

9 February 2016

Mr Nick Wimbush
Advisory Committee Chair
Planning Panels Victoria
Department of Environment, Land, Water and Planning
1 Spring Street
MELBOURNE VIC 3000

Dear Nick

Major Hazard Facilities Advisory Committee: Discussion Paper

Thank you for your letter of 22 December 2015 inviting Melbourne Water's comments on the Major Hazard Facilities Advisory Committee Discussion Paper. We have reviewed the Discussion Paper and provide the following feedback.

Overview of Melbourne Water's Major Hazard Facilities

Melbourne Water owns and operates three facilities that meet the definition for a Major Hazard Facility (MHF) in accordance with the *Occupational Health and Safety Regulations 2007*. These include:

- Silvan Treatment Plant
- Winneke Treatment Plant
- Eastern Treatment Plant

There is an obligation for Melbourne Water as an operator of MHF sites to prepare, maintain and revise Safety Cases in order to obtain a license to operate. The Safety Case is used to demonstrate to WorkSafe that adequate control measures and satisfactory management systems are being used to achieve safe operation of the facility. Melbourne Water continuously works towards reducing the risk to as low as reasonably practicable and acceptable levels.

Melbourne Water has prepared a safety case document for each of the above MHF facilities in conjunction with our employees and contractors. Together we have worked to identify the hazards and risks associated with water treatment plants at Silvan, Winneke and the Eastern Treatment Plant; and implemented the controls needed to manage those hazards.

Melbourne Water is committed to providing a safe operating environment for our people and ensuring the health and safety of the local communities in which we work.

There are a number of materials stored onsite at water treatment plants that could cause hazards. However, chlorine is the only material which is above the threshold amount, making the water treatment plants MHFs.

As well as the three MHFs listed above, Melbourne Water has additional water and wastewater treatment facilities with high-volume gas chlorination systems. The volumes

of chemicals at these sites do not meet the MHF threshold amounts however; Melbourne Water adopts similar risk mitigation strategies at these sites to ensure the ongoing health and safety of the local communities. Furthermore, they are faced with similar buffer and amenity issues as the MHF and are therefore of interest in the context of this review.

The Greenvale Water Treatment Plant site (though not classified as a MHF) is a notable example that demonstrates the potential impacts of urban encroachment and how land use incompatibilities develop over the course of time. In this instance, residential areas encroached on the Greenvale site, resulting in increased residential densities in the surrounding areas and within the site's WorkSafe "inner planning advisory area" for MHF. This consequently increased the risk profile due to higher consequence (from increased exposure / number of occupants in the neighbouring facilities), with associated implications on Melbourne Water for not being able to meet the required separation distances. This created the need for Melbourne Water to convert the water treatment processes at Greenvale to safer chlorination alternatives.

Melbourne Water supports this review by the MHF Advisory Committee and recognises the ability of the planning system to ensure appropriate separation distances are maintained between the MHF and neighbouring, sensitive land uses.

Below we provide responses to the relevant thought starters identified in the Discussion Paper.

Melbourne Water Response to Discussion Paper Thought Starters

Relevant Thought Starter	Melbourne Water Response
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?	Whilst the planning system outlines policy to ' <i>Provide adequate separation and buffer areas between sensitive uses and offensive or dangerous industries</i> ' in relation to the design of new industrial development, policy that relates to protecting existing industry from the encroachment of sensitive uses that may be adversely impacted by the industry (i.e. the 'reverse buffer' issue) is not adequately addressed.
2. How should planning address areas surrounding existing or proposed MHF or other hazardous industry that poses a risk to the safety of surrounding areas?	The EPA guideline titled <i>Recommended Separation Distances for Industrial Residual Air Emissions (IRAE)</i> provides advice on recommended separation distances between industrial land uses that emit odour or dust, and sensitive land uses. It may be useful to build upon this guidance document and embed it better into the planning schemes, noting that it may need more detail for the MHF risks.
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?	Melbourne Water recommends that amendments be made to the State Planning Policy Framework (SPPF) to introduce policy to ensure appropriate separation distances are maintained between industry and neighbouring, sensitive land uses. This should not be restricted to MHF, but should include all "hazardous industry that poses a risk to the safety of surrounding areas".

