Response to the Planning Panels Victoria Advisory Committee’s Major Hazard Facilities Discussion Paper

9 Feb 2016
Executive Summary

This officer level submission responds to the issues and thought starter questions raised in the Planning Panels Advisory Committee’s Major Hazard Facilities Discussion Paper and where appropriate provides commentary and suggested changes.

The Major Hazard Facilities Discussion Paper was prepared in late December 2015 by a three person Advisory Committee. The terms of reference are outlined in the Discussion Paper appendix.

Major hazard facilities are currently not defined in the Planning Scheme. A proposed definition could be modelled on the definition used by Worksafe for Occupational Health and Safety purposed in their MHF Guidance Note.¹ This definition states:

A dangerous goods facility is automatically classified as an MHF if the quantities of hazardous materials listed in Schedule 9 of the OHS Regulations, Materials at major hazards facilities (and their threshold quantity) are present, or likely to be present, in a quantity exceeding the threshold values, either individually or in aggregate.²

Not all MHFs are identified by the above Worksafe definition. Some existing uses such as hospitals and universities identified in the National Pollution Inventory (NPI) are not classified as MHFs even though they may still store significant amounts of hazardous chemicals on site or potentially emit pollution at levels of concern.

Given the high level of risk, consideration should be given as to whether the new definition should apply to land uses such as hospitals or universities. This could be done by incorporating reference to all uses identified in the National Pollution Inventory (NPI) in the proposed Planning Scheme definition.

The Planning system is currently not being used as effectively as it could be to manage the safety risks posed by MHF expansion or MHF encroachment by sensitive uses. The Planning system can be made more effective by working in parallel with other legislation to ensure that defined MHF are located away from sensitive uses such as schools, residential buildings and kindergartens and that there is sufficient land for effective buffers both now and in the future.

In general, the level of required consultation, when a new MHF is proposed or when changes are made to a MHF’s safety assessment system, should be proportionate to the level of risk. Consultation may also be a necessary requirement in the case of encroachment on MHFs by other uses. MHF emergency plans should also consider the effect a major incident would have on property within a given radius and provide this information to the local community.

Worksafe’s current methodology for determining Inner and Outer Planning Advisory Areas (areas with different levels of risk) is effective and should be identified in planning schemes through Inner and Outer Planning Advisory Areas.

²ibid
Modelled risk areas around MHFs could be translated into planning schemes using an appropriate new MHF Planning Scheme Overlay and Schedule mechanism.

The present treatment of MHFs in State Policy is not adequate as it does not mention MHFs. State Policy should seek to limit the location of both sensitive and non-compatible uses close to major hazardous facilities to reduce any adverse outcomes should an accident occur. The planning scheme could also propose definitions for a ‘sensitive use’ in relation to a MHF and for uses not compatible with a MHF, to assist planning around MHFs.

Under the current Planning system, Local Planning Policy’s primary aim is to guide discretionary decision-making at a local level when a planning permit is required. As the local conditions pertaining to MHF do vary, local planning policy should provide guidance on how affected areas are to be developed, thus providing greater certainty for developers of land uses which may be incompatible with MHFs. However this would only be effective if it related to discretion allowed by zone or overlay controls.

The development of a new MHF Overlay Schedule would allow protection to extend beyond a property boundary without restricting any compatible uses in the vicinity of the MHF. This approach could also help to manage reverse amenity impact issues such as encroachment.

In general, Planning should evaluate the specific performance of a development against performance measures and therefore a discretionary permit process is recommended so as to allow the individual merits of each proposal to be properly considered.

A new MHF Overlay with Schedules could identify risk and manage development on land surrounding a MHF. In the case of the proposed MHF Overlay, the Schedule mechanism could be used to identify risk and manage development on land in and surrounding a MHF. The Overlay could also identify inner and outer hazards areas (whether default or modelled).

Notification to neighbours of the MHF of the risk status of land can be achieved if an MHF overlay exists and is in place on land both within and sufficiently adjoining/adjacent to an MHF. Notification of MHF owners/occupiers of potentially sensitive land uses expanding or locating within their vicinity could be triggered by a permit requirement for use from the Overlay. The Planning system could assess risk and recommend how it could be managed.

The costs associated with any further MHF safety requirements generated by either expansion or encroachment should be apportioned either on the basis of who is proposing change or equally / proportionally shared between parties in a manner similar to how the cost of a new fence is apportioned between existing neighbours.

It is appropriate to include key agencies, such as the EPA and WorkSafe, as referral authorities for permit applications lodged with identified risk areas around MHFs. The use of an MHF overlay could provide the mechanism for engaging the EPA and/or WorkSafe as a referral authority for areas of risk around Major Hazard Facilities.

