
Waterway (natural)
Waterway (man-made)
Commercial (other)
Industrial (other)

Drop down list 2 – Land use

Kindergarten, primary school, playground or other site with direct access to soil by children

Low-medium density residential, no habitable basement

Low-medium density residential, with habitable basement

Low-medium density residential, no information on basements

High density residential, no basement

High density residential, basement car park/storage

High density residential, with habitable basement

High density residential, no information on basements

Public open space or parkland (moderate ecological significance)

Public open space or parkland (high ecological significance)

Secondary school, tertiary education facility

Outdoor sporting grounds

Agricultural land used solely for the production of food

Agricultural land used as a place of residence and to produce food

Commercial, retail or office use

Light industrial land use

Heavy industrial land use

Construction/remediation site, not accessible by the public

Crown land used for purposes others than those listed above

Vacant land (may have waste stockpiles), not accessible by the public

Vacant land (may have waste stockpiles), accessible by the public

Drop down list 3 – Victorian Geologies

Alluvium - sediments	Olney Formation
Anderson Creek Formation	Otway Basin
Baxter Formation	Parilla Sand
Bridgewater Formation	Port Melbourne Sand
Brighton Group	Sale & Seaspray Groups
Calivil Formation	Shepparton Formation
Castlemaine Group	Silurian Siltstone
Coode Island Silts	St Arnaud Group
Coonambidgal Formation	Warak Formation
Dargile Formation	Warina Sand
Devonian Granite	Werribee Formation
Duddo Limestone	Other - Sedimentary
Fishermans Bend Silt	Other - Granite
Fyansford Formation	Other - Sandstone
Grampians Group	Other - Volcanics
Haunted Hill Formation	Other - Shale
Humevale Formation	Other - Sand
Kanmantoo Group	Other - Limestone
Moorabool Viaduct sands	Fill - Coode Island Silts
Moray Street Gravels	Fill - General
Nargoos Group	Fill - Newer Volcanics
Newer Volcanics	Fill - Sediments
Older Volcanics	

Drop down list 4 – Groundwater Segments

- Segment A1 (TDS 0-600 mg/L)
- Segment A2 (TDS 601-1,200 mg/L)
- Segment B (TDS 1,201-3,100 mg/L)
- Segment C (TDS 3,101-5,400 mg/L)
- Segment D (TDS 5,401-7,100 mg/L)
- Segment E (TDS 7,101-10,000 mg/L)
- Segment F (TDS >10,001 mg/L)

Drop down list 5 – Notification type (contaminant measures)

- Section 8(a) - Soil contamination on-site
- Section 8(b) - Soil contamination has extended off-site
- Section 10(1) - Groundwater contamination
- Section 10(2) - Surface water contamination (freshwater)
- Section 10(2) - Surface water contamination (marine water)
- Section 11(1)(a) - Vapour intrusion from soil vapour (chlorinated compounds - average sample)
- Section 11(1)(b) - Vapour intrusion from soil vapour (chlorinated compounds - individual sample)
- Section 11(1)(c) - Vapour intrusion from soil vapour (petroleum hydrocarbons - average sample)
- Section 11(1)(d) - Vapour intrusion from soil vapour (petroleum hydrocarbons - individual sample)
- Section 11(1)(e) - Vapour intrusion from soil (average sample)
- Section 11(1)(f) - Vapour intrusion from soil (individual sample)
- Section 11(1)(g) - Vapour intrusion from groundwater (average sample)
- Section 11(1)(h) - Vapour intrusion from groundwater (individual sample)
- Informational (soil)
- Informational (groundwater)
- Informational (surface water - fresh)
- Informational (surface water - marine)
- Informational (soil vapour)

Drop down list 6 – Assessment type

- | | |
|---------------------------------------|---|
| Environmental site assessment reports | Site management plans |
| Disclosures from former occupants | Clean up plans |
| Site records | Monitoring plans |
| Interim risk minimisation measures | Management response works schedule |
| Human health risk assessment | Disclosure advice provided to off-site affected parties |
| Ecological risk assessment | Other |