Our Ref: MA006794

Mr Nick Wimbush
Advisory Committee Chair
Major Hazard Facilities Advisory Committee
planning.panels@delwp.vic.gov.au

Dear Mr Wimbush

Submission to the Major Hazard Facilities Advisory Committee

Thank you for your letter of 22 December 2015 regarding the release of the Major Hazard Facilities Advisory Committee discussion paper. The Environment Protection Authority Victoria (EPA) welcomes the opportunity to provide a submission.

This submission supplements EPA’s initial comments dated 16 November 2015 (submission 20), which summarised EPA’s:

- role in relation to Major Hazard Facilities (MHFs)
- view that there is need for improvement to land use planning for areas that interface with industrial operations with the potential for offsite impacts, including MHFs
- current relevant guidance and statutory policies under the Environment Protection Act 1970 (EP Act)
- current project focused on better managing residential encroachment on industries that require an EPA licence or works approval (Encroachment Project), which has since progressed.

Our comments in the attachment below provide further detail on EPA’s role and challenges in regulating MHFs, and respond to the thought starters in the discussion paper relevant to EPA. Of these, EPA most strongly supports:

1. a new overlay to control both use and development within industrial buffers
2. amendments to (or a more detailed review of) clause 52.10 to improve its operation and integration with environmental regulation
3. strengthening the provisions on identifying and protecting buffers in the State Planning Policy Framework.

For further discussion about EPA’s comments, please contact Dan Keely, Manager – Policy & Regulation on 9695 2606 or Dan.Keely@epa.vic.gov.au

EPA looks forward to participating in the next steps of the Advisory Committee’s process.

Yours sincerely

NIAL FINEGAN
CHIEF EXECUTIVE OFFICER
ENVIRONMENT PROTECTION AUTHORITY VICTORIA

5/2/2016
Attachment – Submission to the Major Hazard Facilities Advisory Committee

EPA’s submission comprises two parts:
- Part A, which provides the Advisory Committee with additional contextual information regarding EPA’s role in regulating MHFs
- Part B, which responds directly to the thought starters in the discussion paper of most relevance to EPA.

Part A – Context: EPA’s regulation of MHFs

**MHFs licensed by EPA**

Of the 37 MHFs currently licensed by WorkSafe, 24 are also licensed by EPA to manage their discharges to the environment. A full list of the MHFs licensed by EPA is set out in Appendix A.

Those sites require EPA licences because they are ‘scheduled premises’ as defined in the *Environment Protection (Scheduled Premises and Exemptions) Regulations 2007*.

The MHFs licensed by EPA fall within the following categories of scheduled premises:

- A01 Prescribed Industrial Waste Management
- A04 Industrial Wastewater Treatment
- F03 Paper Pulp Mills
- G01 Chemical Works
- G03 Oil and Gas Refining
- G04 Bulk Storage
- G05 Container Washing.

The licences predominantly allow for discharges of waste to air, subject to conditions. Several allow for discharges of treated wastewater and stormwater, and the acceptance, treatment and disposal of certain wastes.

The licences further contain conditions related to amenity, including that:

- Offensive odours must not be discharged beyond the boundaries of the premises.
- Unacceptable noise (including vibration) must not be emitted beyond the boundaries of the premises.

The MHFs licensed by EPA represent a small proportion of the approximately 670 sites licensed by EPA in total.

**EPA’s assessment of major industries, including MHFs**

EPA has recently established a dedicated major industries team working with Victoria’s largest and most complex industrial sites. This includes the MHFs both licensed and not licensed by EPA.

Major industry assessments include an audit-based review of each site’s Environmental Management System, focused on potential environmental risks and controls. Each site is issued with a report that evaluates how well it has identified environmental risks, to what extent these are managed, and opportunities for improvement.
For MHFs, there are often synergies between environmental and safety risks and controls. EPA and WorkSafe work together to:

- understand the risk profile of each MHF
- communicate risks to MHF operators
- ensure MHF operators adopt best practice technology and management measures and undertake continuous improvement to reduce their impacts
- ensure the hazards at each site are controlled through preventative and response measures to reduce the risk of incidents arising and minimise the environmental impact of any incidents that could occur, while avoiding the duplication of controls.

**Challenges faced by EPA in managing MHF interfaces**

EPA has a statutory duty to regulate the offsite impacts of industry, including MHFs. The consequences of those impacts depend in large part on how the land surrounding industry is used and developed, which is regulated primarily through the planning system. EPA fully supports strengthening the planning system to minimise the likelihood of future impacts on amenity and the environment.

EPA recognises that, in the context of buffer protection, the planning system offers mainly preventative tools. These are less effective at protecting existing residents whose dwellings are already in close proximity to industrial sites and who may be suffering adverse impacts as a result. EPA will continue to regulate industry using EPA’s powers in the EP Act to address those impacts, regardless of the particular planning provisions that apply. Environmental justice requires ensuring that health and amenity impacts do not fall disproportionately on communities in these legacy situations.

EPA considers the environment protection system and planning system to have complementary roles to play in protecting both existing and future communities.

**Part B – EPA’s responses to the thought starters in the discussion paper**

**Land use planning around MHFs and other industries with offsite impacts [thought starters 1 and 2]**

EPA considers that amendments to the planning system could improve the protection of areas surrounding both MHFs and other industries with the potential for offsite impacts.

As noted in EPA’s initial comments, EPA’s Encroachment Project involved identifying and evaluating various options within the Victoria Planning Provisions (VPPs) to achieve this. The resulting options paper, at Appendix B to this submission, addresses many of the ‘thought starters’ in the discussion paper.

The EPA options paper does not make recommendations for particular changes. For the purposes of assisting the Advisory Committee, EPA’s preferred options are set out below.
**Policies** [thought starters 10, 12 and 27]

The discussion paper focuses on the lack of a specific MHF policy at State level, noting that State planning policy 'does reflect on land use conflict' more generally.

EPA acknowledges there are buffer-related provisions in the State Planning Policy Framework (SPPF), but is concerned these are fragmented across various policies and predominantly located in the industrial policies in clause 17 (Economic development), where they risk being overlooked for proposals (such as for dwellings) that happen to be in proximity to industrial sites.

EPA submits that the buffer provisions in the SPPF should be strengthened and better linked or consolidated to improve their visibility to planners. Table 1 in the EPA options paper identifies a number of ways in which this could be achieved.

EPA considers it appropriate to deal with the issue of buffer protection primarily at State level, as the same principles apply regardless of the municipality involved. Local planning policies should be used to apply State policies to local contexts and provide further detail as required by specific circumstances.

**Zones and overlays** [thought starters 14, 17, 18, 19]

The discussion paper states that 'zones applied to areas outside of MHF do not provide for hazards and risk to be considered'. This is equally true of zones surrounding other industries with offsite impacts.

EPA's options paper considers how existing zones in the VPPs or potential new or modified zones could be applied to industrial buffers. However, for most scenarios, particularly in more established, non-greenfields areas, EPA considers overlays to offer a more appropriate planning tool to achieve buffer protection.

As noted in the Department of Environment, Land, Water and Planning's guide *Using Victoria's Planning System*, 'Generally, overlays apply to a single issue or related set of issues (such as heritage, an environmental concern or flooding)'. Accordingly, an overlay appears more apt for application to a buffer than a zone, which typically specifies broader purposes for land, such as business, industrial or residential.

Table 3 in the EPA options paper evaluates the Environmental Significance Overlay and the Design and Development Overlay, both considered in the discussion paper, as well as a potential new overlay based on the Airport Environ Overlay and Melbourne Airport Environs Overlay. As the discussion paper notes, the latter provide examples of overlays that control both land use and development.

EPA would support the development of a new overlay to assist with managing the offsite risks presented by a range of industries, including fire or explosion from a major incident at a MHF, but also environmental, health and amenity impacts, such as from waste and resource recovery facilities. EPA agrees that such an overlay could:

* identify the extent of the separation distance required

---

• control both use and development within that separation distance
• allow for multiple schedules to manage different risks (for example, the inner and outer planning advisory areas for MHFs).

If the Advisory Committee sees merit in recommending such an overlay for MHF buffers, EPA respectfully requests the Advisory Committee consider its potential for broader application to other industrial sites with the risk of offsite impacts, in line with paragraph 5(b) of the Terms of Reference.

The Advisory Committee will be aware that the Animal Industries Advisory Committee has also been seeking submissions on planning tools to better define and protect buffers for animal industry operations. EPA is making a consistent submission to that Advisory Committee in favour of recommending an overlay that could be developed to apply to the buffers of a range of industries with offsite impacts.

**Clause 52.10 and referrals [thought starters 21, 22, 23, 24, 26 and 31]**

EPA's initial comments outlined the types of planning permit applications for which EPA is a determining referral authority. As noted in the discussion paper, this does not include planning permit applications for sites in proximity to MHFs or other industries with the potential for offsite impacts.

EPA considers there to be a gap in the current planning framework: there is no provision in the VPPs to ensure a responsible authority considers existing buffers and accounts for the environmental, health and safety risks posed by nearby industry in its assessment.

