

**IN THE MATTER**

**of the Resource Management Act 1991**

**AND**

**IN THE MATTER**

**of Submissions and Further Submissions on  
the Proposed Hutt City District Plan**

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**JOINT WITNESS STATEMENT: HAZARDOUS SUBSTANCES**

**INITIAL ISSUE: 19 JUNE 2026**

**UPDATED: 28 JULY 2026**

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## Introduction

1. This joint witness statement on hazardous substance has been prepared by Jenny Polich (on behalf of the Fuel Companies) and Rob Van de Munckhof (on behalf of Seaview Marina), (together, "**Experts**").
2. In preparing this statement, the Experts have read and understood and agree to be bound by the Code of Conduct for Expert Witnesses.
3. The Panel issued Minute 6 relating to the Hearing Stream 2 which directed conferencing on a number of specific matters following the hearing.
4. In response to the Minute, the Experts engaged in good discussions on the 19 June 2026 through informal conferencing on the matters directed by the Panel.
5. Additional discussions were held between the Experts on 17 July 2026 to address supplementary questions raised by the planning conference.

The Panel asked us to consider the following questions:

*Options for acceptable risk criteria, including 1 x 10<sup>-6</sup> per year criterion, or a multi-tiered/variable arrangement in this regard consideration is to be given to both the Seaview Wharfline and the fuel storage terminals.*

*With reference to the options identified in 'a', land use activities that should be enabled, managed or avoided depending on the applicable risk criteria, including:*

- i. any reasons why different approaches are warranted for different land uses;*
- ii. where management is recommended, whether the management relates to limitations as to scale or location (for example associated number of people or position within a certain part of the Marina Zone), to particular measures required (for example evacuation procedures, timing/duration, coordination with third parties) or for other purposes;*
- iii. where avoidance is recommended, whether it is for reasons of health and safety, potential reverse sensitivity effects, both of those reasons, or other reasons;*

*The experts' professional opinions on the options, measures and other details that should be preferred (if any)*

*Any other technical advice to assist the planning experts with relevant matters to be addressed in conferencing.*

### **Technical Agreement**

6. In plain English, the two issues that needed to be managed are
  - (a) the sensitivity of landuses
  - (b) population density.
7. In terms of the sensitivity we consider that while hospitals, schools, childcare facilities and retirement villages technically are the most sensitive, but other rules would restrict these activities so we consider that these would not establish in the area. In isolation, if rules are needed to restrict, this could be achieved by making these activities non-complying within the Seaview Marina Zone (noting the appropriate mechanism is a matter for the planners).
8. Residential, has two issues: density /numbers of people and nighttime population and ease of evacuation if incident occurred early morning / nighttime. Residential development of any kind should not occur within the 1 in a million ( $1 \times 10^{-6}$  per year) risk contour. However population changes and increase in density also needs to be considered to determine if a proposal is appropriate within lower risk areas outside the  $1 \times 10^{-6}$  per year contour to avoid societal risk increasing to intolerable levels.
9. With the available QRA information we agree that the 0.5 in a million ( $0.5 \times 10^{-6}$  per year contour), while not directly linked to societal risks provides a reasonable basis for setting the extent for consideration in changes in population that may affect societal risk. This is illustrated in the societal risk figure in Attachment A, which shows that by managing the total number of people within areas affected by the  $0.5 \times 10^{-6}$  per year contour by constraining development to low density land uses, societal risk is unlikely to reach intolerable levels.
10. Residential Developments between the 0.5 in a million and 1 in million contours should be assessed but is not immediately excluded. This approach may enable low density residential, but is unlikely to allow higher density or multi-level residential or hotel type development. (noting the appropriate mechanism is a matter for the planners).