Clause 52.10 should be reviewed to provide more than just an advisory role in determining the need for permits for industrial and warehousing uses. It should also include the provision to allow for permits to be required for sensitive uses located in the vicinity of MHFs and in a proposed MHF overlay, in a manner similar to land within other Overlays.
The EPA IRAE Guidelines could be better articulated in the VPP to accord greater weight to separation distances for industry or sensitive use expansion. They could be referred to in any proposed MHF overlay control as part of set of decision guidelines.

Buffers between MHF and other industry and sensitive uses must reduce risk or amenity impacts to an ‘acceptable level’. This acceptable level should be evidence based with a focus on human and environmental health; and human amenity.

While the existing pipeline protection regulatory framework is adequate, there would be an awareness benefit in identifying pipelines in the planning scheme.
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**Introduction**

This officer level submission responds to the issues and thought starter questions raised in the Planning Panels Advisory Committee’s *Major Hazard Facilities* Discussion Paper and where appropriate provides commentary and suggested changes.

**Background**

The Planning Panels’ Major Hazard Facilities Discussion Paper was prepared in late December 2015 by an Advisory Committee appointed by the Minister for Planning under section 151 of the *Planning and Environment Act 1987*.

Submissions on the Discussion Paper must be lodged by 5.00pm on 9 Feb 2016.

The Advisory Committee stresses in their paper that it does not consider the current system of MHF management broken or in need of repair. Rather, the focus of the Committee and its Discussion Paper is on improvement and better management of the existing system.

The Discussion Paper outlines the current system of control, explores how the risks and amenity around Major Hazard Facilities (MHF) might be better managed across the State and how the principles for applying use buffers may be applied to other land uses with adverse amenity potential. Some of the key issues raised by the Discussion Paper include: the role of planning in identifying buffers around MHF; neighbour notification of MHF; the basis of buffer distances; buffers for hazards and amenity, and, the use of buffers around high pressure gas and petroleum pipelines.

**Major Hazard Facilities (MHF) in Victoria and the City of Melbourne**

Currently, there are forty (40) registered Major Hazard Facilities (MHF) in Victoria, identified using the storage selection criteria of the *Occupational Health and Safety Regulations*.

Two of the registered MHFs are within the City of Melbourne – Stolthaven Coode Island and Terminals Pty Ltd, both located in Mackenzie Road, West Melbourne.

In addition, the *National Pollution Inventory (NPI)*, administered by the EPA, identifies eighteen other sites in the City of Melbourne with potential hazardous material storage issues and/or potential air, water and sewerage impacts that could require special planning consideration and or registration. The sites include manufacturers like GMH and Boral, Hospitals, Universities, VLine railway land, warehouses and food processing plants.

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Maps Showing Worksafe Registered (MHFs) in the City of Melbourne

Stolthaven - 45-52 Mackenzie Road, West Melbourne

Terminals Pty Ltd. - 70-78 Mackenzie Road, West Melbourne
Key issues

The Discussion Paper raises a number of ‘thought starter’ questions for which the Committee seeks a response.

The following section outlines each specific issue, the relevant thought starter question(s) and a response.

1. Hazards, risk and consequence

There are a range of industrial land uses where large quantities of hazardous chemicals and dangerous goods and materials are stored, handled or processed either in manufacturing processes or as products from such processes. These land uses are often referred to as MHF.

Examples include:

- Oil refineries.
- Chemical manufacturing sites.
- Gas processing plants.
- LPG facilities.
- Some warehousing and transport depots.
- Water treatment plants.

There may also be land uses that are not specifically defined as a MHF but which may be potentially hazardous to surrounding land use and development due to the nature of their operations. These uses can include hospitals, schools, universities and food manufacturers.

Whether classified as an MHF or not, the primary matter for consideration appears to relate to the nature of materials or goods stored or processed at the facility.

The risks arising from MHF and other industrial uses may be associated with high consequence events (e.g. an explosion or release of toxic chemicals which may pose a risk to human life).

MHF and other land uses that are a potential hazard to human health and safety occur at both existing facilities or at new proposed facilities.

The critical issue for the Committee is to ensure the net community benefit and sustainable development objectives can be met to both protect human health and safety whilst enabling the important economic contribution that MHF make to society.

Another critical issue is how the land use planning system integrates with the safety control system especially in relation to how surrounding land uses can impact on MHF and vice versa.
Response to Thought starter questions 1-3:

1. **Does the Planning system effectively address existing or greenfield MHF or other hazardous industry that poses a risk to the safety of surrounding areas?**

   The planning system is currently not being used as effectively as it could to manage the safety risks posed by MHF expansion or MHF encroachment by sensitive uses.

   The planning system can be made more effective by working more closely with other legislation to ensure that defined MHF are located away from sensitive uses such as schools, residential buildings and kindergartens and that there is sufficient land for effective buffers both now and in the future.

   The planning system can also be used to ensure appropriate land use and development in the vicinity of existing MHFs.

2. **How should planning address areas surrounding existing or proposed MHF or other hazardous industry that pose a risk to the safety of surrounding areas?**

   Use and development in the vicinity of MHFs would need to be better managed. A key as yet unresolved problem with MHFs occurs when existing MHFs seek to expand on land occupied by other uses and /or when existing sensitive uses surrounding a MHF encroach on land and /or the buffers occupied by a MHF. This issue is addressed below.