However, it does not follow that EPA seeks to be made a determining referral authority for all applications submitted within the threshold distances specified in clause 52.10. EPA acknowledges the guidance in Planning Practice Note 54 – Referral and Notice Provisions on when this designation is appropriate in comparison to recommending referral authority or notice requirements.

Rather, EPA submits that, in the majority of situations, the following changes would ensure responsible authority decisions are appropriately informed by environmental risks:

• application of a newly developed overlay (discussed above), which:
  - identifies the extent of existing buffers on planning maps
  - triggers permit requirements for use and development within buffers as required by local conditions
  - contains appropriate decision guidelines, including the requirement to consider other relevant documents, such as EPA and WorkSafe guidelines

• provision of a Planning Practice Note for interface planning between industry and sensitive uses that incorporates, or refers to and integrates with, EPA and WorkSafe guidance.

EPA would additionally support a review of clause 52.10 (discussed in more detail in Table 4 in the EPA options paper) to:

• clarify the specific risks it addresses
• more fully cover the sensitive uses requiring protection from those risks
• achieve consistency with current EPA guidance (or clarify the reason for appropriate discrepancies)
• clarify the meaning of ‘threshold distance’ and the link to the clause 66 referral requirements
• require applications to be accompanied by information typically required by EPA and WorkSafe to properly assess the risk posed by an application
• expand the referral trigger in clause 66 to require certain applications for development for a purpose listed in clause 52.10 to be referred to EPA, as applications where the area of buildings and works would increase by more than 25 per cent are referred to WorkSafe.

**EPA’s guideline on separation distances [thought starters 25 and 26]**

As noted in the discussion paper, EPA’s Recommended Separation Distances for Industrial Residual Air Emissions – Guideline (EPA Publication 1518) was published in 2013. Although the discussion paper states it is a reference document to clause 13.04-2, it is in fact the 1990 predecessor to this guideline, Recommended Buffer Distances for Industrial Residual Air Emissions (AQ 2/86), that is referred to in the SPPF. 

Despite its relatively recent publication, EPA is open to reviewing this guideline concurrently with, or in response to, a review of clause 52.10 to ensure:

• effective integration and consistency between EPA guidance and the VPPs, especially clause 52.10

• confidence that all recommended distances and methodologies for their variation have a sound technical basis.

**Agent of change [thought starter 29]**

The discussion paper describes the ‘agent of change’ principle as requiring the encroaching sensitive use ‘to take design or other measures to ensure risks are managed to an acceptable level’ and states that this principle is used in EPA’s Recommended Separation Distances for Industrial Residual Air Emissions – Guideline (EPA Publication 1518).

The guideline indeed adopts this principle, but in relation to determining who is responsible for demonstrating that a change from the recommended separation distance is appropriate. This is an important distinction.

The way the principle is described in the discussion paper reflects how it is used in clause 52.43 (Live music and entertainment noise). EPA notes this is a relatively new policy in the VPPs and its implications may not yet be fully understood, such as the consequential changes required to the statutory requirements in the State Environment Protection Policy (Control of Music Noise from Public Premises) No. N-2.

When taking the live music provision as a precedent, EPA recommends that the Advisory Committee have regard to the distinctions between:

---

2 EPA advised the SPPF Review Advisory Committee of this and the need to update other references to EPA guidance and statutory policies under the Environment Protection Act 1970 in response to the Foundation Draft, Interim Draft and Integration Draft produced by that Committee during 2013 and 2014.
• the ability to attenuate different types of risk (such as noise and air emissions) through design, construction and other measures, as opposed to using separation distances to allow any emissions to dissipate

• the magnitude of risk consequence for noise emissions and other environmental and safety risks, from annoyance through to fatality.

**Sensitive uses** [thought starter 30]

EPA notes the term 'sensitive use' is used in various contexts with different meanings. While EPA acknowledges the attraction of adopting a standard definition, EPA considers there to be substantive reasons for the current differences. For instance, the definition of 'sensitive use' in:

• *Ministerial Direction No. 1 – Potentially Contaminated Land* is focused on the risk of contaminated land and therefore considers the types of land uses where contact with land is most likely, such as dwellings with gardens and facilities for young children, who are more likely to play in and potentially ingest soil

• EPA's *Recommended Separation Distances for Industrial Residual Air Emissions – Guideline* (EPA Publication 1518) is focused on the risk of odour and dust emissions and therefore considers the types of land uses where amenity should be prioritised, such as dwellings and schools

• EPA's *Best Practice Environmental Management: Siting, Design, Operation and Rehabilitation of Landfills* (EPA Publication 788.3) is focused on the risk of landfill gas migration and therefore deems any building or structure, regardless of its 'use' to be sensitive, because of the risk that gas will accumulate and lead to explosion or asphyxiation.

EPA supports the intention of clarifying the meanings of 'sensitive use', streamlining these where possible and locating them within clause 72 of the VPPs where they are most easily locatable by planners. However, EPA cautions that any such changes carefully consider the particular risks involved and associated statutory policies under the *Environment Protection Act 1970*.

Alternatively, it may reduce confusion to assign unique terms to the various types of uses that are currently all defined as 'sensitive uses'.
Appendix A – list of MHFs licensed by EPA

<table>
<thead>
<tr>
<th>Licence holder</th>
<th>Premises</th>
<th>EPA licence no.*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Australian Vinyls Corp Limited</td>
<td>65 Leakes Rd, Laverton North</td>
<td>11348</td>
</tr>
<tr>
<td>BHP Billiton Petroleum Pty Ltd</td>
<td>192 Brumbys Rd, Port Campbell</td>
<td>2755</td>
</tr>
<tr>
<td>Caltex Australia Petroleum Pty Ltd</td>
<td>411 Douglas Pde, Newport</td>
<td>2678</td>
</tr>
<tr>
<td>Dow Chemical (Australia) Pty Ltd</td>
<td>541-583 Kororoit Creek Rd, Altona</td>
<td>10896</td>
</tr>
<tr>
<td>Esso Australia Pty Ltd</td>
<td>Cemetery Rd, Hastings</td>
<td>2613</td>
</tr>
<tr>
<td>Esso Australia Pty Ltd</td>
<td>Garretts Rd, Longford</td>
<td>11327</td>
</tr>
<tr>
<td>FBT-Transwest Pty Ltd</td>
<td>1-5 Amanda Rd, Tottenham</td>
<td>11611</td>
</tr>
<tr>
<td>Mobil Oil Australia Pty Ltd</td>
<td>29 Francis St, Spotwood</td>
<td>26788</td>
</tr>
<tr>
<td>Mobil Refining Australia Pty Ltd</td>
<td>351-381 Millers Rd, Altona</td>
<td>74281 (amalgamated)</td>
</tr>
<tr>
<td>Mobil Refining Australia Pty Ltd</td>
<td>Gellibrand Pier, Williamstown</td>
<td>74281 (amalgamated)</td>
</tr>
<tr>
<td>Hexion Pty Ltd</td>
<td>765 Ballarat Rd, Deer Park</td>
<td>82164</td>
</tr>
<tr>
<td>Nufarm Australia Limited</td>
<td>87-105 Pipe Rd, Laverton North</td>
<td>620</td>
</tr>
<tr>
<td>Ixom Operations Pty Ltd</td>
<td>166-180 Dohertys Rd, Laverton North</td>
<td>2730</td>
</tr>
<tr>
<td>Origin Energy Resources Limited</td>
<td>5775 South Gippsland Hwy, Lang Lang</td>
<td>2797</td>
</tr>
<tr>
<td>Origin Energy Resources Limited</td>
<td>305 Waarre Rd, Port Campbell</td>
<td>2858</td>
</tr>
<tr>
<td>Paper Australia Pty Ltd</td>
<td>Traralgon West Rd, Morwell</td>
<td>46547</td>
</tr>
<tr>
<td>Qenos Pty Ltd</td>
<td>471-513 Kororoit Creek Rd, Altona</td>
<td>EM31466</td>
</tr>
<tr>
<td>Viva Energy Australia Ltd</td>
<td>39-81 Burleigh St, Spotwood</td>
<td>3674</td>
</tr>
<tr>
<td>Viva Energy Refining Pty Ltd</td>
<td>80 Refinery Rd, Corio</td>
<td>46555</td>
</tr>
<tr>
<td>Stolthaven Coode Island Pty Ltd</td>
<td>42-52 Mackenzie Rd, West Melbourne</td>
<td>11578</td>
</tr>
<tr>
<td>Terminals Pty Ltd</td>
<td>40 Wharf Rd, Corio</td>
<td>16136</td>
</tr>
<tr>
<td>Terminals Pty Ltd</td>
<td>54-62 Mackenzie Rd, West Melbourne</td>
<td>11058</td>
</tr>
<tr>
<td>Toll North Pty Ltd</td>
<td>180 Fitzgerald Rd, Laverton North</td>
<td>9844</td>
</tr>
<tr>
<td>United Terminals Pty Ltd</td>
<td>5 Barclay Cr, Hastings</td>
<td>3205</td>
</tr>
</tbody>
</table>

1. Introduction

1.1. Purpose

The Environment Protection Authority Victoria (EPA) is often involved in responding to impacts on residents from industrial facilities that have been caused or exacerbated by land use conflicts.

