

**Metropolitan Region Scheme Amendment No.  
1008/33 South Fremantle – Hamilton Hill**

---

**Western Australian Planning Commission**

**Report and recommendations  
of the Environmental Protection Authority**

**Environmental Protection Authority  
Perth, Western Australia  
Bulletin 992  
September 2000**

ISBN 0 7307 6615 2

ISSN 1030 - 0120

Assessment No 1256

## **Summary and recommendations**

The Western Australian Planning Commission, the Responsible Authority, has initiated Metropolitan Region Scheme (MRS) Amendment 1008/33 South Fremantle - Hamilton Hill to rezone 21 ha of land adjacent to South Beach in South Fremantle from the current MRS zoning of Industrial and Railway Reserve to Urban and Parks and Recreation Reserve. This report provides the Environmental Protection Authority's (EPA's) advice to the Minister for the Environment on the environmental factors, conditions and procedures relevant to the proposed scheme amendment.

Section 48D of the *Environmental Protection Act 1986* requires the EPA to report to the Minister for the Environment on the environmental factors relevant to the scheme amendment and on the conditions and procedures to which the proposed scheme amendment should be subject, if implemented. In addition, the EPA may make recommendations as it sees fit.

### **Environmental factors**

Although a number of environmental factors were considered by the EPA in the assessment, it is the EPA's opinion that the following are the environmental factors relevant to the proposed scheme amendment:

- (a) Soil contamination;
- (b) Groundwater contamination;
- (c) Noise;
- (d) Incompatible land uses; and
- (e) Railway transport.

### **Conclusion**

The EPA has concluded that although further information is necessary to confirm that the scheme amendment is acceptable, it is the EPA's opinion that subject to further investigations and satisfactory implementation by the Responsible Authority of the recommended conditions set out in Section 4, the proposal is capable of being managed to meet the EPA's objectives.

### **Recommendations**

The EPA submits the following recommendations to the Minister for the Environment:

1. That the Minister notes that the proposed scheme amendment being assessed comprises the rezoning of 21 ha of land adjacent to South Beach in South Fremantle from the current MRS zoning of Industrial and Railway Reserve to Urban and Parks and Recreation Reserve;
2. That the Minister considers the report on the relevant environmental factors as set out in Section 3;
3. That the Minister notes that further investigations of soil and groundwater quality are to be undertaken to demonstrate the full nature and extent of the contamination at the site and determine environmental and health risk.
4. That the Minister notes that further investigations of the potential noise impacts from the rail and road traffic on the amendment area are to be undertaken to enable preparation of a Noise Management Plan.
5. That the Minister notes that the EPA has recommended that the planning authorities consider the issues of land use incompatibility and potential constraints to railway transport when determining detailed land uses in subsequent planning processes;

6. That the Minister notes that, although further information is necessary to confirm that the scheme amendment is acceptable, it is the EPA's opinion that subject to further investigations and satisfactory implementation by the Responsible Authority of the recommended conditions set out in Section 4, the proposal is capable of being managed to meet the EPA's objectives.
7. That the Minister imposes the conditions and procedures recommended in Appendix 3 of this report.

### **Conditions**

Having considered the Responsible Authority's commitments and information provided in this report, the EPA has developed a draft set of conditions which it recommends be imposed if the proposed scheme amendment is approved. These conditions are presented in Appendix 3. Matters addressed in the conditions include the following:

- (a) preparation and implementation of a Site Investigation and Management Plan for soil and groundwater contamination;
- (b) preparation of subsequent Site Remediation and Validation Reports;
- (c) preparation and implementation of a Noise Management Plan for noise from rail and heavy vehicle traffic; and
- (d) consideration of land use compatibility and the need for buffers during Structure Planning for the area.