	<p>The Local Planning Policy Framework (LPPF) can then be used to specifically refer to relevant sites, and detail local policy requirements.</p> <p>Melbourne Water supports the suggestion by the Advisory Committee to use a tailor-made control to manage adverse amenity impacts within buffer areas surrounding the industrial facilities. (Further discussion below.)</p> <p>When a new MHF is proposed or changes made that would require changes to its safety assessment, consultation could be included as part of the EPA Works Approval Process. A number of MHFs would also be Scheduled Premises, therefore, when applying for Works Approval (which has a requirement for community engagement) the MHF consultation could be combined.</p>
<p>4. Should a definition for MHF be included in planning schemes, and if so, what might a definition include?</p>	<p>If new policy and a new control were to be introduced to better manage the interface areas between existing and new development and land used for MHF, a definition for MHF would be helpful in planning schemes. However, it should not be restricted to MHF, and should instead be based around risk profile – i.e. the definition should take it back to the risk areas/contours. As highlighted earlier, some non-MHF facilities may pose greater risk than MHF facilities and these other sites should be managed in the same way (e.g. Greenvale Treatment Plant).</p>
<p>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 information given to the local community?</p>	<p>Melbourne Water supports the concept of identifying risk areas around MHF, and using this as the basis for managing buffer areas. Identifying the buffers in planning schemes (through the use of a planning control such as a zone or overlay) has the advantage of making it clear to planning and responsible authorities and permit applicants of the spatial area within which restrictions may apply.</p>
<p>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?</p>	<p>However, using both inner and outer buffer areas may complicate matters, and it is instead recommended that one buffer area be applied. Further consultation should be undertaken to determine whether the WorkSafe methodology for Advisory Areas is appropriate, or perhaps an alternate buffer definition may be preferred by stakeholders.</p>
<p>7. Should risk areas around MHF, through Inner and Outer Planning Advisory Areas, be identified in planning schemes?</p>	<p>In addition, the management of buffers should not be restricted to MHF, and should instead be outcomes based.</p>
<p>8. Are there other more</p>	<p>In any case it is necessary to ensure the risk contour / buffer adopted can be clearly communicated to the</p>

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?

community, as those described in the WorkSafe *Major hazard facilities: Land use planning near a major hazard facility* guidance note may be confusing and difficult to understand for those not experienced in risk terminology.

We recognise that the planning system is an appropriate mechanism to alert landowners, permit applicants and prospective purchasers of the potential restrictions to proposed developments and land use changes as a result of the neighbouring facilities. However, it should not be relied upon to inform the local community about the MHF and their risk potential, which would impact on a wider range of people. Informing tenants and short term residents who don't generally interact with the planning system would be a challenge if the only communication measures were through planning schemes.

Further thought should be given to supplementing this planning system review with a process for regular and appropriate alerts and notifications to ensure the local communities are appropriately informed and remain safe (e.g. by handing out fridge magnets or regularly sending out fliers, etc.).

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

It would be beneficial to use a planning scheme control (e.g. zone/overlay) to identify modelled risk areas in planning schemes so that planning and responsible authorities and permit applicants are aware of the area in which land use and development restrictions may apply. This would also have the benefit of encouraging pre-application discussions to take place between relevant parties.

Melbourne Water recommends that only one risk area be applied as a buffer, rather than inner and outer advisory areas as per the WorkSafe guidance note to avoid complicating the management of the buffer.

Further consultation should be undertaken to determine whether the WorkSafe methodology for Advisory Areas is appropriate, or perhaps an alternate buffer definition may be preferred by stakeholders.

Consideration needs to be given to the community cost of imposing land use and development restrictions to land within the buffer areas, and ensuring it is commensurate with the level of safety risk to the community.