This paper has been prepared as part of an EPA project to develop a more strategic and preventative approach to using EPA's environmental specialist expertise to avoid these situations arising.

The purpose of this paper is to identify and evaluate options for improving the management of residential encroachment on industry through the planning system. This includes both existing and potential new options.

This paper does not make recommendations on preferred options, other than identifying their strengths and weaknesses. It is intended as a basis for further work that can be used by the EPA and other interested organisations.

1.2. Scope

This paper addresses the situation where residential development is allowed too close to industry and residents are unreasonably affected by odour, dust and noise. Although the focus is on residential use, the issues and options identified in this paper may apply equally to other sensitive uses.

This paper does not address other risks posed by some industrial facilities, such as from landfill gas or the storage, handling or processing of hazardous chemicals and dangerous goods. However, a number of the issues and options identified may have broader relevance and application.

The focus of this paper is on industries that require an EPA licence or works approval. Other land uses that emit odour, dust and noise, for instance transport-related uses, fall outside its direct scope.

This paper concentrates on tools for managing encroachment that are, or could be built into, the Victoria Planning Provisions (VPPs). EPA acknowledges there are other planning and non-planning tools outside the VPPs for managing the offsite impacts of industry, but they are not the focus of this paper. The EPA project is additionally looking at EPA's guidance and capacity to support planners with interface area planning.

1.3. Acknowledgements

In preparing this options paper, EPA has been assisted by ideas and feedback from the project's external steering group, whose members have generously shared their skills, knowledge and experience with EPA in a collaborative effort to address this problem. See Appendix 1 for more information and details of the external steering group members.

2. Separation distances in environmental protection

2.1. Protecting human health and amenity

Separation distances are used to keep apart different land uses with the potential to adversely impact each other. From the perspective of environmental protection, those adverse impacts are to the health and amenity of people in areas surrounding industrial operations through air emissions such as odour, dust and noise.

The distinction between health and amenity is rarely clear. For instance, noise is often discussed by government and business in terms of annoyance and classified as an amenity issue 'only'. However, studies show noise impacts also inflict a heavy health burden, including increased risk of cardiovascular disease, tinnitus and high sleep disturbance.2

EPA's 2015-16 Annual Plan states that 'Our ongoing commitment to clean air, healthy water, safe land and minimal disturbance from noise and odour are critical to achieving our vision for a healthy environment that supports a liveable and prosperous Victoria'.

2.2. Protecting industry

Impacts from industrial facilities on nearby residents can also constrain the full operation and expansion ability of those industries. This includes industries that provide essential community infrastructure and services, such as wastewater treatment plants and waste and resource recovery facilities. For many of these sites, the costs associated with encroachment, such as the need to implement mitigation measures, restrict operating hours or relocate, are borne by the public.3

---

1 As Victoria's environmental regulator, EPA's priority is always to reduce the offsite impacts of industry.
2 For example, *Burden of disease from environmental noise: Quantification of healthy life years lost in Europe* (World Health Organisation, 2011) identified environmental noise as the second largest environmental health risk in Western Europe, with 1 million healthy life years lost every year from traffic-related noise alone in western Europe.
3 For example, water services are provided by water corporations. The shareholder for these corporations is the Victorian Government.
2.3. Statutory policy

State Environment Protection Policies (SEPPs) declared under the Environment Protection Act 1970 (EP Act) set Victoria’s environmental quality objectives and standards. Particularly relevant are:

- State Environment Protection Policy (Air Quality Management) (SEPP (AQM))
- State Environment Protection Policy (Control of Noise from Commerce, Industry and Trade) No. N-1 (SEPP N-1)\(^4\)

**SEPP (AQM)**

SEPP (AQM) establishes the statutory framework for managing emissions into the air environment in Victoria. It sets out design criteria for the purpose of assessing proposals that will produce air emissions. The design criteria for general odour is 1 odour unit, which is the odour detection threshold in laboratory conditions. This means proposals for premises that emit odour are generally required to show that odour will not be detectable at and beyond the property boundary. The SEPP further prescribes how to model emissions to air to estimate the impact of a proposal.

SEPP (AQM) primarily places obligations on generators of emissions. It does not set separation distances or address the issue of encroaching sensitive uses, although it allows for EPA to develop a protocol for environmental management on separation distances.\(^5\) It further specifies that the provision of a separation distance for a development is not permitted as an alternative to meeting the emissions management requirements.

**Noise SEPPs**

The two noise SEPPs aim to protect beneficial uses (such as sleep) by setting limits on noise at locations where the beneficial use occurs (such as dwellings). This may be contrasted with SEPP (AQM), where the relevant point of measurement is at the boundary of the premises. It is the legal responsibility of noise emitters (such as industry or music venues) to limit their noise to comply with the noise SEPPs.

Noise sensitive encroachment can occur when premises that previously complied with noise SEPP requirements become non-compliant as a result of the introduction of new nearby sensitive uses or rezoning of land that reduces the noise limits that apply to the premises.

Noise sensitive encroachment can be managed through planning by not allowing sensitive uses to be built on land where noise levels exceed the SEPP limits, or by implementing design solutions to manage noise. The noise SEPPs set out detailed requirements for assessing noise, such as the requirement for noise to be assessed outside a noise sensitive building, which can limit the design options available to manage noise impacts.\(^6\)

The noise SEPPs are currently under review. The review is considering the interaction between the noise SEPPs and the planning system, including the issue of encroachment.\(^7\)

2.4. EPA’s guidance on separation distances

Sitting below the statutory policies, EPA has three publications that recommend particular separation distances:

- a guideline on *Recommended Separation Distances for Industrial Residual Air Emissions* (EPA Publication 1518, 2013) (Separation Distance Guideline)
- a best practice environmental management publication on *Siting, Design, Operation and Rehabilitation of Landfills* (EPA Publication 786.3, 2015) (Landfill BPEM)
- a guideline on *Designing, Constructing and Operating Composting Facilities* (EPA Publication 1588, 2015) (Composting Guideline).

Unlike SEPPs, these publications are not statutory instruments, although the Landfill BPEM is an incorporated document under the statutory Waste Management Policy (Siting, Design and Management of Landfills), which gives legal force to a number of its objectives and recommendations.\(^8\)

**Separation Distance Guideline**

The Separation Distance Guideline is EPA’s primary publication on the separation of industrial and sensitive uses. In terms of environmental impacts, the guideline specifically addresses odour and dust emissions (and does not consider noise, vibration, ambient or hazardous air pollutants).

---

\(^4\) SEPP N-1 applies only in metropolitan Melbourne. Commercial and industrial noise outside metropolitan Melbourne is covered by the EPA guideline *Noise from industry in regional Victoria* (NIRV) (EPA Publication 1411, 2011).

\(^5\) EPA developed a guideline rather than a protocol on separation distances, which is discussed below.

\(^6\) There are several reasons why noise is required to be measured outside, outlined in the *Review of Victoria’s State Environment Protection Policies for Noise* (EPA Publication 1570, 2014).


\(^8\) For example, clause 11(3) of the Waste Management Policy (Siting, Design and Management of Landfills) requires planning permit decisions in relation to existing or proposed landfill sites to be consistent with the Landfill BPEM.
The Separation Distance Guideline defines ‘sensitive land use’ as:

Any land uses which require a particular focus on protecting the beneficial uses of the air environment relating to human health and wellbeing, local amenity and aesthetic enjoyment, for example residential premises, child care centres, pre-schools, primary schools, education centres or informal outdoor recreation sites.

The recommended separation distances assume good pollution control technology and practice at the industrial site, but account for the risk of unintended emissions, for instance due to equipment failure, accidents or abnormal weather events. The distances specified are intended to allow industrial residual air emissions to dissipate without adverse impacts on nearby sensitive land uses. They do not provide a guarantee that there will be no impact, but offer a tool to manage that risk. As stated in SEPP (AQM), separation distances must not be considered as an alternative to control of emissions at their source or for the management of emissions under normal and foreseen circumstances.

The distances specified are recommended minimums based on EPA’s previous experience of the impacts from different types of industrial activities. Those recommendations can be varied as appropriate to account for site-specific operations and conditions. The Separation Distance Guideline outlines site-specific variation considerations and recommends modelling to justify variation from the default distances.

**Landfill BPEM**

The Landfill BPEM provides guidance to planning and responsible authorities on separation distances for operating and closed landfills and specifically addresses the risks of encroachment.9 The separation distances recommended in the Landfill BPEM principally account for the risk of odour (of most concern during landfill operation) and landfill gas impacts.

**Composting Guideline**

The Composting Guideline provides advice on separation distances for new composting facilities, which can also be used by planning and responsible authorities when considering potential land use changes near existing compost facilities.10 The separation distances specifically address the risk of odour impacts.

### 2.5. EPA’s role in planning

In addition to setting environmental standards through statutory policy and publishing guidance, EPA provides advice about environmental risks to responsible and planning authorities under the Planning and Environment Act 1987 (P&E Act). This advice frequently concerns the appropriate distance required between industrial and sensitive uses to prevent or mitigate future environmental impacts.