# Contents

## Page

<b>Summary and recommendations.....</b>	<b>i</b>
<b>1. Introduction and background.....</b>	<b>1</b>
<b>2. The proposed scheme amendment.....</b>	<b>1</b>
<b>3. Environmental factors.....</b>	<b>4</b>
3.1 Soil contamination .....	4
3.2 Groundwater contamination .....	6
3.3 Noise .....	7
3.4 Land use compatibility .....	10
3.5 Rail transport .....	11
<b>4. Conditions .....</b>	<b>12</b>
<b>5. Other advice.....</b>	<b>13</b>
<b>6. Conclusions.....</b>	<b>13</b>
<b>7. Recommendations .....</b>	<b>14</b>
<b>Table</b>	
1. Key characteristics of proposed scheme amendment	3
<b>Figure</b>	
1. Proposed Metropolitan Region Scheme Amendment No. 1008/33	2
<b>Appendices</b>	
1. List of submitters	
2. References	
3. Recommended environmental conditions	
4. Responsible Authority's Response to Submissions	
5. Table 2. Identification of Environmental factors	

## **1. Introduction and background**

The Western Australian Planning Commission (WAPC), the Responsible Authority, proposes to rezone an area of coastal land in South Fremantle bounded by Rollinson Road to the south, the South Beach Parks and Recreation Reservation to the west, Ocean Road and Island Street to the north and the Fremantle Village and Chalet Centre to the east. The MRS amendment proposes to rezone the subject land from the Industrial zone and Railways Reservation to the Urban zone with a small portion of Parks and Recreation (see Figure 1). The purpose of the Amendment is to facilitate the future development of the land for residential or commercial uses (WAPC, 2000a).

The WAPC initiated MRS Amendment No 1008/33 in December 1998 and the amendment was referred to the EPA under Section 33E of the Metropolitan Region Town Planning Scheme Act. As a result of the potential for soil contamination from past land uses and the potential noise impacts from the existing railway which runs through the amendment area the level of assessment was set at Scheme Assessed, Environmental Review required, in January 1999.

In compiling this report, the EPA has considered the environmental factors associated with the proposed scheme amendment, issues raised in the public submissions, specialist advice from the Department of Environmental Protection (DEP) and other government agencies, the Responsible Authority's response to submissions and the EPA's own research and expertise.

Further details of the proposed scheme amendment are presented in Section 2 of this report while Section 3 discusses the environmental issues relevant to the proposed scheme amendment. The Conditions and Procedures to which the proposed scheme amendment should be subject, if the Minister determines that it may be implemented, are set out in Section 4. Section 5 presents the EPA's Other Advice, Section 6 presents the EPA's Conclusions and Section 7, the EPA's Recommendations.

A list of people and organisations that made submissions is included in Appendix 1. References are listed in Appendix 2, and recommended environmental conditions and procedures are provided in Appendix 3.

Appendix 4 contains the summary of the public submissions and the Responsible Authority's responses. The summary of public submissions and the Responsible Authority's responses is produced as a matter of information only and does not form part of the EPA's report and recommendations. The EPA has considered issues raised in the public submissions when identifying and assessing relevant environmental factors.

The EPA identification of environmental factors and summary of assessment of the relevant factors is included in Appendix 5.

## **2. The proposed scheme amendment**

The proposed scheme amendment seeks to rezone Pt Fremantle Lot 1815 Island Street, Lot 100 Cockburn Sound Location 5 Island Street, Lots 113 to 121 O'Connor Close, Lot 21 Rollinson Road and part of the adjacent railway reserve, South Fremantle and Hamilton Hill from Industrial or Railway Reserve to Urban. Small areas of Industrial zoned land adjoining the south and west boundaries of Pt Lot 1815 are proposed to be rezoned to Parks and Recreation (WAPC, 2000a).

The scheme amendment encompasses about 21 ha of land, approximately 2.5 kilometres south of the Fremantle town centre. The scheme amendment falls mostly within the City of Cockburn with the northern most portion of the Railway Reserve being within the City of Fremantle.

The majority of the site is, or has historically been used for industrial purposes (WAPC, 2000a). Uses have included woolsheds, marshalling yards and an iron foundry. These past activities may have contaminated the soil and groundwater within the subject land.