Melbourne Water recommends that a streamlined planning scheme amendment process be put in place to ensure there is an easy mechanism to update planning schemes if/as buffers change. This is particularly relevant given the risk contours/areas are a function of the number of people in proximity to the

	<p>facility. That is, as land use and development changes occur over time, the risk contours will change as a result.</p>
<p>10. Is the treatment of MHF in State policy adequate/appropriate?</p> <p>11. Should policy more clearly prioritise the protection of human life in areas around MHF similar to that provided under Bushfire policy?</p> <p>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?</p>	<p>In Melbourne Water’s view the SPPF should be updated to identify the need to manage the interface / buffers between current or proposed MHF facilities and more sensitive uses. The risk around these facilities should be described broadly, and policy should clearly prioritise the protection of human life in these areas.</p> <p>However, doing so should not preclude the need to regularly carry out risk assessments of these facilities to ensure net community benefit continues to be achieved. This includes weighing up the community cost of imposing land use and development restrictions to land within buffer areas, against the cost of upgrading the operations of the facility and reducing the buffers accordingly where feasible.</p> <p>Changes to the SPPF should be supported by amendments to relevant LPPF to provide local context for the MHF, and strategic guidance on how these areas could be developed.</p>
<p>13. Should a specific zone be considered and applied to all MHF such as the SUZ or a new zone?</p> <p>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?</p> <p>15. Could any new or modified zone include purposes, permit requirements, decision guidelines that identify and manage sensitive uses?</p> <p>16. Should zones prohibit intensification of use or should they maintain a discretionary permit process?</p>	<p>All of Melbourne Water’s MHF (and similar facilities) are zoned Public Use Zone 1 (PUZ1) – Service and Utility. This enables Melbourne Water to carry out its operations unimpeded, including carrying out necessary upgrades or other works or associated uses consistent with the water treatment plant. It is also beneficial that the planning scheme identify the public land for transparency. Therefore, Melbourne Water would not want to rezone the sites of the MHF or their buffers from PUZ1 to any other zone.</p>
<p>17. Could or should an existing or new overlay be used to identify risk and manage development on land surrounding a MHF?</p> <p>18. Should both use and</p>	<p>In Melbourne Water’s view an overlay would be a more appropriate planning tool to manage the interface areas between MHF and existing and new development.</p> <p>As changes in land use have the ability to increase the number of people in proximity to the MHF site it is necessary that the overlay control land use in addition</p>

<p>development of land around a MHF be managed in an overlay?</p>	<p>to development. As no such overlay exists, a new, tailor-made overlay would need to be developed.</p>
<p>19. Could an overlay identify inner and outer hazards areas or be applied to identified areas (whether default or modelled)?</p>	<p>Using both inner and outer hazard areas may complicate matters, and it is instead recommended that one buffer area be applied. Further consultation should be undertaken to determine whether the WorkSafe methodology for Advisory Areas is appropriate, or perhaps an alternate buffer definition may be preferred by stakeholders.</p> <p>Consideration needs to be given to the community cost of imposing land use and development restrictions to land within the buffer areas, and ensuring it is commensurate with the level of safety risk to the community.</p> <p>If an overlay were to be applied to the MHF buffer areas we would want to be exempt from permit requirements to enable us to continue to operate the facilities unimpeded.</p>
<p>20. Is notification of the risk status of land in proximity to a MHF important and how might it be achieved?</p>	<p>In Melbourne Water’s view it is advisable to notify the local community of the risk status of the land in proximity to a MHF. In particular because the risk associated with these facilities is extremely low. However, if the interface/buffer areas are not managed appropriately, and urban development encroaches (such as the Greenvale Treatment Plant example), then the risk becomes unacceptable. This highlights the importance of proactively managing the buffer areas.</p>
<p>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?</p>	<p>It could be beneficial for the EPA and WorkSafe to be referral authorities for permit applications lodged within identified risk areas around MHF.</p>
<p>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?</p>	<p>Melbourne Water is a determining referral authority for proposed development within the Environmental Significance Overlay – Schedule 3 of the Greater Dandenong Planning Scheme, which applies to the Eastern Treatment Plant buffer area to manage adverse impacts relating to odour. This referral authority status has served us well to manage encroaching odour-sensitive uses.</p> <p>The use of a zone or overlay could provide the mechanism for engaging the EPA and/or WorkSafe as referral authorities for risk areas around MHF. The overlay should also allow for the MHF operator to be a referral authority if desired.</p>
<p>23. Should Clause 52.10 be reviewed to provide more than just an advisory role in determining the need for</p>	<p>Melbourne Water supports a review of Clause 52.10 that considers the matters outlined in the Discussion Paper.</p>

permits for industrial and warehousing uses?

