

Appendix 13: EPA step change summary

The spreadsheet that underpins the calculation in the table below has also been provided as supporting documentation.

Table 1 EPA step change (\$M, real December 2021)

Item	2023-24	2024-25	2025-26	2026-27	2027-28	Total
Internal resource	0.05	0.05	0.05	0.05	0.05	0.27
Preliminary investigations	0.00	0.21	0.21	0.21	0.08	0.71
Detailed Site Investigations	0.00	0.04	0.00	0.04	0.04	0.12
Annual groundwater & EMP updates	0.00	0.04	0.07	0.11	0.13	0.36
Noise testing	0.00	0.03	0.03	0.03	0.03	0.12
Sub-total	0.05	0.38	0.37	0.45	0.34	1.58
CY21 base year & trend	0.05	0.06	0.06	0.06	0.06	0.29
Opex step change	0.00	0.32	0.31	0.39	0.28	1.29

1.1 Legislative context

1.1.1 Environment Protection Act 1970

Until 1 July 2021, the Environment Protection Act 1970 (Vic) (the 1970 Act) was the primary legislation for protecting the environment in Victoria.¹ As well as establishing and providing for the operation of the Environment Protection Authority (EPA), the 1970 Act created principles governing the way pollution was to be managed. Importantly, these principles were "consequence based"²: the focus of the Act was on managing existing pollution rather than requiring businesses to take positive steps to identify and prevent and/or remediate environmental risks and hazards.

Consequently, under the 1970 Act, AusNet's risk mitigation measures focussed primarily on preventing further contamination by deciding whether to undertake remediation if contamination was identified during site-related works, or when an incident occurred that required remediation. In some instances, our knowledge of previous land use/activities on site may have warranted us undertaking soil/groundwater contamination investigations to manage corporate risk. However, the 1970 Act did not impose on us—or any other entity—an obligation to look proactively for environmental impacts. Rather, it only required a response to actual or suspected pollution where this was subject to a regulatory instrument.

1.1.2 Legislative reform and the Environment Protection Act 2017

In response to an Independent Inquiry into the EPA³, the Government announced its intention to develop new environment protection laws and invest in building a stronger and more proactive EPA that focussed on preventing harm.⁴

A key part of the Government's strategy was legislative reform. The Environment Protection Act 2017 (Vic) (EP Act) was passed in 2017. It was the first of two phases of legislative reform to overhaul the 1970 Act and replace it with

¹ Environment Protection Act 1970, section 1A(1).

² Environment Protection Authority, Victoria's New Environment Protection Law – Update from EPA Victoria. Available at https://www.youtube.com/watch?v=g8jY4_zFI3s&t=382s

³ Inquiry into the Environment Protection Authority, 31 March 2016. Available at <http://epa-inquiry.vic.gov.au/epa-inquiry-report>.

⁴ Parliament of Victoria, Parliamentary Debates (Hansard), Legislative Assembly: fifty-eight parliament, 20 June 2018, 2084.

modernised and fit-for-purpose legislation.⁵ The changes made by the EP Act focused on modernising the EPA's corporate governance.⁶

In 2018, the Parliament passed the Environment Protection Amendment Act 2018 (Vic) (Amending Act). It was the second and final tranche of legislative reform, repealing the 1970 Act and making significant amendments to the 2017 EP Act.⁷ The changes to the amended Environment Protection Act 2017 (Vic) (New EP Act) took effect on 1 July 2021.

One of the most significant changes the Amending Act made was to "establish a legislative model based on prevention of harm."⁸ As the Minister for Energy, Environment and Climate Change explained to the Parliament, the new regulatory model "focusses on preventing harm, rather than acting to clean up after a pollution incident has occurred."⁹

Figure 1: Comparison of the legislative model



Source: Environment Protection Authority, *Victoria's New Environment Protection Laws – Update from EPA Victoria*. Available at: https://www.youtube.com/watch?v=q8jY4_zFI3s&t=382s

Central to the new legislative scheme was the creation of new environmental management duties. These duties require businesses (including AusNet) to take a proactive approach to identifying and managing risks to human health and the environment associated with their activities.