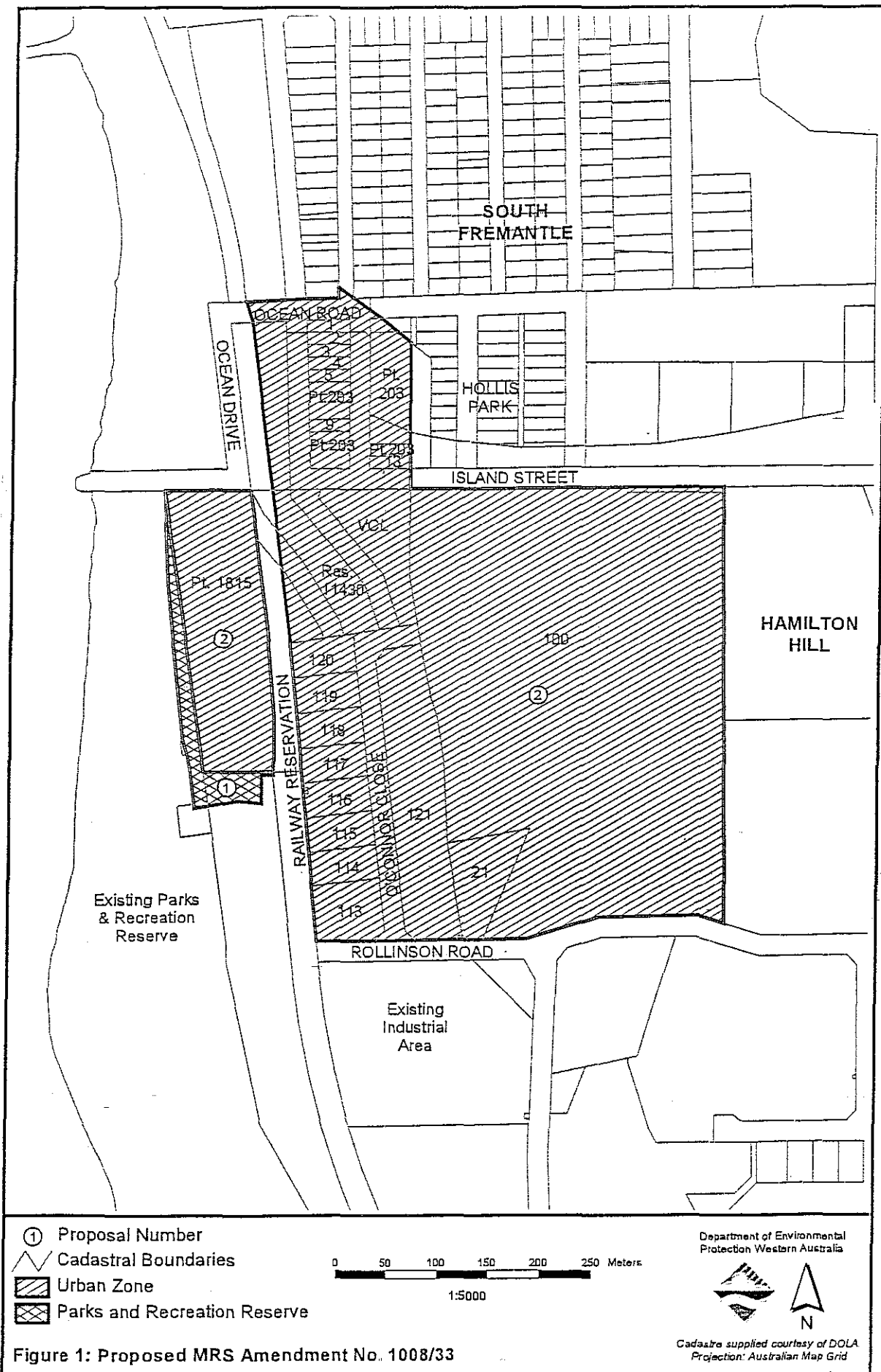


Figure 1. Proposed Metropolitan Region Scheme Amendment No.1008/33.

A railway line extends in a north-south direction through the amendment area which is in regular use for freight services to the Fremantle Port. To the south of the amendment area land is zoned Industrial under the MRS which contains a number of established industries and within the amendment area there are some existing industries which may not relocate out of the amendment area once the land is zoned to Urban.

The Urban zoning under the MRS allows for a variety of land uses at the local town planning scheme level, including light industrial, commercial and residential land uses. The Urban rezoning will however remove the potential for heavy industrial development. It will not be until these town planning schemes and structure plans are prepared that the detailed land uses will be determined within the amendment area.