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

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?

Melbourne Water supports better articulation of the EPA IRAE Guidelines in the VPP to accord greater weight to separation distances for industry or sensitive use expansion.

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

It is necessary to distinguish between recommended separation distances for odour and dust (as per EPA IRAE Guidelines), and those required around MHF from a safety risk perspective (such as the WorkSafe Advisory Areas).

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

The separation distances set out in Clause 52.10 are to avoid causing "offence or unacceptable risk to the neighbourhood", however it is not made clear on what basis these threshold distances have been determined.

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?

The planning system would benefit from a clearer articulation of the principles around the need for buffers. This should distinguish between buffers required to minimise offence from odour and dust, and the more complex buffer requirements determined on the basis of risk safety for MHF and other similar facilities.

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.

Melbourne Water supports the introduction of the 'agent of change' principle to planning schemes.

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

It would be beneficial to define sensitive uses in the planning scheme, and also some consideration should be given to the number of people that may be on a site.

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

A Planning Practice Note for interface planning between industry and sensitive uses would be useful. It could provide guidance to Councils on how to develop local policies for MHF that exists in their municipality.

In addition, it could clarify the differences between amenity buffers for odour and dust, and those

	<p>required for risk safety. It could be used to clearly communicate the risk associated with MHF and other similar facilities, and how to determine an appropriate buffer around these facilities to minimise the risk.</p> <p>Melbourne Water would be pleased to work with DELWP to provide specific advice on interface planning around water and waste water treatment plants in particular.</p>
<p>32. Given there is already a legislative framework for pipeline protection, does the planning system need to include additional provisions?</p> <p>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?</p>	<p>Melbourne Water agrees that a risk based spatial overlay developed for MHF and industry with a specific schedule for pipelines may be a potential tool for use in identifying major pipelines in planning schemes.</p>

Melbourne Water Submission Summary

In Melbourne Water’s view the planning system currently does not effectively address existing or greenfield MHF or other hazardous industry that poses a risk to the safety of surrounding areas. In particular, the ‘reverse buffer’ issue is not adequately addressed.

Because of the stringent safety requirements in place at MHF, the risk associated with these facilities is extremely low. Therefore, any amendments to planning schemes to manage amenity issues within buffer areas around MHF needs to be carefully constructed so as to clearly state the low level of risk in these areas.

Melbourne Water recommends that amendments be made to the SPPF to introduce policy to ensure appropriate separation distances are maintained between industry and neighbouring, sensitive land uses. This should not be restricted to MHF, but should include all “hazardous industry that poses a risk to the safety of surrounding areas”.

The LPPF can then be used to specifically refer to relevant sites, and detail local policy requirements.

Melbourne Water supports the suggestion by the Advisory Committee to use a tailor-made control to manage adverse amenity impacts within buffer areas surrounding industrial facilities. Such a control would ensure land use and development compatible with the level of risk is allowed to occur in the buffer areas.

Melbourne Water would prefer an overlay over a zone as all Melbourne Water’s facilities are currently zoned Public Use Zone 1 – Service and Utility, which allows Melbourne Water to continue to operate its facilities as required.

A new overlay would provide the mechanism for engaging the EPA and/or WorkSafe as a referral authority for areas of risk around MHF. The overlay should also allow for the MHF operator to be a referral authority if desired.

A Planning Practice Note for interface planning between industry and sensitive uses would be useful. It could provide guidance to Councils on how to develop local policies for MHF that exists in their municipality.

In addition, it could clarify the differences between amenity buffers for odour and dust, and those required for risk safety. It could also be used to clearly communicate the risk associated with MHF and other similar facilities, and how to determine an appropriate buffer around these facilities to minimise the risk.

Melbourne Water would be pleased to work with DELWP to provide specific advice on interface planning around water and waste water treatment plants in particular.

Should you have any queries in relation to this submission, please don't hesitate to contact Nicki Granek, Senior Land Use Planner on 9679 7016, or myself.

Yours sincerely

A handwritten signature in cursive script that reads "Bruce Rush".

BRUCE RUSH
PRINCIPAL, LAND USE PLANNING