



Department of Environment, Land, Water  
and Planning  
**Fishermans Bend Buffer Assessment**

October 2016



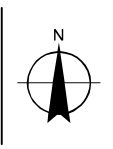
# Appendices

# Appendix A – Land Use Maps





Paper Size A4  
 0 165 330 660  
 Metres  
 Map Projection: Transverse Mercator  
 Horizontal Datum: GDA 1994  
 Grid: GDA 1994 MGA Zone 55



**LEGEND**

**Planning overlay**

- Development Contributions Plan
- Environmental Significance
- Design And Development
- Design And Development Overlay Part
- Heritage

- Incorporated Plan
- Neighbourhood Character
- Land Subject to Inundation
- Special Building
- City Link Project
- Environmental Audit

- Development Plan
- Road Closure
- Parking
- Public Acquisition



DELWP  
 Fishermans Bend Buffer Report - Update

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 Revision B  
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**Industries within the FBURA  
 Planning Overlays**

**Figure 3**

# Appendix B – WorkSafe Safety Separation Distance

# Major hazard facilities

## Land use planning near a major hazard facility

### Summary

This information will assist planning and relevant authorities ensure exposure to risks from potential low frequency-high consequence incidents at existing major hazard facilities (MHF) is not increased by new developments or changes in land use surrounding them.

### Background

An MHF is an industrial facility where significant quantities of certain types of dangerous goods may be present as defined in the Occupational Health and Safety Regulations 2007 (OHS Regulations). It is safe to live or work close to an MHF because stringent design, operation and regulation of such facilities mean that a serious incident, with effects outside the site, is unlikely. However, incidents in Australia and overseas have illustrated the possible widespread effects on people surrounding a site. It is therefore important that land use planning minimises exposure of people close to an MHF.

To operate an MHF in Victoria a licence must be granted by WorkSafe Victoria. The licensing process includes assessment, clarification and verification of a Safety Case (prepared as a requirement of the OHS Regulations) and other relevant information. Following this licensing process, WorkSafe has information about the nature and extent of risks that may potentially effect the surrounding land and is able to provide advice to authorities responsible for planning.

There is no statutory requirement for planning or responsible authorities to contact WorkSafe on any proposed use or development of land close to an MHF, apart from section 55 of the *Planning and Environment Act 1987* that requires certain industrial developments to be referred to WorkSafe.

However, authorities with concerns about the proximity of an MHF to a proposed land use or development do seek advice from WorkSafe. Those who do not seek advice from WorkSafe may have limited knowledge of potential incidents at an MHF. It is therefore prudent for planning

or responsible authorities to seek information to assist them in deciding the appropriateness of a proposed use or development of land close to an MHF.

### Planning considerations

Operators of an MHF must reduce risk to the surrounding area so far as is reasonably practicable where it cannot be eliminated. WorkSafe's advice to planning and responsible authorities on any residual risk is an important step in the development and implementation of appropriate planning zones and determination of planning applications.

There is no standard methodology or criteria applicable to advise on planning proposals on land surrounding an MHF. However, all methodologies use the concepts of individual<sup>1</sup> and societal risks<sup>2</sup> which can be expressed quantitatively or qualitatively. WorkSafe's advice on these risk concepts is based on a review of the Safety Case and any other relevant information that allows a reasonable estimate of areas of land affected by potential incidents at an MHF. More information about risk criteria and planning considerations for Australia can be found in the WorkSafe Victoria Guidance Note, *The Requirements for 'Demonstration' under the Occupational Health and Safety (Major Hazard Facility) Regulations* and the Planning NSW advisory paper No. 4, consultation draft, *Risk Criteria for Land Use Safety Planning*, available from [planning.nsw.gov.au](http://planning.nsw.gov.au).

WorkSafe believes it appropriate to present the extent of risk areas around an MHF as planning advisory areas:

1. Inner planning advisory area - 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).
2. Outer planning advisory area - 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.

<sup>1</sup> Individual risk is expressed as the probability of a typical user of the development under consideration (eg a dwelling, industrial use) being harmed in the course of a year from an incident at a major hazard facility.

<sup>2</sup> Societal risk is a measure of the likelihood of a large-scale incident involving mass casualties. This measure depends upon integrating the risk of a major incident occurring with the number of people living or working in the vicinity of a major hazard facility who could be exposed resulting in death or major injuries.



# Land use planning near a major hazard facility

WorkSafe's advice on proposed land use or developments within these areas takes account of:

- 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.

WorkSafe generally advises against the following proposed land use or developments:

- 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 eg a large number of people present
- planning scheme amendments that may result in unacceptable societal risk because of the cumulative effects to all developments and persons that may be present on land surrounding an MHF.

## Advice available from WorkSafe

WorkSafe is progressively providing maps to each authority responsible for planning. These maps show the planning advisory areas for the MHF in their area affected by low frequency-high consequence events. When read in conjunction with the planning considerations discussed previously, the maps should allow authorities responsible for planning to understand this general advice without the need for additional information.