   Another potential unresolved issue is where a use such as a university or hospital, which is not always specifically defined as a MHF, stores hazardous chemicals at a level that could potentially impact on the wider community. Such existing MHF uses need to be identified in the planning system. This is addressed by examining a potential definition for MHFs.

   For the planning system to be more effective in managing encroachment or expansion issues, all MHFs (and other land uses with a potentially hazardous chemicals storage impact) would need to be defined and identified in the planning scheme, along with a mechanism for identifying any land within a given distance of any new MHF.

   In line with the Committee’s suggested recommendations, a proposed new MHF overlay (with a use and development control) applying to the MHF and surrounding land would be a suitable mechanism to manage the issue of expansion or encroachment.

3. **Should there be greater consultation when a new MHF is proposed or changes made that would require changes to its safety assessment? Who should be involved in that consultation?**

   In general, the level of required consultation should be proportionate to the level of risk. Consultation may also be a necessary requirement in the case of encroachment on MHFs by other uses. All owners and occupiers of property that could be affected by a high consequence event should be notified.
(i) Definition of a Major Hazard Facility

A MHF is defined by the OHSR. There is currently no land use definition of a MHF in the planning scheme. MHF as defined are managed under the OHSR to reflect their level of hazard and risk to the safety of surrounding areas. Apart from references in State Planning Policy, in some Councils’ Local Planning Policies and in Industrial Zones and in some SUZ Schedules, there is no specific policy, zone, overlay or other particular provision that addresses MHF or the safety risk to surrounding areas, or vice versa.

Response to Thought starter question 4

4. Should a definition for MHF be included in planning schemes, and if so, what might a definition include?

A definition for MHFs should be included in all Planning Schemes.

The definition could be modelled on the definition used by Worksafe in their MHF Guidance Note. This definition states:

A dangerous goods facility is automatically classified as an MHF if the quantities of hazardous materials listed in Schedule 9 of the OHS Regulations, Materials at major hazards facilities (and their threshold quantity) are present, or likely to be present, in a quantity exceeding the threshold values, either individually or in aggregate.

However, not all MHFs are identified by the above Worksafe definition. Some existing uses such as hospitals and universities identified in the National Pollution Inventory (NPI) are not classified as MHFs even though they may still store significant amounts of hazardous chemicals on site and or potentially emit pollution at levels of concern.

Given the high level of risk, consideration should be given as to whether the new definition should apply to land uses such as hospitals or universities, which are not always noted as MHF sites. This could be done by incorporating reference to all uses identified in the National Pollution Inventory (NPI) in the proposed Planning Scheme definition. A state-wide safety audit to identify all MHF sites using the new definition may also be warranted.

(ii) Risk assessment and modelled hazard boundaries

MHFs, where they are classified as such by WorkSafe, are required to be licensed and have a Safety Case which assesses the risk, likelihood and consequence of an event on safety of both the site of the facility and its surrounds.

A Safety Case is useful because it can identify potential risk to areas around a MHF. It also enables WorkSafe to provide advice in relation to activity within those areas of land that may be affected by such risk from a MHF.


ibid
The extent of risk areas around a MHF can be portrayed as:

- **An Inner Planning Advisory Area** where the individual risk of fatality from potential foreseeable incidents is greater than or equal to $1 \times 10^{-7}$ per year (one chance in 10 million years).
- **An Outer Planning Advisory Area** where the consequence of a credible incident is not likely to cause a fatality but persons present may suffer some adverse effects or have difficulty responding to an emergency that may result in injury or harm.

These Planning Advisory Areas provide guidance in identifying areas around a MHF where risk to the safety of land uses that are considered sensitive to those risks need consideration and where similar care should be taken for any strategic planning for future land use and development.

WorkSafe have released mapped risk areas on the above basis for a number of sites including Coode Island and the Shell Terminal Station in Newport. See map 1 below.

The delineation of separation distances/buffer areas may vary between different types of industrial activity. Difficulty occurs because of this variation and the planning system’s reliance upon definitive mapping of zone and overlay boundaries.

Separation distances/buffer areas can be determined using site specific assessments or a more standardised approach such as using nominated distances from a potential source of risk.

The WorkSafe information sheet titled “Land use planning near a major hazard facility” does not mention distances but outlines the following considerations in providing advice on proposed land use or developments within any mapped Inner and Outer Planning Advisory.

**Areas:**

- The numbers, occupancy and vulnerability of persons likely to be present at the proposed development.
- The ability of those persons present to be organised and to safely respond to an emergency at the nearby MHF.
- Potential societal risk that may arise due to the overall impact on developments and people present on land surrounding the MHF.

The planning system could benefit from having a simple and transparent mechanism to identify risk areas for MHF and other hazardous industries to be clearly identified and articulated.