The New EP Act contains five key new duties:

- A General Environmental Duty (the GED) that requires any person engaging in an activity that gives rise to risks of harm to human health or the environment from pollution or waste to understand and minimise those risks as far as reasonably practicable.¹⁰
- A duty requiring persons in management or control of contaminated land to minimise risks of harm to human health and the environment from the contamination so far as reasonably practicable (Duty to Manage).¹¹ This applies to contamination that we know or reasonably ought to have known about. The owner or tenant, or a contractor who is in control, of contaminated land will be subject to this duty.
- A duty requiring a person in management or control of land to notify the EPA of the presence of any 'prescribed notifiable contamination' (Duty to Notify).¹² This duty is triggered if the concentration of any notifiable contaminant exceeds the notifiable contamination trigger levels outlined in the Environment Protection Regulations 2021.
- A duty to take action to respond to harm caused by a pollution incident.¹³
- A duty to notify the EPA of notifiable pollution incidents.¹⁴

⁵ Environment Protection Authority, 'Reform news update: Environment Protection Act 2017 passed by Parliament', *EPA Reform* <<https://engage.vic.gov.au/reform-epa>>, accessed 25 August 2021.

⁶ *Ibid.*

⁷ The *Environment Protection Act 2017 as 2018* is referred to in the Revised Proposal as the New EP Act.

⁸ Environment Protection Amendment Bill 2018, Explanatory Memorandum, 1.

⁹ Parliament of Victoria, *Parliamentary Debates (Hansard)*, Legislative Assembly: fifty-eight parliament, 20 June 2018, 2084.

¹⁰ New section 25(1).

¹¹ New section 39(1).

¹² New section 40(1).

¹³ New section 31.

¹⁴ New section 32.

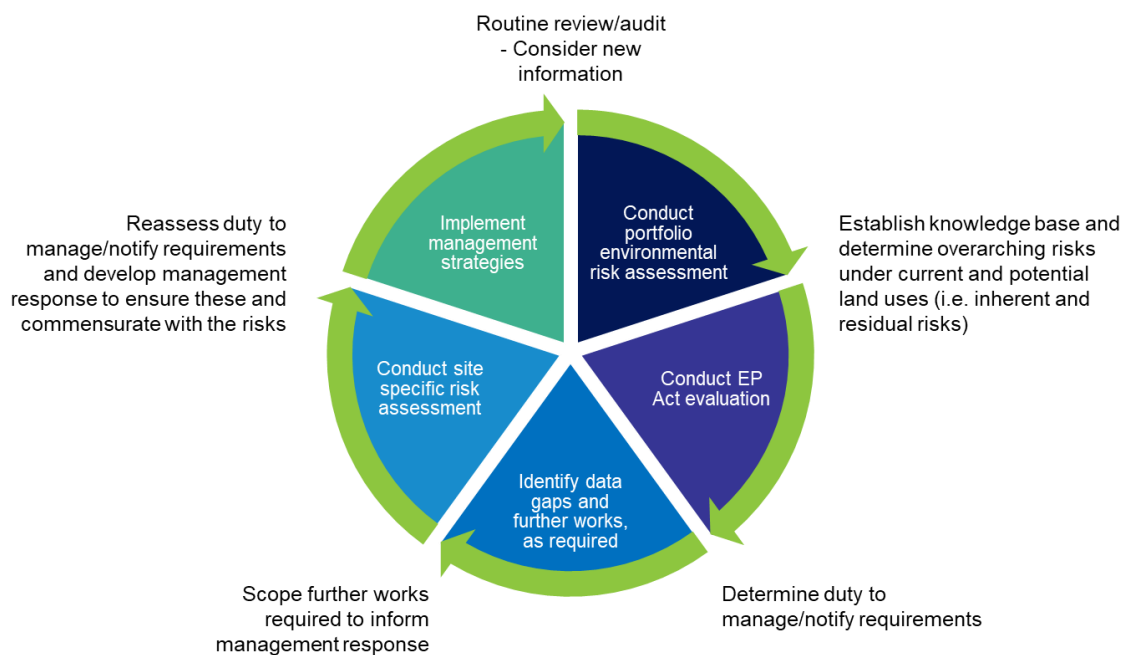
The New EP Act also contains new compliance and enforcement measures, which give the Victorian EPA the power to issue notices to investigate or take action in relation to an environmental risk or risk to human health¹⁵, site management orders,¹⁶ and non-disturbance orders.¹⁷