Most significantly with respect to encroachment, under the planning framework, EPA:

- is a referral authority under section 55 of the P&E Act and clause 66 of the VPPs for planning permit applications for:
  - any use or development requiring a works approval, licence or licence amendment under the EP Act
  - any use listed in the table to clause 52.10 of the VPPs shown with a Note 1 or if the threshold distance specified in that clause is not met
- provides advice on the environmental risks of a broader range of planning permit applications, in response to notice of planning permit applications under section 52 of the P&E Act
- works with planning authorities on strategic planning, including through advice on appropriate separation distances between industrial and sensitive uses.

When EPA is asked to advise on the separation distance required between an industrial and sensitive use, EPA’s response is guided by the Separation Distance Guideline, the SEPPs, other EPA publications and previous experience.

### 3. Separation distances in the planning framework

Land use interfaces and the separation of conflicting uses is a central issue in planning. The importance of this issue was described as follows by the Victorian Civil and Administrative Tribunal (VCAT) in Holder v Cardinia SC11:

One of the fundamental purposes of town and country planning is to avoid incompatible land uses in close proximity to each other. A common example is where houses exist close to industry where residents will have complaints about the affect of industry on their residential amenity and the industrial users will have complaints about the affect of the presence of houses close by. For example, residents might have legitimate complaints about noises, smells, appearance, the coming and going of traffic and other ills. On the other hand, industrial users can be irked by the necessity to consider the convenience and amenity of nearby residential neighbours, and by the constraints this can impose on their otherwise legitimate industrial activities. Modern planning seeks to separate incompatible, or potentially incompatible, activities so that each can go about their affairs without undue burdens. This can give rise, in modern planning, to the imposition of buffer separations, or planning to have intervening activities compatible with both.

Separation distances and the issue of encroachment are addressed in various planning provisions required to be considered in

---

9 See sections 5.1.5, 8.2.1 and 8.2.2 of the Landfill BPEM.
10 See section 4 of the Composting Guideline.
11 [2005] VCAT 1838, paragraph 9 (Senior Member Byard).
strategic and statutory decision making.

The sections below explore the different ways in which the planning system currently manages residential encroachment on industry, consider a number of issues with the current framework and identify potential options for improvement. The focus is on state-wide provisions in the VPPs, namely:

- the State Planning Policy Framework (section 4)
- zones (section 5)
- overlays (section 5)
- clause 52.10, and the referral and notice provisions for planning permit applications (section 7).

4. State Planning Policy Framework

4.1. Current provisions

The State Planning Policy Framework (SPPF) articulates a number of policies relevant to encroachment in:

- clause 11 (Settlement)
- clause 13 (Environmental Risks)
- clause 17 (Economic Development)
- clause 19 (Infrastructure).

Clause 11 – Settlement

Clause 11 states that ‘Planning is to prevent environmental problems created by siting incompatible land uses close together’.

The statewide objectives and strategies that follow within clause 11 do not address this principle directly. However, they do contain direction for its consideration in structure planning. To this effect, clause 11.02-3 (Structure planning) includes a strategy to ‘Develop Growth Area Framework Plans that will ... Identify appropriate uses for areas described as constrained, including quarry buffers’.

Clause 11 further contains a number of policies reflecting Regional Growth Plans for particular regions. Broadly, clause 11.05-4 (Regional planning strategies and principles) includes as a strategy ‘Ensuring that the capacity of major infrastructure (including highways, railways, airports, ports, communications networks and energy generation and distribution systems) is not affected adversely by urban development in adjacent areas’.

More specifically:

- clause 11.06 (Central Highlands regional growth) at clause 11.06-2 (A diversified economy) includes the strategy ‘Provide and protect buffer areas for industry from the encroachment of sensitive uses’
- clause 11.09 (Great South Coast regional growth) at clause 11.09-9 (Integrated planning) includes the strategy ‘Protect industrial activity from sensitive land uses’
- clause 11.10 (Hume regional growth):
  - at clause 11.10-1 (A diversified economy) includes the strategy ‘Maintain and protect buffers around mining and quarrying activities to manage potential land use conflicts’
  - at clause 11.10-4 (Infrastructure) includes the strategy ‘Provide for appropriate settlement buffers around sewerage treatment areas, solid waste management and resource recovery facilities and industrial areas to minimise potential impacts on the environment such as noise and odour’
- clause 11.12 (Loddon Mallee South regional growth):
  - at clause 11.12-3 (A diversified economy) includes the strategy ‘Maintain and develop buffers around mining and quarrying activities’
  - at clause 11.12-4 (Infrastructure) includes the strategy ‘Minimise the impact of urban development on the current and future operation of major infrastructure of national, state and regional significance, including highways, railways, airports, communication networks and energy generation and distribution systems’.

Clause 13 – Environmental Risks

Clause 13 focuses on environmental risks, starting with the principle:

Planning should adopt a best practice environmental management and risk management approach which aims to avoid or minimise environmental degradation and hazards. Planning should identify and manage the potential for the environment, and environmental changes, to impact upon the economic, environmental or social well-being of society.

Clause 13.04 (Noise and air) is of particular relevance.

The objective of clause 13.04-1 (Noise abatement) is ‘To assist the control of noise effects on sensitive land uses’. Its accompanying strategy acknowledges the dual importance of separation distances:
Ensure that development is not prejudiced and community amenity is not reduced by noise emissions, including a range of building design, urban design and land use separation techniques as appropriate to the land use functions and character of the area.

The policy guidelines for clause 13.04-1 include the noise SEPPs and the predecessor guideline to NIRV.

The objective of clause 13.04-2 (Air quality) is 'To assist the protection and improvement of air quality'. Its accompanying strategies include 'Ensure, wherever possible, that there is suitable separation between land uses to reduce amenity and sensitive land uses'. Its policy guidelines are SEPP (AQM) and the predecessor guideline to the Separation Distance Guideline.

**Clause 17 – Economic Development**

Clause 17 sets the goals for economic development in Victoria and recognises the importance to the economic well-being of communities and the State of resolving land use conflicts. Clause 17.02 (Industry) is of particular relevance.

Clause 17.02-1 (Industrial land development) has the objective 'To ensure availability of land for industry' and supporting strategies, which include:

- 'Identify land for industrial development for urban growth areas where...Appropriate buffer areas can be provided between the proposed industrial land and nearby sensitive land uses.'
- 'Protect and carefully plan existing industrial areas to, where possible, facilitate further industrial development.'
- 'Provide an adequate supply of industrial land in appropriate locations including sufficient stocks of large sites for strategic investment.'
- 'Protect industrial activity in industrial zones from the encroachment of unplanned commercial, residential and other sensitive uses which would adversely affect industry viability.'
- 'Avoid approving non-industrial land uses, which will prejudice the availability of land for future industrial requirements, in identified industrial areas.'

Clause 17.02-2 (Design of industrial development) includes the following further relevant strategies:

- 'Ensure that industrial activities requiring substantial threshold distances are located in the core of industrial areas.'
- 'Encourage activities with minimal threshold requirements to locate towards the perimeter of the industrial area.'
- 'Minimise inter-industry conflict and encourage like industries to locate within the same area.'
- 'Provide adequate separation and buffer areas between sensitive uses and offensive or dangerous industries and quarries to ensure that residents are not affected by adverse environmental effects, nuisance or exposure to hazards.'

Both clauses 17.02-1 and 17.02-2 cite the predecessor to the Separation Distance Guideline as a policy guideline.

Clause 17.02-3 (State significant industrial land) contains further strategies seeking to:

- 'Protect large areas of industrial land of state significance to ensure availability of land for major industrial development, particularly for industries and storage facilities that require significant threshold distances from sensitive or incompatible uses.'
- 'Protect heavy industrial areas from inappropriate development and maintain adequate buffer distances from sensitive or incompatible uses.'

**Clause 19 – Infrastructure**

Finally, clause 19.03-5 (Waste and resource recovery) includes a strategy to 'Ensure buffers for waste and resource recovery facilities are defined, protected and maintained' and the Landfill BPEM as a policy guideline.

There is no equivalent strategy in clause 19.03-2 (Water supply, sewerage and drainage), despite the known need for separation distances for wastewater treatment plants. The objective for this clause is 'To plan for the provision of water supply, sewerage and drainage services that efficiently and effectively meet State and community needs and protect the environment'. The policy guidelines broadly require consideration of 'Any relevant Environment Protection Authority guidelines'.

### 4.2. Issues

The provisions in the SPPF addressing encroachment are scattered across various policies, but with most detail and emphasis in the industrial policies.

The key settlement policy, clause 11, sets strategies only in relation to the Central Highlands, Great South Coast, Hume and Loddon Mallee South regions (reflecting their respective Regional Growth Plans) despite the issue of residential encroachment on industry affecting all municipalities. With respect to those four regions, the scope and wording of the strategies also differ. Clause 16 (Housing), which includes policy on the location of residential development (clause 16.01-2) is silent on the risks associated with proximity to industry.

A responsible authority planner considering a residential proposal is currently required to identify any uses with adverse amenity potential in the vicinity of the subject land and locate the provisions that apply to that use, in addition to the proposed use or development under consideration. Given the distances specified in clause 52.10 and the Separation Distance Guideline may extend up to 5 kilometres, the need to consider impacts from the industrial site may not be immediately obvious to the planner upon reviewing the application documents or inspecting the site.
4.3. Options

The options set out in Table 1 below may be considered separately or as a package. They focus on strengthening the existing SPPF provisions and linking or consolidating the different provisions to improve their visibility to planners.