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Map 1: Land use Planning Advisory Areas – Coode Island

Land use planning advisory areas for major hazard facilities
Coode Island, Port of Melbourne

This map should be read in conjunction with the WorkSafe Victoria Information Sheet Land use planning near a major hazard facility, issued March 2010.
Response to Thought starter questions 5-8

5. Should MHF emergency plans also be required to consider the affect a major incident would have on property within the land use planning areas and provide this in information given to the local community?

MHF emergency plans should be required to consider the effect a major incident would have on property so that the affected community can understand the implications of their location in relation to the MHF.

Sharing of all information in an open and transparent manner promotes a greater level of knowledge and trust and will make the emergency plan more effective.

6. Should the WorkSafe methodology for Inner and Outer Planning Advisory Areas continue to be the basis for identifying risk areas around MHF and be used for the land use planning system?

Worksafe’s methodology for Inner and Outer Planning Advisory Areas is logically based on the protection of human life and therefore should continue to be the basis for identifying the risk areas around MHFs and be used for the planning system.

7. Should risk areas around MHF, through Inner and Outer Planning Advisory Areas, be identified in planning schemes?

Risk areas around MHF should be identified in planning schemes so that the community and planners understand the level of risk in their strategic planning and in considering planning proposals.

8. Are there other more appropriate mechanisms other than the planning system that could be used to identify risk areas around a MHF that would alert landowners, tenants, permit applicants, facility operators and prospective purchasers and others about a MHF and the risk potential?

The planning system should be used in conjunction with any other systems that are currently in place. The planning system is the most appropriate mechanism for identifying risk as being a map based system, it is transparent.

Under the planning system a new use or development can be managed to mitigate any risk. Any buyer of property would also be alerted to the MHF.

The centrality and ease of use of the planning system make it an ideal tool for identifying such risks. The planning system already identifies risk in the case of bushfire and floodway management and, provided an appropriate MHF Overlay and/or Zone were applied to MHF uses, it could do likewise for MHF risks.
(iii) Reflection in the Planning system

Environmental and safety requirements for MHF are regulated by the EPA and WorkSafe. The planning system does not provide this role; however, it can ensure through both strategic and statutory planning that conflicting land uses and development do not occur in areas where environmental risk may occur.

Existing planning scheme tools do not provide a single mechanism for appropriately managing both use and development of land within separation distances/buffer areas. There is no zone that includes specific provisions that requires an applicant or a decision maker to consider the effects of nearby land use or development on safety.

Extending an identified risk area over land outside the property boundary of a MHF does not necessarily quarantine that land from having a viable, economic use. There are non-sensitive uses which might be compatible with potential environmental risk.

This is perhaps made clear when considering what types of land use and development within the Inner and Outer Planning Advisory Areas WorkSafe advises against in its information sheet:

- Land use or developments within the inner area, apart from low density industrial uses such as non-retail warehousing or other low employee density business or industrial use. This minimises the numbers of people that might be affected by a low frequency-high consequence incident and maximises the likelihood of people safely responding to an emergency.

- Land use or developments within the outer area for residential, business or other use where people likely to be present are not able to safely respond to a potential emergency situation or the proposal may result in unacceptable societal risk e.g. a large number of people present.

Response to Thought starter question 9:

9. Should modelled risk areas around MHF be translated into planning schemes, and if so, how could this best be achieved?

Modelled risk areas around MHFs based on the Work Safe advisory for inner and outer areas (see map 1 above) would be an accurate and logical way of showing risk in planning schemes. A planning overlay is the suggested mechanism.
2. Policy

Planning policy at State level does reflect on land use conflict. However there is no specific policy for MHF.

Local planning policy can be drafted to manage use of land and land use conflict between sensitive uses and hazardous facilities. However, local policy only provides guidance and cannot be used to prohibit inappropriate sensitive uses, there needs to be a permit trigger through a zone or overlay.

Response to Thought starter questions 10-12:

10. Is the treatment of MHF in State policy adequate/appropriate?

The present treatment of MHFs in State Policy is not adequate as it does not mention MHFs. Any State Policy should seek to limit the location of both sensitive and non-compatible uses close to major hazardous facilities to reduce any adverse outcomes should an accident occur.

The planning scheme could also propose definitions for a ‘sensitive use’ in relation to a MHF and for uses not compatible with a MHF, to assist planning around MHFs.

11. Should policy more clearly prioritise the protection of human life in areas around MHF similar to that provided under Bushfire policy?

The protection of human life is always a priority and this must be reflected in policy.

12. Could local planning policy play a greater role in managing conflicting land uses and sensitive land use near MHF and provide strategic guidance on how such areas are developed?

Under the current planning system, Local Planning Policy’s primary aim is to guide discretionary decision-making at a local level when a planning permit is required.