In practical terms, the effect of the New EP Act is that we must:

1. Have a thorough understanding of the risks of harm to human health or the environment associated with our assets and the sites that are under management or control by us.
2. Compile, review and update the body of knowledge we hold regarding the current and historic land uses, actual and suspected sources of contamination and their associated risks.
3. Put mechanisms in place to manage our GED and integrate these into our business-as-usual activities.
4. Determine which sites meet the Duty to Manage and/or Duty to Notify triggers.
5. Establish a management framework to prioritise further investigations, management and/or remedial actions and ensure we meet our environmental obligations.
6. Respond to any regulatory instruments, where required in relation to an environmental or to human health risk¹⁸, site management orders¹⁹, and non-disturbance orders²⁰.

Given the above observations, we have developed an iterative risk-based environmental management framework (Figure 2) to provide a systematic approach to identifying and discharging our obligations under the New EP Act prudently and efficiently.

Figure 2: Environmental Management Framework



1.2 EPA guidance

In preparing the cost assessment that underpins our step change, we have carefully considered the reference standards, protocols, guidelines and policies the EPA issued following the amendments to the EP Act. These documents further clarify the EPA's expectations and they have enabled AusNet to develop our approach to managing our new environmental obligations. The key documents that we have used to support this submission are:

¹⁵ New sections 273(1) and 274(1).

¹⁶ New section 275(1).

¹⁷ New section 278(1).

¹⁸ New sections 273(1) and 274(1).

¹⁹ New section 275(1).

²⁰ New section 278(1).

- Environment Protection Regulations 2021, S.R. No. 47/2021;
- Environmental Reference Standard, No. S 245, May 2021;
- Managing industrial waste – Your duties as a waste producer, EPA Victoria Publication 1990.1, July 2021;
- Waste classification assessment protocol, EPA Victoria Publication 1827.2, June 2020;
- Waste disposal categories - characteristics and thresholds, EPA Victoria Publication 1828.2, July 2020;
- Construction - Guide to preventing harm to people and the environment, EPA Victoria Publication 1820, October 2020;
- Civil construction, building and demolition guide, EPA Victoria Publication 1834, November 2020;
- Contaminated land policy, EPA Victoria Publication 1915, February 2021;
- Contaminated land: understanding section 35 of the Environment Protection Act 2017, EPA Victoria Publication 1940, February 2021;
- Guide to classifying industrial waste, EPA Victoria Publication 1968, April 2021;
- Noise limit and assessment protocol for the control of noise from commercial, industrial and trade premises and entertainment venues, EPA Victoria Publication 1826.4, May 2021;
- Assessing and controlling contaminated land risks: A guide to meeting the duty to manage for those in management or control of land, EPA Victoria Publication 1977, June 2021;
- Assessing and controlling risk: A guide for business, EPA Victoria Publication 1695.1, August 2018; and
- Notifiable contamination guideline – Duty to notify of contaminated land, EPA Victoria Publication 2008.1, June 2021.

Each of these documents is available on the EPA Victoria's website.²¹

1.3 Contaminated Land Policy

The Duty to Manage is one of the new legislative duties contained in the New EP Act. The duty applies to persons in management or control of contaminated land and requires those persons to minimise the risks of harm to human health and the environment from the contamination so far as reasonably practicable. Where actual or suspected contamination is identified, the duty requires duty holders to conduct investigations in accordance with the National Environment Protection (Assessment of Site Contamination) Measure (NEPM), implement any clean up or maintenance required, and to share information with any potential impacted third parties. Where contamination is identified above specific thresholds outlined in the Environment Protection Regulations 2021, there is a Duty to Notify the EPA of the contamination.