Table 1: SPPF options

<table>
<thead>
<tr>
<th>Option</th>
<th>Advantages</th>
<th>Disadvantages</th>
</tr>
</thead>
<tbody>
<tr>
<td>Add state-wide encroachment provisions to clause 11 (Settlement)</td>
<td>Clause 11 is regularly used by strategic and statutory planners for a broad range of planning matters. Would support directly relevant principles at start of clause on siting incompatible uses. Could replace regional strategies with statewide provisions to encourage consistency across state.</td>
<td>Clause 11 is lengthy and does not have a current obvious location for provisions addressing encroachment (relevant policies include urban growth [11.02], Metropolitan Melbourne [11.04] and regional development [11.05]).</td>
</tr>
<tr>
<td>Further develop provisions in clause 13 (Environmental risks)</td>
<td>The risks of residential encroachment on industry are environmental risks and policy on environmental risks is consolidated in clause 13. Clause 13 already contains policy addressing encroachment that can be built on.</td>
<td>A planner assessing a proposal for residential development may overlook the need to consider the policies in clause 13.</td>
</tr>
<tr>
<td>Add encroachment provisions to clause 16 (Housing)</td>
<td>Impacts from encroachment primarily affect nearby residents and involve the inappropriate siting of housing near industry. Clause 16 already contains policy on the location of residential development that can be built on.</td>
<td>The impacts from encroachment also affect sensitive uses other than residential, which fall outside the scope of clause 16.</td>
</tr>
<tr>
<td>Add encroachment provisions to clause 19.03-2 (Water supply, sewerage and drainage)</td>
<td>Adding encroachment related strategy would support environmental protection objective of clause 19.03-2 (waste and resource recovery) for consistent policy on essential public infrastructure. Could provide greater specificity in directing planners to relevant EPA guidance.</td>
<td>A planner assessing a proposal for residential development may overlook the need to consider the policies in clause 19. Detailed provisions for specific types of infrastructure in clause 19 may overlap with general provisions for industry in clause 17.</td>
</tr>
<tr>
<td>Introduce cross-references within the SPPF to other relevant clauses (e.g. clause 52.10)</td>
<td>Would allow for encroachment provisions to be located in all relevant clauses of the SPPF without undue repetition or risk of some clauses being overlooked.</td>
<td>The current structure of the SPPF does not provide for cross-references.</td>
</tr>
</tbody>
</table>

5. Zones

5.1. Current provisions

Conflicting uses are principally controlled through the application of zones, which encourage complementary uses and discourage or prohibit conflicting uses in particular areas. For example, the residential zones allow the use of land for Accommodation as of right and prohibit the use of land for industry (other than Car wash).

The application of particular zones can provide a transition, for instance between core industrial zones and more sensitive zones, such as residential zones.

**Industrial 3 Zone**

The Industrial 3 Zone (IN3Z) is the only zone in the VPPs with a specific transitional purpose to manage amenity impacts. Its stated purpose includes:

- To provide for industries and associated uses in specific areas where special consideration of the nature and impacts of industrial uses is required or to avoid inter-industry conflict.
- To provide a buffer between the Industrial 1 Zone or Industrial 2 Zone and local communities, which allows for industries and associated uses compatible with the nearby community.
- To allow limited retail opportunities including convenience shops, small scale supermarkets and associated shops in appropriate locations.

---

12 This was a feature of the draft Planning Policy Framework prepared by the SPPF Review Advisory Committee in March 2014.
To ensure that uses do not affect the safety and amenity of adjacent, more sensitive land uses.

In the IN3Z, Industry is a permit required use and Accommodation (other than Caretaker’s house) is a prohibited use.

The IN3Z application requirements include:

The likely effects, if any, on the neighbourhood, including:

- Noise levels.
- Air-borne emissions.
- Emissions to land or water.
- Traffic, including the hours of delivery and despatch.
- Light spill or glare.

Its decision guidelines include, relevantly:

- The effect that the use may have on nearby existing or proposed residential areas or other uses which are sensitive to industrial off-site effects, having regard to any comments or directions of the referral authorities.
- The effect that nearby industries may have on the proposed use.
- The effect on nearby industries.

Special Use Zone

The Special Use Zone (SUZ) offers the ability to tailor a zone where other available zones, overlays and local policies cannot give effect to the desired objectives or requirements.  

A recent example of the application of the SUZ for buffer protection is Schedule 3 to the SUZ in the Warmambool Planning Scheme, titled 'Warmambool West Industrial Precinct – Transition Area'. The purpose of this SUZ is described as follows:

To provide for a range of industrial uses, storage, distribution of goods, services and associated uses in a manner which provides an appropriate transition between residential properties on Mervinale Drive and the West Warmambool Industrial Precinct.

To provide for a high standard of building design and landscaping to reflect the prominent location and visual profile of the land.

To manage and minimise amenity based conflicts between industrial activities and sensitive land uses.

To manage the establishment of sensitive land uses within existing buffers taking into account potential for amenity based conflicts.

The land to which the SUZ3 now applies falls within the separation distance required for a long-established existing industrial use. In considering whether rezoning the land from the General Residential Zone (GRZ) to the SUZ3 was justified in this circumstance, the Panel accepted Warmambool City Council’s argument that:

- the GRZ was inappropriate due to the need to restrict further the residential development on the land
- the land was not suitable for some of the uses that might be permitted under the provisions of the IN3Z or the Mixed Use Zone
- the SUZ had been specifically designed to respond to the context of the site and the council’s aspiration to have a higher degree of control on the type of industry encouraged to locate on the land.

Schedules to zones

A number of zones in the VPPs offer schedules as a means of supplementing or adapting the State standard provisions to achieve local objectives.

The residential zones introduced in July 2013 – the GRZ, the Neighbourhood Residential Zone (NRZ) and the Residential Growth Zone (RGZ) – provide this option. The schedules can be used to specify provisions relevant to the assessment and management of residential encroachment, such as application requirements, decision guidelines, and siting and design requirements. The NRZ schedule can additionally be used to specify the number of dwellings on a lot, permit thresholds for construction and extension of single dwellings, and minimum lot size.

EPA is not aware of any instances since their introduction where schedules to the residential zones have been used to impose restrictions or require additional considerations on the basis of interface with a conflicting use.

Farming Zone

In greenfields areas, residential encroachment on industrial sites is often preceded by rezoning land from farming to residential. The separation distance required by the industrial site may be retained by leaving the area of land required between the conflicting
uses in the Farming Zone, where its development will be restricted.

A recent example may again be found in the Warrnambool Planning Scheme with the rezoning of a large parcel of (mostly) Farming Zone land in North Dennington. The Panel considering the rezoning proposal examined the extent of the separation distance required by a milk processing plant and associated wastewater treatment plant within the amendment area. In recommending the 'application of a buffer', the Panel was referring to the removal of the buffer land from the area to be rezoned GRZ, to instead be retained within the Farming Zone.\textsuperscript{15}

5.2. Issues

As the only zone specifically designed for interface areas, the IN3Z is not an ideal fit for all locations between industrial and residential zones. This may be the case where:

- the relevant land is in close proximity to residential land and it would be more appropriate for industrial uses that themselves require a separation distance to be prohibited rather than 'permit required'.
- the relevant land is relatively well separated from industrial uses and it is appropriate for it to be used for sensitive uses such as 'residential (prohibited by the IN3Z), provided some additional considerations or restrictions are ensured.

There is no other zone in the VPPs that offers a consistent tool for buffer protection or that transparently identifies the constraints imposed on interface areas.

5.3. Options

In addition to the advantages and disadvantages of individual zones set out below, zones more generally:

- control both the use and development of land
- appear in planning reports required to accompany vendor's statements provided to potential buyers of land (like overlays, but unlike policy provisions)
- provide a strong visual signal on planning maps to trigger consideration of potential environmental impacts (noting this is not the primary purpose of zones)
- can be difficult to change in already developed areas due to existing communities concerned about restrictions on the development potential of their land, effects on land value, and the concept of industry externalising its costs of operation (like overlays).