As the local conditions pertaining to MHF do vary, local planning policy should provide guidance on how affected areas are to be developed, thus providing greater certainty for developers of land uses which may be incompatible with MHFs. However this would only be effective if it related to discretion allowed by zone or overlay controls.
3. Zones

As mentioned above, current zones applied to areas outside of MHF do not provide for hazards and risk to be considered. The exception could be those zones that allow Schedules to be developed that are tailored to particular circumstances or locational matters such as the SUZ or Comprehensive Development Zone (CDZ).

Alternatively a new zone with a tailored schedule or schedules could be developed. In triggering a permit, an application for a sensitive use or development would be required to demonstrate that it includes appropriate design measures to manage external effects from vibration, light spill and glare, noise, airborne emissions and provide for safety and emergency evacuation to minimise potential amenity conflicts and threat to human life.

Response to Thought starter question 13-16:

13. Should a specific zone be considered and applied to all MHF such as the SUZ or a new zone?

Introducing a new zone could duplicate and confuse the purpose of zones already in place, such as the industrial zone.

14. Could or should SUZ or other zone boundaries extend off site from MHF and Schedules used to allow certain use and development to occur?

Using a new MHF zone schedule could allow protection to extend beyond a property boundary without restricting any compatible uses in the vicinity of the MHF. This approach could manage reverse amenity impact issues such as encroachment.

15. Could any new or modified zone include purposes, permit requirements, decision guidelines that identify and manage sensitive uses?

A new or modified zone could identify or manage sensitive uses but it is unlikely that a generic zone could work, and specific zone would need to be created for different locations.

16. Should zones prohibit intensification of use or should they maintain a discretionary permit process?

In general, planning should evaluate the specific performance of development against performance measures and therefore a discretionary permit process is recommended so as to allow the individual merits of each proposal to be properly considered.
4. Overlays

Overlays are limited primarily to triggering the need for permits for development and not use. The Airport Environs Overlay (AEO) is an exception where it can manage both land use and development in relation to noise effects. The Environmental Significance Overlay (ESO) has been used to provide a degree of management of development around some MHF. It has been given some recognition for this role under DELWP’s guidelines for using Victoria’s planning system.

A new purpose built overlay could be developed. There is potential for a new overlay that could identify and manage separation distances/buffer areas and:

- Define the boundaries of separation distances/buffer areas for risks around Major Hazard Facilities
- Control both the use and development of land within the identified separation distances/buffer risk area
- Allow for multiple Schedules to the overlay to provide for different levels of control to effectively manage varying levels of risk. Schedules may be restrictive with prohibitions of certain sensitive land uses or development or be less restrictive with greater emphasis on performance based assessment including contextual circumstances, design and siting considerations.

Response to Thought starter question 17-19:

17. Could or should an existing or new overlay be used to identify risk and manage development on land surrounding a MHF?

A specific MHF overlay could be used to identify risk and manage development on land on and surrounding a MHF. A MHF overlay could operate in a manner similar to the Airport Environs Overlay (AEO) where it can manage both land use and development. In the case of the proposed MHF Overlay, the mechanism could be used to identify risk and manage use and development on land surrounding a MHF that might impact on the operation of a MHF.

18. Should both use and development of land around a MHF be managed in an overlay?

Yes, both the use and development of land around a MHF should be managed in an overlay to help identify changed conditions of risk which may arise from expansion or encroachment. It is important that use be included as depending on the zoning a building could change to a sensitive use without the need for a permit.

19. Could an overlay identify inner and outer hazards areas or be applied to identified areas (whether default or modelled)?

It would be useful for an Overlay to identify inner and outer hazards areas or be applied to identify areas (whether default or modelled). By using a schedule or even two schedules (inner and outer areas), an overlay could then identify the level of the hazard and tailor the planning response accordingly.
5. Particular Provisions

Clause 52.10 – Uses with Adverse Amenity Potential also applies to ‘unacceptable risk’. The clause is discussed at length in the next section.

(iv) Notification of risk

A concern for MHF regarding the Planning system is encroachment. The present planning framework is effective at considering the impact on neighbouring properties as part of the assessment of any planning application for a new or modified MHF but does not appear to apply as rigorous an assessment process to an application for use or development, including residential or community buildings in the vicinity of an existing MHF.

A planning scheme amendment to a more sensitive use (such as residential) will usually trigger notice provisions which may involve a more transparent consideration of risk issues, but if the land is already zoned then development may occur as of right.

The result is that approvals may be granted that allow a greater population or population density close to a MHF. An issue is: how can future residents, whether prospective purchasers, tenants or developers, be made more aware of the potential for risk?

If one of the planning tools mentioned above was used this notification would be provided through a planning certificate or a section 32 statement.

Response to Thought starter question 20:

20. Is notification of the risk status of land in proximity to a MHF important and how might it be achieved?

The notification of owners/occupiers of the risk status of land in proximity to a MHF is important to both potential neighbours of a MHF and to the MHF owner/operator as well for obvious emergency and safety planning reasons. The notification of neighbours of the MHF of the risk status of land would be achieved via a section 32 notice reference, if an MHF Overlay exists and is in place on land within a MHF and sufficiently adjoining/adjacent or in proximity to an MHF.