To evaluate risks to human health and the environment and identify sites within AusNet's management control for which the Duty to Manage applies and allow for AusNet's response to be prioritised to ensure our actions are commensurate with the risks, we have developed a new environmental management framework (Figure 2 above) including associated tools (such as the contaminated land risk assessment process). This provides an iterative approach to assessing and evaluating risks and enables both a macro (portfolio) and micro (site-specific) lens to be applied depending on the current body of knowledge. Together, these tools help AusNet to identify hazards associated with the current and historic land uses, and the associated likelihood and consequence of the impact of these hazards on human health and/or the environment. Multiple workshops with stakeholders across our business enabled us to refine the likelihood and consequence descriptors to account for a range of potential hazards, along with a range of other potential contributing factors to inform the overall risk assessment. In addition, the likelihood and consequence of contamination have been used together with the current body of knowledge to help determine the Duty to Manage and/or Duty to Notify requirements, where relevant.

In accordance with our new environmental management framework, we have identified sites that we know or reasonably ought to have known are potentially contaminated as required by the Act. The Duty to Manage applies to these sites. Where sites have not been identified as being potentially contaminated, the Duty to Manage does not apply. This is consistent with the New EP Act that does not require investigations to be undertaken where there is no suspected contamination. For such sites, the General Environmental Duty (GED) continues to apply.

²¹ <https://www.epa.vic.gov.au>

In accordance with the Duty to Manage and Duty to Notify guidelines, the Duty to Manage applies to all potential land uses whereas the Duty to Notify focusses on the current land uses. As such, our contaminated land management framework considers two key risks:

1. The Inherent Risk: That determines if there is the potential for contamination to exist. This informs whether a Duty to Manage exists; and
2. The Residual Risk: That measures the risk to the existing land users (i.e. site workers, contractors and/or delivery partners) and therefore whether further management controls are necessary and if a potential Duty to Notify exists.

In line with EPA guidance, it is not practicable to notify the EPA or potentially affected third parties in the absence of site-specific data.

The portfolio environmental risk assessment considers a Duty to Manage to be triggered when the likelihood of contamination ranges from 'possible' to 'almost certain' and the *inherent* consequence of contamination is 3 to 5. That is, the site is potentially contaminated. We have reproduced our risk matrix in **Figure 3** below and highlighted the categories that are subject to Duty to Manage requirements.

Figure 3: Risk Matrix

		Consequence				
		1	2	3	4	5
Likelihood	Almost Certain	C	C	B	A	A
	Likely	D	C	B	B	A
	Possible	E	D	C	B	A
	Unlikely	E	D	D	C	B
	Rare	E	E	D	C	C

In line with the Environmental Management Framework (Figure 2) and the Duty to Manage guidelines²², where the potential for contamination has been identified (i.e. a Duty to Manage has been triggered) further work in accordance with the National Environment Protection (Assessment of Site Contamination) Measure (NEPM) is required to confirm the presence of contamination, assess the nature and extent of any contamination identified and to adequately inform the management and/or notification requirements. These may include:

- developing site-specific or activity-based Environmental Management Plans (EMPs);
- completing Preliminary Site Investigations (PSI) and Detailed Site Investigations (DSI); and
- completing a Site-Specific Risk Assessment.

The intent of this further work is to gather the data required to adequately determine the site-specific risks, required management response and the notification requirements, where relevant.

1.4 Internal resource cost estimate

Previously, the environmental function at AusNet was performed by safety professionals who did not have specific environmental training, with very occasional support from an external consultant (a few weeks in every 4th or 5th year). In keeping with the consequence-based approach to managing pollution under the 1970 Act, the team only dealt with issues after they occurred. Due to the new prevention-based approach under the New EP Act, we must now ensure that we have a deeper understanding of the relevant environmental obligations, standards and best practice and integrate this knowledge into our BAU approach to ensure we minimise the risks of harm to human health and the environment to the extent practicable.

To ensure that the readiness and ongoing compliance with the New EP Act was achieved and maintained prior to the commencement date of 1 July 2021, we hired an Environmental Manager in September 2020. However, we require an on-going dedicated resource to maintain compliance with the New EP Act and so have included in the opex step change expenditure for the continuation of this role beyond 1 July 2021. This role is split across our three regulated networks, therefore the allocation to the gas network is 33%.