Table 2: Zone options

<table>
<thead>
<tr>
<th>Option</th>
<th>Advantages</th>
<th>Disadvantages</th>
</tr>
</thead>
<tbody>
<tr>
<td>Industrial 3 Zone</td>
<td>Existing zone in the VPPs with relevant purpose</td>
<td>Limited ability to tailor to local circumstances</td>
</tr>
<tr>
<td></td>
<td>Requires a permit for all Industry uses</td>
<td>Permits all Industry uses, where prohibition may be more appropriate in some circumstances</td>
</tr>
<tr>
<td></td>
<td>Contains useful application requirements and decision guidelines that prompt consideration of main environmental risks</td>
<td>Prohibits most Accommodation uses, where permission may be more appropriate in some circumstances</td>
</tr>
<tr>
<td>Template schedule to the Industrial 3 Zone</td>
<td>Uses the framework of an existing zone in the VPPs</td>
<td>Requires statewide coordination to prepare and implement</td>
</tr>
<tr>
<td></td>
<td>Can be tailored to address the principal risks of encroachment and encourage generally appropriate planning outcomes for interface areas</td>
<td>Zone currently only enables schedule for floor space requirements</td>
</tr>
<tr>
<td></td>
<td>Encourages consistent approach across State</td>
<td>Not currently able to specifically address local circumstances (beyond office floor space) and encourage particular outcomes</td>
</tr>
<tr>
<td></td>
<td>Minimises time and cost burden on councils by removing need to draft each schedule individually</td>
<td></td>
</tr>
<tr>
<td>Individually tailored schedules to the Special Use Zone</td>
<td>Uses the framework of an existing zone in the VPPs</td>
<td>Frequent use for different purposes increases the complexity of the planning system</td>
</tr>
<tr>
<td></td>
<td>Can be tailored to particular interface areas to encourage desired planning outcomes</td>
<td>Imposes a time and cost burden on councils to draft appropriate individual schedules</td>
</tr>
<tr>
<td></td>
<td>Can be specific and transparent about its purpose and councils' expectations</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Can include built form, design and landscaping requirements, removing need for a Design and Development Overlay</td>
<td></td>
</tr>
</tbody>
</table>

\textsuperscript{15} Planning Panels Victoria Report on Warrnambool Planning Scheme Amendment C90 (22 May 2014), page 64.
<table>
<thead>
<tr>
<th>Option</th>
<th>Advantages</th>
<th>Disadvantages</th>
</tr>
</thead>
<tbody>
<tr>
<td>Template schedule to the Special Use Zone</td>
<td>Uses the framework of an existing zone in the VPPs Can be tailored to address the principal risks of encroachment and encourage generally appropriate planning outcomes for interface areas Encourages consistent approach across State Minimises time and cost burden on councils by removing need to draft each schedule individually</td>
<td>Requires statewide coordination to prepare and implement Not as able to specifically address local circumstances and encourage particular outcomes as an individually tailored schedule</td>
</tr>
<tr>
<td>Schedules to the residential zones</td>
<td>Uses the framework of existing zones in the VPPs Can be tailored to particular interface areas to encourage desired planning outcomes</td>
<td>Application restricted to situations where primary land use should be residential Does not align with purpose of residential zones</td>
</tr>
<tr>
<td>Farming Zone</td>
<td>No action required when area required for buffer is already in Farming Zone</td>
<td>Contrary to stated purpose of zone Does not communicate buffer purpose Can be eroded over time in areas transitioning away from farming</td>
</tr>
<tr>
<td>A new ‘Buffer Zone’</td>
<td>Can be tailored to address the principal risks of encroachment and encourage generally appropriate planning outcomes for interface areas Encourages consistent approach across State Can offer a schedule for further customising to reflect local needs</td>
<td>Each additional zone increases the complexity of the planning system Requires amendment to the VPPs Overlaps in purpose with the Industrial 3 Zone Difficult to implement over existing residential uses Inconsistent with government commitments to reduce ‘red tape’</td>
</tr>
</tbody>
</table>

6. Overlays

6.1. Current provisions

A number of overlays may be applied to achieve land use separation for environmental purposes.

**Environmental Significance Overlay**

The Environmental Significance Overlay (ESO) is used to achieve two separate purposes in the planning system: protection of significant natural environments and protection from adverse amenity impacts. This is endorsed in *Using Victoria’s Planning System*, which offers the following summary of the ESO:\(^{16}\)

> This overlay seeks to address areas where the development of land may be affected by environmental constraints such as effects from noise or industrial buffer areas, as well as issues related to the natural environment.

It is also accounted for in the ESO’s purpose, which includes:

> To identify areas where the development of land may be affected by environmental constraints.

> To ensure that development is compatible with identified environmental values.

The ESO introduces a permit requirement for buildings, works and subdivision (among other things), unless a schedule specifies otherwise. The ESO is not able to restrict particular uses of land.

The ESO has been applied around a number of wastewater treatment plants, including, recently, the Benalla Wastewater Treatment Facility. The Panel Report considering the proposal to apply that ESO with accompanying Schedule 4 into the Benalla Planning Scheme noted that none of the parties to the Panel Hearing challenged the application of the ESO as the most appropriate tool.\(^{17}\)

**Design and Development Overlay**

The Design and Development Overlay (DDO) can be applied to require development in the overlay area to incorporate appropriate design measures to mitigate impacts from the nearby operation of industry. Its purpose includes ‘To identify areas which are affected by specific requirements relating to the design and built form of new development’.

The DDO introduces a permit requirement for buildings and works (unless the schedule states otherwise) and allows for mandatory specifications for those buildings and works in the schedule. Like the ESO, the DDO is not able to restrict particular uses of land.

An example of its application is in the Hobsons Bay Planning Scheme, with schedule 10. DDO10, titled ‘The Former Caltex

---

\(^{16}\) Department of Environment, Land, Water and Planning (28 May 2015), page 18.

\(^{17}\) Planning Panels Victoria Report on Benalla Planning Scheme Amendment C31 (30 June 2015), page 7.
Terminal, was applied to former industrial land as it was rezoned residential. The rezoned land was located close to continuing industrial uses and railway infrastructure with the potential to cause adverse amenity impacts. DDO10 includes design objectives focused on protecting both the amenity of future residents and the operations of nearby state and nationally significant industry and infrastructure, as well as noise and vibration attenuation measure requirements.

Airport Environs Overlay and Melbourne Airport Environs Overlay

Airports do not require an EPA licence or works approval and so fall outside the scope of EPA's encroachment project. However, these overlays are useful to consider as a potential precedent for a new overlay.

The Airport Environs Overlay and the Melbourne Airport Environs Overlay are applied with the intention of limiting the number of people living in areas affected by aircraft noise and requiring noise attenuation measures in buildings used for sensitive uses within these areas.

For example, the Melbourne Airport Environs Overlay requires a planning permit to be sought for a single dwelling on a lot (for which ordinarily a permit would not be required), as well as requiring any new dwelling constructed to meet specific noise insulation criteria and the referral of the application to the Melbourne Airport lessees.

Unusually for overlays, both allow restrictions on use, making for a powerful tool that can override underlying zone controls without changing the zone itself.

6.2. Issues and options

In addition to the advantages and disadvantages of individual overlays set out below, overlays more generally:

- are appropriate to address a particular issue or set of issues, such as environmental risks associated with encroachment
- most commonly include schedules to specify local objectives and requirements
- appear in planning reports required to accompany vendor’s statements provided to potential buyers of land (like zones, but unlike policy provisions)
- provide a strong visual signal on planning maps to trigger consideration of potential environmental impacts (noting this is not the primary purpose of overlays)
- can be unpopular with existing communities concerned about restrictions on the development potential of their land, effects on their land value, and the concept of industry externalising its costs of operation (like zones).

Table 3: Overlay options

<table>
<thead>
<tr>
<th>Option</th>
<th>Advantages</th>
<th>Disadvantages</th>
</tr>
</thead>
<tbody>
<tr>
<td>Environmental Significance Overlay</td>
<td>Existing overlay in the VPPs with relevant purpose</td>
<td>Does not allow control of land use</td>
</tr>
<tr>
<td></td>
<td>Already commonly applied for buffer protection</td>
<td>Does not provide for minimum subdivision (lot) size</td>
</tr>
<tr>
<td>Design and Development Overlay</td>
<td>Existing overlay in the VPPs with broad purpose</td>
<td>Does not allow control of land use</td>
</tr>
<tr>
<td></td>
<td>Design and development provisions of particular relevance to mitigating noise impacts</td>
<td>Does not communicate environmental buffer purpose</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Design and development provisions are less relevant to mitigating odour and dust impacts than noise impacts</td>
</tr>
<tr>
<td>New overlay based on Airport Environs Overlay and Melbourne Airport Environs Overlay</td>
<td>Allows for control of land use without rezoning</td>
<td>Each additional overlay increases the complexity of the planning system</td>
</tr>
<tr>
<td></td>
<td>Can be tailored to address the principal risks of encroachment and encourage generally appropriate planning outcomes for interface areas</td>
<td>Requires amendment to the VPPs</td>
</tr>
<tr>
<td></td>
<td>Encourages consistent approach across State</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Can offer a schedule for further customising to reflect local needs</td>
<td></td>
</tr>
</tbody>
</table>

7. Clause 52.10, referrals and notice of planning permit applications

7.1. Current provisions

Clause 52.10 is one of the key tools in the Victorian planning system for implementing land use buffers between industrial and sensitive uses.

The clause lists particular industry and warehouse uses identified as having adverse amenity potential. Its stated purpose is to capture those uses within one definition, namely:

---

To define those types of industries and warehouses which if not appropriately designed and located may cause offence or unacceptable risk to the neighbourhood.

For each type of use listed, clause 52.10 specifies a threshold distance and/or a ‘Note’. The threshold distance is defined as:

...the minimum distance from any part of the land of the proposed use or buildings and works to land (not a road) in a residential zones, Capital City Zone or Docklands Zone, land used for a hospital or an education centre of land in a Public Acquisition Overlay to be acquired for a hospital or an education centre.