11. Commercial and offices is more difficult to establish a rule for as these uses could vary from activities such as a call centre with high staff density, to activities such as warehouses and linked offices with limited staff.
12. The Experts agree that activities with a high density are not appropriate within the 1 in million risk contour. Therefore within the  $1 \times 10^{-6}$  per year contour commercial (including office) developments should be assessed, with a focus on the scale of the development and ensuring that emergency evacuation controls are in place. The reason for distinguishing commercial from residential is that an evacuation plan is more likely to be achievable for non-residential populations and there is limited overnight presence of people.
13. To provide direction to the panel and planners the following indicates what we consider in terms of appropriate (with emergency evacuation considerations) and not appropriate:
  - (a) High density offices (e.g. call centres), multi-story offices with large staff present (hundreds of staff) would not be appropriate
  - (b) Small offices with tens of people developments may be ok;
  - (c) Retail – coffee shop/ small scale retail activities such as clothing/ sportswear type (surf shop) is ok;
  - (d) Large scale retail such as shopping mall with multi-story shopping centres would not be appropriate.
14. Finally for events and activities, the Experts consider that the key factors are associated with the timing of events with pumping activities as this is linked to the largest off-site risks. Where the timing of events can be coordinated with the supply and delivery of fuel the risks can be managed. In JP experience, this is unlikely to be achievable for regular events (e.g. monthly markets) but could be achieved for irregular events with long lead time (examples include Sail GP in Lyttleton Port). Even for events outside the risk contours, whilst controls over numbers are not required consideration of evacuation and egress is still recommended throughout the Marina Zone, noting that considerations include emergency services access, egress of the public and management of exposures to lesser effects than fatality, eg smoke from a terminal fire.
15. For the fuel pipeline the Experts agree, that sensitive activities such as hospitals, schools, childcare facilities and retirement villages should not be located within the vicinity of the pipeline.
16. For residential the issue is the same as for the bulk fuel risk, which is focused on density. Again, high density residential next to pipeline is not likely to be appropriate but lower density may be acceptable. Therefore, consideration of the design and scale again would be appropriate for any proposed development with low density likely to be acceptable.

17. In terms of pipelines, the key risks are likely to be associated with fire risk and therefore, controls such as firewalls and evacuation plans would reduce risk to people..

Overall, the Experts consider:

- For bulk fuel terminals, having two mapped contours is preferable being:
  - Within the 1 in million contour which would
    - restrict residential,
    - and provide a trigger for assessment for commercial activities to consider if the scale and number of people is acceptable and effectiveness of controls, including whether emergency planning and evacuation is adequate.
  - Within the 0.5 in a million contour which would
    - restrict sensitive activities (schools, hospitals etc),
    - and provide a trigger for assessment for residential activities between the 0.5 and  $1 \times 10^{-6}$  per year contours to consider if the scale and number of people is acceptable,
    - and provide a trigger to ensure any commercial (eg offices, markets etc) between the 0.5 and  $1 \times 10^{-6}$  per year contours have consideration of emergency planning and evacuation arrangements;
  - As we consider the contours provide a basis for assessment and not an outright prohibition (except for sensitive land uses within the  $0.5 \times 10^{-6}$  per year contour and residential within the  $1 \times 10^{-6}$  per year contour) , then the exact extent of the contours is less critical and therefore the existing QRA information can be used.
- For the fuel pipelines, a single mapped overlay based on the 0.5 in million risk contour is acceptable on the following basis:
  - The overlay restricts highly sensitive activities (schools, hospitals etc); and

- Provide a trigger for assessment for other landuses including residential and commercial and is not used to prohibit activities.

- Points of disagreement:

- There are no points of disagreement

18. After issue of the draft JWS additional questions from planners were provided as follows:

1. *Our understanding is the most recent QRA for the pipeline is incorporated in the bp Terminal QRA dated 2009, and which predates the recent upgrade and replacement of the pipeline (as part of the Seaview Energy Resilience Project). We note also that questions have been raised during the hearings process around reliance on older QRA assessments to inform the basis for risk management provisions in the PDP.*

*Can you please confirm the following:*

2. *Is the 2009 QRA considered appropriate to use as the basis for a risk management overlay for the pipeline?*

*If not, what is an appropriate alternative basis for a risk management overlay. For example, would an updated QRA need to be produced to inform the width of any pipeline overlay and/or can an appropriate overlay width be determined based on the AS 2885 consequence based modelling and/or the 2024 guidance from the NSW Department of Planning, Housing and Infrastructure titled 'Guideline for planning proposals near high pressure dangerous goods pipelines'.*

*i.e.; how wide should the pipeline overlay be?*

**Response:** The NSW pipeline guidance is generic and is to be applied when there is no site-specific risk assessment. In this case there is a site specific QRA, although the 2009 QRA covering the pipeline does not reflect current pipeline design and is likely to be conservative (i.e. overstate the risk) for the new pipeline design. We note that the distances from the 2009 QRA are smaller than NSW generic guidance.