The harder issue of notification concerns where an existing use expands or changes on land close to a MHF. Currently, notification of MHF owners/occupiers of land uses expanding or locating within the vicinity of a MHF does not always occur. However notification would be triggered by a permit requirement from a MHF Overlay applying to land on which a MHF exists and in the surrounding area if this Overlay were in place. The Planning system could assess the risk and make recommendations on how it risk could best be managed.

The costs associated with any further safety requirements could be apportioned either on the basis of who is making the changes or equally or proportionally shared between parties.
(v) Referral authority requirements

The EPA and WorkSafe have the opportunity as referral authorities to be involved in planning applications associated with new or existing MHF. However, they are not referral authorities for proposals located outside of these types of facilities.

Referral authority status under Section 55 of the Planning and Environment Act 1987 can be provided under Clause 66.04 for referral of permit applications under local planning provisions.

Response to Thought starter question 21-22:

21. **Would it be appropriate or beneficial to include key agencies such as the EPA and WorkSafe as referral authorities for permit applications lodged with identified risk areas around MHF?**

It is appropriate and beneficial to include key agencies such as the EPA and WorkSafe as referral authorities for permit applications lodged with identified risk areas around MHFs. Doing so would provide the expertise required to support the outcomes sought by the Planning system.

22. **Would the use of a zone or overlay provide the mechanism for engaging the EPA and/or WorkSafe as a referral authority for areas of risk around Major Hazard Facilities?**

Yes. The use of an Overlay should provide the mechanism for engaging the EPA and/or WorkSafe as a referral authority for areas of risk around Major Hazard Facilities.
2. Adverse amenity

Hazards leading to risk and significant consequences from MHF have been discussed above. The Committee’s Terms of Reference also require consideration of buffers for adverse amenity for other industrial uses.

A buffer or separation distance can achieve both risk and amenity objectives, although a buffer to protect the amenity of sensitive uses is often considerably greater. Some of the key issues for planning controls in relation to risk as discussed can also be considered in relation to amenity protection.

(i) Buffers/separation distances

The two primary tools for amenity buffers are Clause 52.10 in the Victoria Planning Provisions (VPP) and in the EPA Recommended Separation Distances for Industrial Residual Air Emissions 2013 guidelines (IRAE Guidelines).

The distances prescribed in these tools are not mapped spatially in the Planning system or the EPA regulatory system, except where being used in relation to a specific proposal.

In essence the tools have the following purposes.

Clause 52.10

The clause relates to threshold distances that are used to determine whether a permit is required for a use in some industrial and commercial zones. Its purpose includes reference to defining types of industries and warehouses that may cause offence or unacceptable risk to neighbourhoods if they are not appropriately designed and located. In some instances the clause acts as a ‘prohibition’; for example some section 2 uses in the Commercial 1 Zone (C1Z) can only occur if they do not include a clause 52.10 use.

The clause does not provide for ‘reverse amenity’ protection of industry, although this is sometimes argued for particular proposals. Thus residential encroachment on industry is not addressed by the clause.

Clause 52.10 also applies from ‘land to land’; that is it applies from boundary of proposed industrial use to boundary of sensitive use. It does not, for example, apply from a pollution source to a particular sensitive use such as a house or school.

Any review of Clause 52.10 may benefit from considering the following matters:

- Clarifying what risks it addresses, such as noise, odour, dust, vibration and public/human safety.
- The definition of ‘threshold distance’ and whether adequate protection is extended to sensitive uses in zones that are not listed in the Clause.
• Clarifying its function, for instance that it does not set separation distances/buffer areas, but rather triggers referrals and further assessment.
• Whether certain permit applications should be referred to the EPA and to WorkSafe.
• Clarifying its interaction with EPA and WorkSafe guidance notes, guidelines and information sheets.
• The potential for identifying/listing permit application requirements to avoid/reduce delays with requests for further information.
• Links with relevant policies in the State and local planning policy frameworks.

Response to Thought starters 23-24:

23. Should Clause 52.10 be reviewed to provide more than just an advisory role in determining the need for permits for industrial and warehousing uses?

Yes, the clause should be reviewed to ensure that if there are any industrial or warehousing uses where the hazard is judged to be such that risk is considered.

24. If so, what should such a review seek?

See response at though starter #23

The review should seek to identify the risk posed by the listed uses and whether and what buffer distance would be required to mitigate the risk.

The IRAE Guidelines

The EPA IRAE Guidelines were reviewed in 2013 and as discussed in Chapter 3 is a reference document in the SPPF. They explicitly address both separation between existing industry and proposed sensitive use and vice versa. The separation distances can be measured from activity to sensitive use boundary (urban context) or activity to sensitive use (rural context).