The main characteristics of the proposed scheme amendment are summarised in Table 1 below.

**Table 1: Key characteristics of proposed scheme amendment.**

Element	Description
Total area of land	approximately 21 hectares
Existing land uses	Industrial
Local Governments	<ul style="list-style-type: none"> <li>• City of Fremantle</li> <li>• City of Cockburn</li> </ul>
Existing zoning in the Metropolitan Region Scheme	Industrial Railway Reserve
Proposed scheme modifications	<p>MRS Amendment 1008/33 proposes to:</p> <ul style="list-style-type: none"> <li>• rezone Pt Fremantle Lot 1815 Island Street, Lot 100 Cockburn Sound Location 5 Island Street, Lots 113 to 121 O'Connor Close, Lot 21 Rollinson Road and part of the adjacent railway reserve to Urban</li> <li>• rezone a small portion of the south and west boundaries Pt Lot 1815 Island Street to Parks and Recreation</li> </ul>
Proposed environmental management measures	<ul style="list-style-type: none"> <li>• preparation and implementation of a Noise Management Plan</li> <li>• preparation and implementation of a Site Contamination Assessment and Management Plan</li> <li>• requirement for Site Remediation and Validation certificate</li> </ul>

A detailed description of the proposed scheme amendment is provided in the Environmental Review document and the Amendment Report (WAPC, 2000a and 200b).

Since the release of the Environmental Review document, no modifications to the proposed scheme amendment have been made by the Responsible Authority.



### **3. Environmental factors**

Section 48D of the *Environmental Protection Act 1986* requires the EPA to report to the Minister for the Environment on the environmental factors relevant to the proposed scheme amendment and the conditions and procedures, if any, to which the proposed scheme amendment should be subject. In addition, the EPA may make recommendations as it sees fit.

The EPA considers that the following factors are relevant to the scheme in the sense that they are significant issues, which have been assessed in a preliminary way as part of this Environmental Review but still require further investigation and the specification of management requirements prior to subsequent stages of the planning process.

It is the EPA's opinion that the following environmental factors are relevant to the proposal:

- (a) Soil contamination;
- (b) Groundwater contamination;
- (c) Noise;
- (d) Incompatible land uses; and
- (e) Railway transport.

The above relevant factors were identified from the EPA's consideration and review of all environmental factors (preliminary factors) generated from the Environmental Review document and the submissions received, in conjunction with the proposed scheme amendment characteristics and alternative approvals processes which ensure that the factors will be appropriately managed. The identification process for the relevant factors is summarised in Appendix 5.

Details on the relevant environmental factors and their assessment is contained in Sections 3.1 - 3.5. The description of each factor shows why it is relevant to the proposal and how it will be affected by the proposal. The assessment of each factor is where the EPA decides whether or not a proposal meets the environmental objective set for that factor.

#### **3.1 Soil contamination**

##### **Description**

The majority of the area subject of this MRS amendment is, or has historically been used for industrial purposes (WAPC, 2000a). Uses have included woolsheds, railway marshalling yards and an iron foundry. These past activities may have contaminated the soil within the subject land.

Several preliminary contamination studies have been undertaken on three potentially contaminated sites within the amendment area which have included soil and groundwater sampling and analysis and comparison with relevant Australian New Zealand Guidelines for the Assessment of Contaminated Sites (ANZECC) and international (Dutch B) criteria (WAPC, 2000a; Alan Tingay and Associates, 1998a, b; Dames and Moore, 1998a, b, c; Gutteridge Haskins and Davey, 1996).

The preliminary assessments have found contamination in specific areas, including (WAPC, 2000a):

- Surface soil metal contamination above ANZECC investigation criteria at restricted locations on the former foundry site and adjacent Westrail land;
- Localised surface soil hydrocarbon contamination on the railway reserve; and

- Possible soil asbestos contamination from previous on-site building materials.

### ***Submissions***

There were two submissions made on the proposed amendment which related to soil contamination. The Water and Rivers Commission (WRC) submission requested that the environmental criteria (ANZECC/NHMRC guidelines) specified in the proposed management section of the Environmental Review should be amended to reflect that accepted criteria could change.