²² EPA Publication 1977.

We have estimated that the total cost of the internal resource is \$266,6670 based on the following assumptions:

- [C-I-C].
- [C-I-C].
- [C-I-C].

Table 2: Internal resource cost (\$M, real December 2021)

Item	2023-24	2024-25	2025-26	2026-27	2027-28	Total
Internal resource	0.05	0.05	0.05	0.05	0.05	0.27

1.5 Land contamination cost estimate

There are three components to our land contamination cost estimate, which are described in the following sections.

The cost estimates reflect the further work that we need to undertake in accordance with the Duty to Manage guidelines to adequately determine the risks and better inform the Duty to Notify triggers. These costs do not include additional costs that may be incurred as a result of Duty to Manage requirements e.g., remediation has not been costed as a part of this exercise.

The responses necessary to manage contaminated land could range from targeted monitoring of soil and groundwater, through to partial remediation, where contaminated soil is treated and/or removed from the site.

It is evident from the analysis in the remainder of this section that our cost estimate is based on a risk-based approach that also ensures our actions and responses are proportional to the risks involved, and therefore consistent with the efficient costs that a prudent network operator would incur in complying with its regulatory obligations or requirements.

1.5.1 Preliminary investigations

[C-I-C].

Table 3: [C-I-C].

[C-I-C].	[C-I-C].	[C-I-C].	[C-I-C].
[C-I-C].	[C-I-C].	[C-I-C].	[C-I-C].
[C-I-C].	[C-I-C].	[C-I-C].	[C-I-C].
[C-I-C].	[C-I-C].	[C-I-C].	[C-I-C].
[C-I-C].	[C-I-C].	[C-I-C].	[C-I-C].

[C-I-C].

[C-I-C].

[C-I-C].

[C-I-C].

- [C-I-C].

- [C-I-C].

Table 4: [C-I-C]

Item	2023-24	2024-25	2025-26	2026-27	2027-28	Total
[C-I-C].	[C-I-C].	[C-I-C].	[C-I-C].	[C-I-C].	[C-I-C].	[C-I-C].
[C-I-C].	[C-I-C].	[C-I-C].	[C-I-C].	[C-I-C].	[C-I-C].	[C-I-C].
[C-I-C].	[C-I-C].	[C-I-C].	[C-I-C].	[C-I-C].	[C-I-C].	[C-I-C].

[C-I-C].

[C-I-C].

Table 5: Preliminary investigations cost (\$M, real December 2021)

Item	2023-24	2024-25	2025-26	2026-27	2027-28	Total
Preliminary investigations	0.00	0.21	0.21	0.21	0.08	0.71

1.5.2 Detailed Site Investigation

As outlined above, where initial investigations confirm the presence of contamination, detailed investigations may be required to adequately determine the risks in accordance with the NEPM process to determine the nature and extent of the identified contamination and suitable management interventions (e.g. clean up or remediation).

[C-I-C].

[C-I-C].

[C-I-C].

We have adopted a risk-based approach that enables us to identify sites that are subject to the Duty to Manage requirements. We have also built up our cost estimate using appropriate and reasonable unit rates, combined with a tiered investigation approach ensuring that our response is proportional to the risk involved. In this particular situation, only a subset of the sites we have a duty to manage have been identified as requiring detailed site investigation.

Table 6: Detailed site investigations cost (\$M, real December 2021)

Item	2023-24	2024-25	2025-26	2026-27	2027-28	Total
Detailed Site Investigations	0.00	0.04	0.00	0.04	0.04	0.12

1.5.3 Groundwater and EMP updates

Following initial works, annual groundwater monitoring and/or EMP updates may be required to monitor the ongoing impacts, where present and implement mechanisms to minimise the exposure risks to the extent practicable in line with ongoing Duty to Manage requirements.

[C-I-C].

- [C-I-C].
- [C-I-C]; and
- [C-I-C].

We have adopted a risk-based approach that enables us to identify sites that are subject to the Duty to Manage requirements. We have also built up our cost estimate using appropriate and reasonable unit rates, combined with a tiered investigation approach ensuring that our response is proportional to the risk involved.