Note 1 indicates that 'The threshold distance is variable, dependent on the processes to be used and the materials to be processed or stored'.

Note 2 indicates that 'An assessment of risk to the safety of people located off the land may be required'.

Clause 52.10 does not itself specify any planning permit or other requirements. Instead, it is principally used as a reference point by:

- zones and overlays to determine whether or not a permit is required – for instance, a permit is not required in the Industrial 1 Zone for industry provided certain conditions are met, including that the proposal is not for a purpose shown with a Note 1 or Note 2 in the table to clause 52.10
- clause 66 (Referral and notice provisions) to identify EPA and WorkSafe as determining referral authorities for particular types of permit applications.

The combined effect of clause 52.10 and clause 66 is referral to:

- EPA of applications to use land for a purpose specified in clause 52.10 where:
  1. the threshold distance is not met; or
  2. the purpose is shown with a Note 1
- WorkSafe of applications to use or construct a building or carry out works (if the area will increase by more than 25 percent) on land for a purpose specified in clause 52.10 where:
  1. the purpose is shown with a Note 2; or
  2. specified requirements arise under WorkSafe regulations.

### 7.2. Issues

**Unclear scope of risks**

Clause 52.10 is slanted as to the types of risk that inform its threshold distances. EPA understands it is intended to address noise, odour and dust emissions, vibration and risks to public safety. This differs from the Separation Distance Guideline, which covers odour and dust emissions only. This distinction is not currently widely understood.

The title of clause 52.10 is also misleading. The uses listed in the table to clause 52.10 are not only ‘uses with adverse amenity potential’. Those uses shown with a Note 2 also pose a safety risk.

**Incomplete coverage of sensitive uses**

Clause 52.10 does not define ‘sensitive use’ but instead defines ‘threshold distance’ as the distance between a use listed in clause 52.10 and:

...land (not a road) in a residential zone, Capital City Zone or Docklands Zone, land used for a hospital or an education centre or land in a Public Acquisition Overlay to be acquired for a hospital or an education centre.

This is a different approach to the Separation Distance Guideline (discussed in section 2.4). It does not capture the full range of sensitive uses, for instance residential uses in an Activity Centre Zone.

**Different distances in clause 52.10 and the Separation Distance Guideline**

Many planners find the different distances specified in clause 52.10 and the Separation Distance Guideline confusing.

Clause 52.10 was originally developed based on an EPA guideline that preceded the Separation Distance Guideline: **Recommended Buffer Distances for Industrial Residual Air Emissions** (AQ 2/86, 1990). EPA understands that since the 1990 guideline (like the Separation Distance Guideline) covered odour and dust emissions only, additional distance was added to some industries in clause 52.10 at the time of its creation to reflect its broader scope and account for noise and vibration impacts. The EPA review that led to the publication of the Separation Distance Guideline in 2013 resulted in further discrepancies with clause 52.10.

The silence of clause 52.10 as to its scope exacerbates the confusion surrounding the different distances in the two documents.

**Unclear distinction between threshold distance and separation distance**

Another point of confusion for planners is the difference between a ‘threshold’ distance in clause 52.10 and a ‘separation’ distance in the Separation Distance Guideline.

Clause 52.10 does not set separation distances. It sets threshold distances which, if not met, prompt the involvement of EPA and/or WorkSafe to assess the level of risk a particular application poses.
When an application is referred to EPA as a result of the clause 52.10 threshold distance not being met, EPA uses the Separation Distance Guideline (together with other EPA publications and the SEPPs) to guide EPA’s assessment and referral response.

**Unclear link to referral requirements**

The interaction between clause 52.10 and the referral requirements in clause 66 is not evident from reading clause 52.10 only. EPA is aware of numerous applications that were inadvertently not referred to EPA due to misunderstandings about the clause 66 and clause 52.10 referral requirements.

**Insufficient information for referral assessments**

When EPA is referred planning permit applications triggered under clause 52.10, the applications rarely contain sufficient information to enable EPA to undertake a proper assessment of risk. EPA frequently advises the responsible authority that more information is required.

**Limited referrals for development**

Unlike referrals to WorkSafe, which cover applications for both use and development, clause 66 only requires referral to EPA of applications for use. Development that extends or intensifies a use listed in clause 52.10 also has the potential to increase the risk associated with that use and the potential for offsite impacts.

This distinction is also not currently well understood by planners. EPA is sometimes requested by responsible authorities to provide referral responses to applications for development said to be triggered by clause 52.10.

**Lack of referral trigger for sensitive use applications within clause 52.10 threshold distances**

Clause 66 ensures applications for new industry and warehouse uses specified in clause 52.10 are referred to EPA when the threshold distance is not met. However, there is no statutory requirement to ensure EPA’s involvement in applications for new encroaching uses or developments within the threshold distance of existing industry.

As such, an industrial facility may be permitted under the VPPs on the basis that there is adequate distance separating the facility from sensitive uses, only for that distance to be eroded in the future by new sensitive uses encroaching on the facility with little or no assessment of the potential risks involved.

### 7.3. Options

The options set out in Table 4 below may be considered separately or as a package involving a broader review of clause 52.10. For some discrete issues, only one option is identified. For other issues, a number of different options are presented along a spectrum.

**Table 4: Clause 52.10, referral and notice options**

<table>
<thead>
<tr>
<th>Issue</th>
<th>Options</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unclear scope of risks</td>
<td>Clarify in clause 52.10 which risks the threshold distances are intended to mitigate, such as air emissions, noise, vibration and public safety</td>
<td>This could be achieved through:</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• amending the ‘purpose’ of clause 52.10 to include further detail on the types of risk it addresses; and</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• amending the title of clause 52.10 to not exclude safety risks.</td>
</tr>
<tr>
<td>Incomplete coverage of sensitive uses</td>
<td>Expand the definition of ‘threshold distance’ to capture all zones with the purpose of accommodating sensitive uses; or</td>
<td>The current zone approach has the benefits of protecting potential future sensitive uses that may establish in the zone and being evident on planning maps. The individual uses currently listed in clause 52.10 in addition to zones (hospital and education centre) are also easily identified.</td>
</tr>
<tr>
<td>Introduce a definition of ‘sensitive use’ in clause 52.10 that is consistent with the definition in the Separation Distance Guideline; or</td>
<td>This would improve consistency between clause 52.10 and the Separation Distance Guideline. Removing references to zones would result in protection only of land currently used for a sensitive purpose. Identifying nearby individual sensitive uses, rather than zones, would involve additional effort.</td>
<td></td>
</tr>
<tr>
<td>Introduce a definition of ‘sensitive use’ in clause 74 (Land use terms)</td>
<td>This would require distinguishing between sensitive uses for different purposes, such as amenity protection (discussed here), contaminated land (currently defined in Ministerial Direction No. 1 – Potentially Contaminated Land) and landfill gas (currently defined in the Landfill BPEM).</td>
<td></td>
</tr>
<tr>
<td>Issue</td>
<td>Options</td>
<td>Comments</td>
</tr>
<tr>
<td>----------------------------------------------------------------------</td>
<td>-------------------------------------------------------------------------</td>
<td>----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Different distances in clause 52.10 and the Separation Distance Guideline</td>
<td>Clarify the basis for the distances specified in clause 52.10 and either: Update clause 52.10 to reflect the distances in the Separation Distance Guideline; or Review the technical basis for the distances specified in both clause 52.10 and the Separation Distance Guideline</td>
<td>This could be achieved through specifying where distances are based on the risk of air emissions, noise, vibration and/or public safety. This would require understanding where the distances in clause 52.10 are based on the risk of air emissions and where they are based on other risks (noise, vibration or public safety). The discrepancies in the types of uses listed in clause 52.10 and the Separation Distance Guideline would also pose difficulties. This would ensure a sound technical basis for the distances specified in both documents, improve the consistency between the two and clarify the reasons for any appropriate discrepancies. This could be part of a broader review of the two documents to clarify their individual roles and how they interact.</td>
</tr>
<tr>
<td>Unclear distinction between threshold distance and separation distance</td>
<td>Clarify the meaning of 'threshold distance' in clause 52.10.</td>
<td>This could be achieved through: amending the 'purpose' and/or 'definition' of clause 52.10 to explain how the threshold distances operate; and introducing a link within clause 52.10 to the clause 66 referral requirement (see below).</td>
</tr>
<tr>
<td>Unclear link to referral requirements</td>
<td>Introduce a link within clause 52.10 to the clause 66 referral requirement</td>
<td>This could be achieved by adding a 'referral' provision within clause 52.10, which explains what to do when the threshold distance is not met, with reference to clause 66.</td>
</tr>
<tr>
<td>Insufficient information for referral assessments</td>
<td>Introduce a requirement in clause 52.10 for applications to be accompanied by certain information</td>
<td>A new 'application requirements' section in clause 52.10 could outline the information EPA and WorkSafe typically require in order to properly assess the risk posed by application. This would streamline the referral process and reduce delays associated with further information requests.</td>
</tr>
<tr>
<td>Limited referrals for development</td>
<td>Expand the referral trigger in clause 66 to require certain applications for development for a purpose listed in clause 52.10 to be referred to EPA.</td>
<td>The clause 66 referral trigger to WorkSafe could be considered as a basis. That covers applications where the area of buildings and works would increase by more than 25 per cent.</td>
</tr>
<tr>
<td>Lack of referral trigger for sensitive use applications within clause 52.10 threshold distances</td>
<td>Amend clause 66 to make EPA and WorkSafe determining referral authorities for certain applications that fall within clause 52.10 threshold distances; or Amend clause 66 to make EPA and WorkSafe recommending referral authorities for certain applications that fall within clause 52.10 threshold distances; or Amend clause 66 to require notice to EPA and WorkSafe of certain applications that fall within clause 52.10 threshold distances; or Use other planning tools, such as overlays, to specify referral or notice requirements</td>
<td>This would ensure responsible authority decisions are determined by specialist technical advice. This would significantly increase resourcing requirements from EPA and WorkSafe. This would ensure responsible authority decisions are informed by specialist technical advice, but allow that advice to be balanced against other planning scheme requirements. This would also significantly increase resourcing requirements from EPA and WorkSafe. This would ensure EPA and WorkSafe are aware of relevant applications and have the opportunity to respond. It would also allow that advice to be balanced against other planning scheme requirements. This would not as significantly increase resourcing requirements from EPA and WorkSafe, as responses would be discretionary. This option is currently available and allows planning authorities to set referral and notice triggers on the basis of local requirements. This would have resourcing impacts due to increased administrative burden.</td>
</tr>
</tbody>
</table>
8. Strategic planning