However, WorkSafe recognises that the planning considerations discussed previously may require further interpretation on specific planning proposals close to an MHF. Additional advice can be provided to authorities responsible for planning on the appropriateness of any consideration of societal risk, or the ability of people at the proposed development or land use to respond to an emergency. Such requests for additional advice may include, but are not limited to, proposed developments or land use in relation to:

- planning permit applications or planning scheme amendments that have the potential to introduce significantly greater numbers of people residing or frequenting areas of land within the defined risk areas. Such referrals should be accompanied by a qualitative or quantitative assessment of relevant societal risk considerations for the proposed development or land use
- any proposed business or other use where persons likely to be present at the proposed land use or development may be able to safely respond to an emergency at the MHF, subject to special building design or emergency considerations. Such referrals should be accompanied by a qualitative or quantitative assessment of the effectiveness of such special design and emergency considerations.

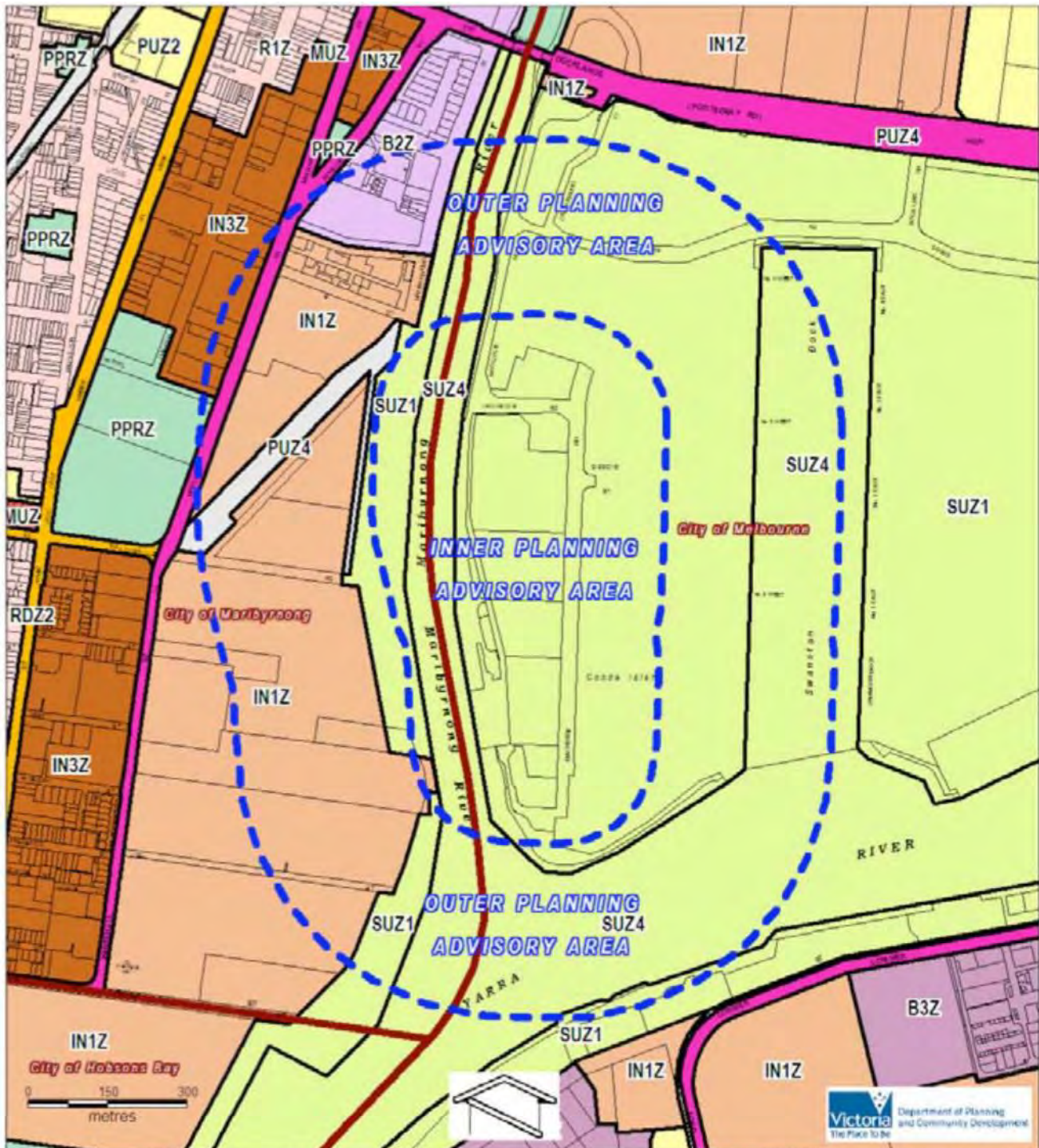
### Further information

For further information contact the WorkSafe Victoria Advisory Service on **1800 136 089** or go to **[worksafe.vic.gov.au](http://worksafe.vic.gov.au)**

## Land use planning advisory areas for major hazard facilities

Coode Island, Port of Melbourne

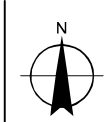
This map should be read in conjunction with the WorkSafe Victoria Information Sheet *Land use planning near a major hazard facility*, issued March 2010.