Table 7: Groundwater and EMP updates cost (\$M, real December 2021)

Item	2023-24	2024-25	2025-26	2026-27	2027-28	Total
Annual groundwater & EMP updates	0.00	0.04	0.07	0.11	0.13	0.36

1.6 Noise emissions and cost estimate

The cornerstone of the New EP Act is the general environmental duty (GED) that requires Victorians to understand and minimise their risks of harm to human health and the environment from pollution and waste, including noise. In practical terms, we are required to measure and manage the noise from our sites that are located near noise-sensitive areas.

The Environment Protection Regulations 2021 set out a noise framework for residential, commercial, industrial and trade premises, as well as entertainment venues and events. The framework defines unreasonable noise, aggravated noise, and other related concepts in relation to activities at these types of premises. In relation to commercial, industrial and trade premises and indoor and outdoor entertainment venues and events, noise levels are set to protect 'noise-sensitive areas' from unreasonable noise.

The regulations for these types of premises use the same methods to calculate noise limits as:

- The previous relevant State Environment Protection Policies (SEPPs); and
- Noise from industry in regional Victoria guideline (EPA publication 1411).

The regulatory framework also includes a new reference document called Noise limit and assessment protocol for the control of noise from commercial, industrial and trade premises and entertainment venues.²³ This 'Noise Protocol' outlines EPA's required approach to the determination of noise limits and to the measurement, prediction, and analysis of noise.

The list of what constitutes a noise-sensitive area has been increased to include additional items that were previously not included. The definitions and limits on noise emitted from industrial and commercial premises (which a gas facility is based on AusNet's legal advice) has now become an item that can attract penalties via Infringement notices (refer Section 168 – Aggravated noise), rather than only via an enforceable undertaking under the 1970 Act.

Additionally, the new legislation gives individuals legal avenues beyond the regulator (the EPA). To avoid infringement and litigation the new legislation requires businesses to undertake regular and ongoing assessment of facilities to ensure that they comply with the required limits and characteristic. [C-I-C].

The legislation has also changed such that if a noise-sensitive area is built or located near an existing facility, the existing facility owner is required to check, assess, and ensure the facility complies with the noise limits and requirements on an ongoing basis in line with a General Environmental Duty (GED). This means AusNet needs to conduct noise monitoring at priority sites (sites with noise emissions near noise-sensitive areas that are close or over the limits provided) on an ongoing basis to ensure that facilities don't exceed the requirements. [C-I-C].

[C-I-C]

- [C-I-C].
- [C-I-C].

The New EP Act will likely require AusNet to undertake significant investment to upgrade existing equipment to meet our new regulatory obligations. [C-I-C]. AusNet will

²³ EPA Victoria, Noise limit and assessment protocol for the control of noise from commercial, industrial and trade premises and entertainment venues, EPA Publication 1826.4, 20 May 2021.

continue to monitor the need for this expenditure and consider the avenues available to us under the regulatory framework to fund it, should it become necessary.

To discharge our GED obligation, we have identified sites requiring ongoing monitoring. We built up our cost estimate using an appropriate and reasonable unit rate, which was the mid-point of quoted costs.

Table 8: Noise emissions cost (\$M, real December 2021)

Item	2023-24	2024-25	2025-26	2026-27	2027-28	Total
Noise testing	0.00	0.03	0.03	0.03	0.03	0.12

1.7 Base year CY2021 actuals and trend

In 2021 calendar year, we spent \$266,667, and this is based on:

- [C-I-C].
- [C-I-C].
- [C-I-C].

The role of the Environmental Manager was to ensure that readiness and ongoing compliance with the New EPA Act is achieved and maintained prior to the commencement date of 1 July 2021.

We confirm that we did not incur any expenditure related to land contamination ongoing maintenance and management, noise monitoring and groundwater monitoring in CY2021 outside of specific works related to capital projects.

The table below also includes the trend parameter.

Table 9: Base year 2021 calendar year actuals and trend (\$M, real December 2021)

Item	2023-24	2024-25	2025-26	2026-27	2027-28	Total
CY21 base year and trend	0.05	0.06	0.06	0.06	0.06	0.29