Response to Thought starter question 25:

25. Should the EPA IRAE Guidelines be better articulated in the VPP to accord greater weight to separation distances for industry or sensitive use expansion?

The EPA IRAE Guidelines should be better articulated in the VPP to accord greater weight to separation distances for industry or sensitive use expansion. They could also be referred to in any proposed MHF overlay control as part of set of decision guidelines.

The Guidelines could also recognise and protect any significant environmental values and or flora and fauna located on land in buffers surrounding MHFs.
The Size of Buffers

Buffers between MHF and other industry and sensitive uses must be ‘fit for purpose’. That is they must reduce risk or amenity impacts to an ‘acceptable level’. This acceptable level should be evidence based with a focus on human and environmental health; and human amenity.

Excessive buffers may be an unnecessary economic impost, even though non-sensitive productive uses may be acceptable in the buffer. Insufficient buffers may lead to significant health and amenity impacts.

Ownership of buffers is often also problematic. Large industry, for example Mobil in Altona, may have significant land holdings that act as a buffer for their own MHF and industry. In other cases a buffer may be sought to be applied over adjoining land that is not in the same ownership with probable economic effects on those land owners. How might such a situation be resolved equitably?

The Committee considers there will always be a need to balance competing policy objectives in planning, for example industrial land protection against the provision of housing, and it would be difficult and probably undesirable to be too prescriptive in planning by providing a set of immutable buffer controls in all cases. However a risk based approach should always underlie decision making on this issue.

Response to Thought starter questions 26-28:

26. Are the separation distances/buffer distances in Clause 52.10 and the IRAE Guidelines clearly justified and appropriate?

The buffer distances may or may not be appropriate. This is a technical question that requires an engineering response based on the nature of a proposed use for a definitive answer to be given. Clause 52.10 includes two notes which in effect allow for even greater distances for buffers/separations than those in the table based on the type of manufacturing processes and materials used and the level of risk posed by the use.

27. Might a clearer articulation in the Planning system of principles around the need for buffers be useful?

A clearer articulation in the Planning system of principles around the need for buffers could be useful. The principles need to justify the size of the buffer/separation distances.

28. Does the Planning system currently allow and/or facilitate appropriate responses to the provision of buffers whilst ensuring the most efficient land use and land value capture outcomes around MHF and industry?

No, the Planning system does not currently allow and/or facilitate appropriate responses to the provision of buffers while ensuring the most efficient land use and land value capture outcomes around MHF and industry because compatible uses are not always considered.
(ii) Reverse amenity and agent of change

As discussed above, the IRAE Guidelines talk specifically about the need to protect industry from encroachment of sensitive uses. This may restrict or 'force out' industry or alternatively may produce unacceptable impacts on nearby residents, whether risk or amenity.

The 'agent of change' principle has long been discussed in planning, whereby the 'new player', that is for example an encroaching sensitive use, is required to take design or other measures to ensure risks are managed to an acceptable level.

In 2014 this principle was given statutory weight in relation to live music, where the new particular provision at Clause 52.43 has one of its purposes: To ensure that the primary responsibility for noise attenuation rests with the agent of change.

It is a principle that is used in the IRAE Guideline. Such an approach could be encapsulated in the Planning system in relation to MHF and other industry with significant offsite effects. There are a number of issues that would need to be explored, including to what extent should the agent of change be allowed to ‘design out’ risk as opposed to an amendment or development being refused.

The Committee is aware that the Western Australian Planning Commission has a State Industrial Buffer Policy which addresses such issues and will be looking at this and other State approaches in completing its task.

Alternatively, could the principle, if implemented in planning in an industrial context, encourage the continuation of industry that is inappropriately located or poorly performing in environmental terms?

Response to Thought starter question 29:

29. Could the ‘agent of change’ principle be introduced to planning schemes for industry to ensure that the onus on ensuring appropriate buffers rests with the encroaching sensitive use.

The ‘agent of change’ principle could be introduced to planning schemes for industry in a modified form to ensure that the onus on ensuring a proportion of the cost of appropriate buffers rests with the encroaching use, sensitive or otherwise.

However, it would be unfair to apportion the full cost to ‘agent of change’ given that often both parties benefit from improved MHF safety protocols. Rather, it would be fairer that the costs should be apportioned in a way similar to the way the costs of a new fence are apportioned between neighbours. That is, the cost is usually split in half because both parties have a direct interest and a benefit to be gained from erecting a new fence.

In a manner similar to the fences example, the ‘agent of change’ relating to MHF proposals could start out from the position of being 50% responsible for the costs of any safety improvements perhaps reducing in proportion to taking into account factors such as the size of the land occupied by the ‘agent of change’ impacting on or arising from the MHF.
3. **Sensitive uses**

There are a range of tools and guidelines used in the consideration of ‘Sensitive uses’ and MHF or other industrial uses.

Ministerial Direction No. 1 – Potentially Contaminated Land provides a definition of ‘sensitive use’ for the purposes of that Direction. It includes a residential use, a child care centre, a pre-school centre or a primary school.