# Appendix C – EPA complaint History



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 Map Projection: Transverse Mercator  
 Horizontal Datum: GDA 1994  
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**LEGEND**  
 [Black outline] Precinct Boundaries  
 [Cyan fill] EPA Odour Complaint (Meshblock)



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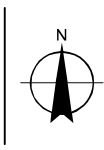
Job Number | 31-34061  
 Revision | A  
 Date | 11 Aug 2016



EPA Odour Complaint (Meshblock)

Appendix



Paper Size A4  
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**LEGEND**  
 Precinct Boundaries  
 EPA Dust Complaint (Meshblock)



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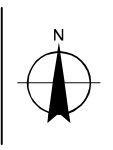
Job Number 31-34061  
 Revision A  
 Date 11 Aug 2016

EPA Dust Complaint (Meshblock)

Appendix



Paper Size A4  
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**LEGEND**

- Precinct Boundaries
- EPA Noise Complaint (Meshblock)



Environment  
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 and Planning

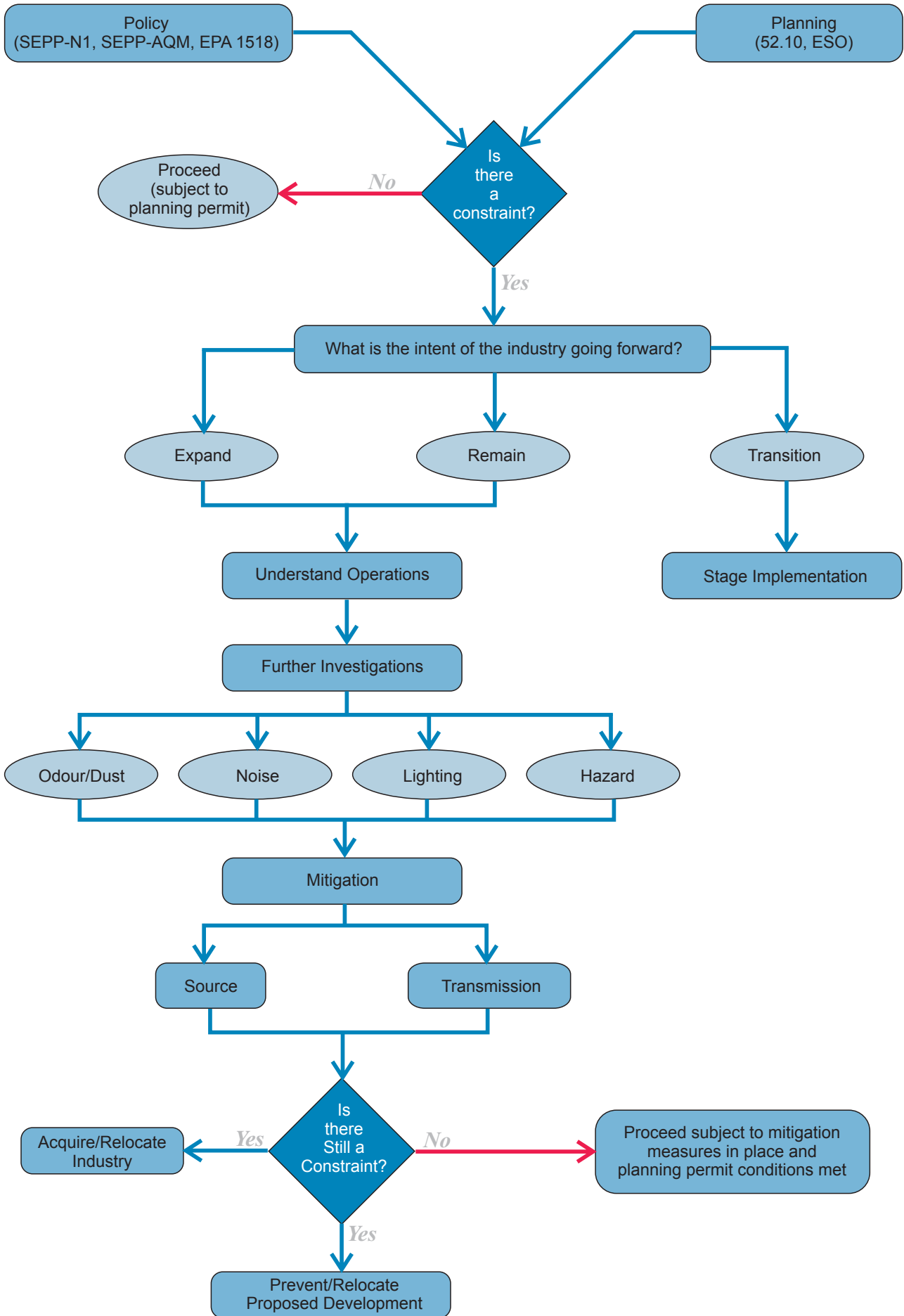
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EPA Noise Complaint (Meshblock)

Appendix

## Appendix D – Proposed process for assessing the development of a sensitive land use





[www.ghd.com](http://www.ghd.com)