We consider the question of whether the QRA is appropriate depends on how the overlay is used. Provided it is used as a trigger for further assessment, then it is not critical but if it is used as a pass fail (i.e. prohibited / acceptable development within overlay) then we would consider it would be appropriate to update the pipeline risk profile for inclusion in the plan.

- *Para 13 of the draft JWS includes the following comment, in relation to events, such as markets, within the Seaview Marina Zoned land:*

*'Even for events outside the risk contours, whilst controls over numbers are not required, consideration of evacuation and egress is still recommended throughout the Marina Zone, noting that considerations include emergency services access, egress of the public and management of exposures to lesser effects than fatality, eg smoke from a terminal fire.'*

- *Can you please clarify if a similar recommendation applies in relation to the establishment of residential, commercial and office activity within the Seaview Marina Zone land, but outside the  $0.5 \times 10^{-6}$  risk contour, noting that given the characteristics of the Seaview Marina Zone land, similar evacuation and egress constraints are assumed likely to apply? If not, can you please clarify the reasons why not?*

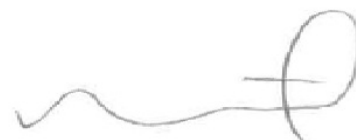
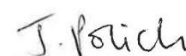
**Response:** We note that buildings of scale are likely to already have their own evacuation plan, i.e. evacuation planning would be required for any workplace (commercial) or multi storey residential building hence an ERP would already be required, regardless of the source of the incident. Therefore no specific restrictions on numbers are advised for buildings outside the risk contours.

For activities that do not require evacuation plans as part of normal activity, we would suggest that the inclusion of a requirement to prepare an ERP be included in the plan not as a consent trigger, but as part of a permitted activity rule or framework an ERP which would recognise a response to a potential incident in the fuel terminals or pipeline.

- *Can you provide any guidance as to the scale of an increase in population on the SMZ site where a consent process / consideration would be warranted?*
- *This question has come up in the context of discussion as to whether or not it is appropriate and / or necessary to include policy guidance and / or assessment criteria relating to management of risk for activities located in the Seaview Marina Zone outside the modelled contour, that are required to obtain resource consent for other reasons(s). That is, it is accepted that a risk based consent trigger for residential, commercial and office activity within the Seaview Marina Zone, but outside the  $0.5 \times 10^{-6}$  risk contour, has not been recommended. However, does the constrained nature of the Seaview Marina land and relationship to the terminals and pipeline warrant including policy and / or assessment criteria that enables broad consideration of risk management, such as evacuation and egress.*
- *Can you provide any guidance as to the scale of an increase in population on the SMZ site where a consent process / consideration would be warranted*

**Response:** In summary

- 1. Within the overlays: need to assess suitability of numbers and type of development on a proposal specific basis as per original advice and also requires ERP planning.
- 2. Outside overlays for permanent development: as per previous response an ERP is required but this is likely to be required anyway for any building of scale, could require ERP considering sources of risk as a condition. No specific restriction on numbers for permanent development
- 3. For temporary events outside overlays: There is precedent in the AUP for events eg AUP cl I214 for events in Wynyard quarter >1000 people not more than 5 days (RD). However Wynyard is a much larger scale area than Seaview and industry was contracting (and has now moved out). Based on Seaview societal risk results events with a population over around 250 people would be a reasonable number to trigger an assessment of risk and specific ERP planning requirements for temporary events outside the risk overlays.

**Signed by:****Rob Van de Munckhof****Jenny Polich**

## ATTACHMENT A – Societal risk criteria

### NOTES:

- 1) societal risk is not related to sensitivity, only number of people affected. Ideally societal risk should remain in the negligible zone, noting that the population is cumulative over all uses within a risk affected area, ie 1 development with 100 people may be very similar to 10 with 10 people each depending on the geographic distribution.
- 2) Figure below shows that to avoid approaching the intolerable region, permanent populations within the  $0,5 \times 10^{-6}$  per year contour should be limited to tens of people, not hundreds of people.
- 3) in a detailed QRA model societal risk calculations take into account geographical distribution, probability of presence and protective factors so example below is for illustration only