Planning Advisory Note 56 for Planning for Ports and their Environs (October 2014) refers to sensitive uses and includes accommodation, childcare facilities, preschool centre or a primary school. The Advisory Note stresses the need for careful consideration of proposals that introduce new sensitive uses and/or intensify existing sensitive uses. Such uses may prejudice the land for future industrial requirements.

Both Clause 52.10 and the conditional requirements attached to as of right land uses under the IN1Z refer to land in a residential zone, Capital City Zone, Docklands Zone, land used for a hospital or an education centre or land in a Public Acquisition Overlay (PAO) to be acquired for a hospital or an education centre.

Of interest, the IN1Z and IN2Z include as a decision guideline relating to the use of land (Clauses 33.01-2 and 33.02-2) that requires consideration of the effect that the industrial 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. This allows scope for a responsible authority and a referral authority to provide advice with respect to what is considered a sensitive use.

Having regard to the above, it is clear that residential uses are sensitive to the off-site effects of industrial activity whether based on amenity or environmental/safety risk. It may be useful to develop and adopt a standard approach to the definition of sensitive uses.

*Response to Thought starter question 30:*

30. **Should sensitive uses be formally defined in the planning scheme?**

“Sensitive uses” and other uses not compatible with a MHF should be formally defined in the Planning Scheme.
4. Navigating the system

While there are clearly many potential tools and guidelines within the Planning system that can be used when considering MHF, it appears to the Committee that there are differing views on how the system should work in an integrated manner.

It may be useful to develop a Practice Note or notes to clearly articulate how land use planning around MHF and industry more broadly should occur. This may be useful, whether the existing suite of tools is used or additional planning tools are identified and developed.

Response to Thought starter question 31:

31. Would a Planning Practice Note(s) for interface planning between industry and sensitive uses be useful?

Yes, a Planning Practice Note(s) for interface planning would be useful. This Note could offer greater guidance to planners and WorkCover / EPA officers. To be complete, it should make reference to the parallel regulatory system and where the Planning system overlaps.
5. Pipelines

(i) Background

A number of submissions requested that pipelines that carry hazardous materials, such as high pressure gas and petroleum products, be included for consideration as these pipelines present a considerable risk to communities if they rupture.

Section 19 of the Act requires the planning authority to inform every Minister, public authority and municipal council that it believes may be materially affected by a planning scheme amendment and through s35 (4) gain consent for the amendment. In the case of a pipeline this would include referral to the Minister for Energy and Resources however the Minister for Planning can also under s20 (4) decide, if considered appropriate, that referral to the Minister for Energy and Resources is not necessary.

There is little recognition of pipelines in the planning provisions. As discussed in Section 2.2 above, Clause 19.03-6 of the SPPF aims to ensure that gas, oil and other substances are delivered safely from ports, and calls for planning schemes to recognise and protect existing gas pipelines from residential encroachment and for new pipelines to have adequate buffers. However this clause is not effectively translated into policies, zones, overlays or particular provisions.

In considering Greater Geelong Planning Scheme Amendment C246, the presence of a significant high pressure gas pipeline only emerged just prior to the Panel Hearing.

The Panel commented that in accordance with Clause 19.03-6 it would be appropriate to “recognise existing transmission-pressure gas pipelines in planning schemes” in a formal way, perhaps with high-pressure gas pipeline routes and associated “heat flux zones” marked on scheme maps with a dedicated Overlay control.

Additionally the Panel recommended that notice be given about the existence of a pipeline to newcomers buying into an area, as this would avoid post-sale disputes between purchasers and the developer or Council.

APA Group advised the Advisory Committee that there is a gas pipeline at Fisherman’s Bend next to which a school and community facilities are planned.
(iii) Pipeline Act and Regulations

The Pipeline Act 2005 applies to onshore pipelines that are used to convey petroleum, oxygen, carbon dioxide, hydrogen, nitrogen, compressed air, sulphuric acid or methanol as well as any other pipeline that the Minister for Industry, Energy and Resources declares to be a pipeline for the purposes of the Act. A pipeline to which the Pipeline Act 2005 applies is required to be licenced and construction is prohibited within three metres of a licenced pipeline.

The Pipeline Regulations 2007 requires among other things that gas and petroleum pipelines are constructed, operated and maintained to specified Australian Standards. The regulations also require the preparation of a Safety Management Plan and that owners and occupiers of land in a pipeline corridor be notified during the pipeline development.

Response to Thought starter questions 32-33:

32. Given there is already a legislative framework for pipeline protection, does the Planning system need to include additional provisions?

While the existing pipeline protection regulatory framework is adequate, there would be an awareness benefit in identifying such pipelines in the planning scheme.

33. Could a risk based spatial overlay developed for MHF and industry with a specific schedule for pipelines be a potential tool for use in identifying major pipelines in planning schemes

A risk based spatial overlay is a potential tool.

Contact for further Information

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