8.1. Current practice

Managing encroachment at the strategic planning level may be divided into:

- planning for new urban areas, which is primarily through the precinct structure planning (PSP) process
- planning for established areas, where industrial facilities may already be subject to some degree of encroachment.

**PSPs in growth areas**

The PSP process provides the opportunity to set appropriate controls to ensure separation between non-compatible land uses in growth areas.

The Growth Corridor Plans (approved in 2012) were the first stage in this process. These four plans19:

- identified appropriate land uses
- identified appropriate separation distances with support from relevant authorities
- used holding zones to delineate those separation distances.

The second and current20 stage is the preparation of PSPs that respond to the approved Growth Corridor Plans. This involves:

- land capability reporting to identify adverse amenity sources and make recommendations around buffer distances
- preparing the future urban structure, which establishes appropriate land uses within buffers
- identifying within the PSP document:
  - objectives to ensure appropriate uses are located within buffer distances
  - buffers on plans.

The Schedule to the Urban Growth Zone can then be tailored with specific provisions to:

- prohibit certain uses within buffers
- require a permit for certain uses within buffers
- refer applications for land within buffers to appropriate authorities.

The schedule to the Urban Growth Zone offers useful flexibility, with the ability to be individually tailored. That tailoring falls away when the PSP matures and the zones within the schedule are applied directly.

**Planning for established areas**

Many existing industries operate in established areas that have not and will not go through a PSP process. For most of these sites, the planning controls applied to the buffer areas are determined on an ad hoc basis through planning scheme amendments. Those amendments may be specifically intended to manage the buffer area or incidentally affect the management of encroachment.

Planning authorities may also take a more comprehensive approach to managing the buffers of industrial facilities within their municipality. For example, Warrnambool City Council has completed the first stage of a review of all land uses within its industrial buffers. Its draft 2014 report adopts the distances recommended in the Separation Distance Guideline and provides for separation distance management plans for six precincts. The first plan, for the West Warrnambool Industrial Precinct, has since been used as a basis for rezoning land from General Residential to Special Use Zone, as discussed in section 5.1 above. The Panel which recommended that rezoning further recommended that the other separation distance management plans be completed and then the report included as a reference document in the Warrnambool Planning Scheme.21

8.2. Issues

The PSP process generally manages the risks associated with encroachment well, particularly for larger industrial sites. Planning scheme amendments in established areas present a greater challenge.

Where there is already residential development in close proximity to an industrial facility, the purpose of new controls will typically be to limit further development. This intention can be unpopular with existing residents concerned about restrictions limiting the future use and development of their land.

Where a planning scheme amendment is proposed for a non-buffer related purpose, such as to rezone land to accommodate growing housing demand, the risks associated with offsite industrial impacts may be overlooked.

---


20 Over 50 PSPs have been completed. For more information on the progress of the PSP program, see: http://www.mpa.vic.gov.au/planning-activities/greenfields-planning/precinct-structure-plans.

In each of these situations, the principal issue is the difficulty in ensuring appropriate consideration and assessment of the environmental risks, including appropriate input from relevant agencies such as EPA.

8.3. Options

Table 5: Strategic planning options

<table>
<thead>
<tr>
<th>Options</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Update Ministerial Direction No. 11 – Strategic Assessment of Amendments and Ministerial Direction on the Form and Content of Planning Scheme Amendments to specifically require consideration of the impacts of any nearby industrial operations</td>
<td>This Ministerial Direction already requires consideration of how the proposed amendment supports or implements the SPFF. The options for improvements to the SPFF in section 4.3 of this paper could therefore also lead to improvements here, without the need to update the Ministerial Direction.</td>
</tr>
<tr>
<td>Update Planning Practice Note 46 – Strategic Assessment Guidelines for Preparing and Evaluating Planning Scheme Amendments to specifically recommend consideration of the impacts of any nearby industrial operations</td>
<td>This Planning Practice Note provides further detail on complying with the requirements of Ministerial Direction No.11. It could be updated more easily than the Ministerial Direction to specifically recommend consideration of encroachment issues.</td>
</tr>
<tr>
<td>New Ministerial Direction on industrial buffers</td>
<td>Ministerial Direction No. 14 (Port Environs) ‘requires a planning authority to satisfy itself that an amendment to a planning scheme will not introduce a sensitive use or will not intensify existing sensitive uses in the areas designated as port environs, if the use prejudices the operation of the port’. This could be considered as a basis for a more general Ministerial Direction on buffers for industrial uses.</td>
</tr>
<tr>
<td>Update Precinct Structure Planning Guidelines</td>
<td>The process for securing agency input into PSPs before public notification is currently informal and can differ between PSPs without apparent reason. A consistent process could be outlined in the PSP Guidelines published by the Metropolitan Planning Authority.</td>
</tr>
</tbody>
</table>

9. Implementation

This paper has concentrated on different tools within the VPPs for managing interface areas. EPA acknowledges that having appropriate tools available is not in itself sufficient to manage residential encroachment on industry through the planning system. Implementing those tools presents another set of challenges for planning authorities.

Although not the focus of this paper, it is worth briefly noting that these challenges include:

- the cost, time and political will required to apply appropriate planning controls to buffers, particularly in established areas
- the technical skills required to determine when a site-specific separation distance is justified
- the variety of approaches used in assessing site-specific separation distances
- how to consider future expansion plans or operational changes, in addition to existing separation distance requirements.  

Successful implementation would benefit from additional training opportunities for planners and guidance material.

10. Summary and next steps

The purpose of this paper was to identify options for better managing residential encroachment on industry through the planning system. The sections above set out a range of options, both existing and potential, together with a brief assessment of their strengths, weaknesses and salient features.

The focus has been on tools within the VPPs, in particular the SPFF, zones, overlays, clause 52.10 and notice and referral provisions for planning permit applications, and strategic planning approaches.

This paper does not make specific recommendations on preferred options. Further evaluation of most options is required.

Factors to consider as part of further evaluation may include:

- whether different approaches are appropriate for industrial sites in growth areas and established areas

---

22 This is a particular challenge for wastewater treatment plants, which require larger separation distances as the communities they service grow.
• whether different approaches are appropriate for areas in close proximity to industrial sites and at a greater distance
• the benefit of a visual trigger on planning maps to prompt consideration of encroachment issues
• the resourcing implications of different notice and referral requirements
• flexibility to respond to local conditions
• flexibility to respond to changing operations.

EPA will use this paper to recommend improvements to the way encroachment is managed through planning. EPA also encourages the use of this paper by other organisations for that purpose.
Appendix – Encroachment Project External Steering Group

EPA acknowledges and appreciates the time and input from all external steering group members in contributing to discussions to assist the development of this options paper. The group met four times in the second half of 2015 to discuss encroachment issues and potential options for improvement.

This options paper represents EPA's views, which have been informed through this collaborative process. The views expressed in this paper are not necessarily endorsed by the organisations that are represented on the steering group.

The external steering group comprised:

- Fleur Elijah, Department of Environment, Land, Water and Planning – Planning Systems
- Ben Hawkins and Martina Johnson, Metropolitan Planning Authority
- Lachlan Carty, Department of Economic Development, Jobs, Transport and Resources – Invest Assist
- Sandra Falconer and Gavin Scott, Department of Health and Human Services – Health Protection
- Michelle Croughan, Municipal Association of Victoria
- Bob Baggio, Melton City Council
- Victoria Wallander, Wangaratta Rural City Council
- Steve Myers, Warrnambool City Council (representative)
- Denise Turner and Kara Mahoney, Whittlesea City Council
- Sarah McDonald and Michelle Lee, Metropolitan Waste and Resource Recovery Group
- Barry Floyd, Coliban Water
- Jason Walker, Australian Industry Group