The Health Department of Western Australia (HDWA) recommended that the amendment area be managed as a contaminated site and remediation reflecting the intended land use should occur before development begins.

### **Assessment**

The area considered for assessment of this factor is the amendment area together with any areas where contamination may have extended beyond the amendment area.

The EPA's environmental objective for this factor is to ensure the rehabilitation of the site to an acceptable standard that is compatible with the intended land use, consistent with appropriate criteria.

The EPA has reviewed the preliminary investigations conducted and does not consider them comprehensive enough to sufficiently delineate the nature and extent of soil contamination within the whole amendment area. The Responsible Authority has recognised that additional investigations will be required at the town planning scheme level and has stated that conditions on subdivision or development approval will ensure that any on-site contamination is remediated as necessary to rehabilitate the site to acceptable standards.

As the full nature and extent of the contamination is yet to be determined it is difficult for the EPA to determine how readily the contamination can be remediated and managed. However, if a thorough and methodological approach is taken to the investigation, remediation and validation of the amendment area, the EPA considers that site remediation can be successful.

The EPA recommends a comprehensive site investigation be undertaken for the whole amendment area and where contamination is shown to occur beyond the boundary of the subject site (as found on the old foundry site), that the contamination is included in the investigation and subsequent remediation.

The EPA recommends that the proposed scheme provisions put forward by the Responsible Authority, with some modifications, be applied as conditions so that the following Investigations and Management Plans will be prepared:

- Site Investigation and Management Plan prepared prior to finalisation of subsequent amendments to the relevant Town Planning Schemes; and
- Site Remediation and Validation Report prior to subdivision or development application.

These conditions will ensure that the site is remediated according to the criteria recognised by the EPA.

## ***Summary***

Having particular regard to:

- the presence of contaminated soils within the proposed amendment area;
- the management measures proposed by the Responsible Authority which require further investigation and remediation of soil contamination to acceptable criteria; and
- a proposed Site Investigation and Management Plan, and Site Remediation and Validation Reports to be applied as conditions;

it is the EPA's opinion that the proposed scheme amendment can be managed to meet the EPA's objective for this factor, provided that the recommended conditions in Appendix 3 are incorporated into the Metropolitan Region Scheme.

## **3.2 Groundwater contamination**

### **Description**

As detailed in Section 3.1 the majority of the area subject to this MRS amendment is, or has historically been used for industrial purposes (WAPC, 2000a). These past activities, may have also contaminated the groundwater within the subject land. In addition, there is also the potential that contaminated groundwater is migrating beneath the site from surrounding land uses. In particular the previous landfill site under Hollis Park, to the north of the amendment area, has been identified as a potential source of contaminants (A Tingay and Associates, 1998b).

The preliminary contamination investigations previously undertaken as described in Section 3.1 have included the sampling and analysis of groundwater beneath the amendment area. These studies found evidence of groundwater contamination, with samples indicating elevated levels of nickel, fluoride and nitrogen (A Tingay and Associates, 1998b).

Further investigations into the extent of groundwater contamination have not been undertaken. Residual contamination in soil within the site and in surrounding areas may be an ongoing source of groundwater contamination.

### **Submissions**

In addition to the comments made by the WRC and HDWA outlined in Section 3.1, there was one public submission made with respect to groundwater contamination. The submission requested that particular attention be given in this assessment to groundwater pollution, in particular the possible plume spreading beneath the site from the nearby refuse disposal site.

### **Assessment**

The area considered for assessment of this factor is the amendment area together with any areas where contamination may have extended beyond the amendment area.

The EPA's environmental objective for this factor is to maintain or improve the quality of groundwater to ensure that existing and potential uses including ecosystem maintenance are protected consistent with the WA Guidelines for Fresh and Marine Waters (EPA, 1993).

The EPA has reviewed the preliminary investigations conducted and does not consider them comprehensive enough to sufficiently delineate the nature and extent of groundwater contamination within the amendment area.

Should residential development proceed within the amendment area, the use of water beneath the site for reticulation or other uses could present an environmental or health risk. The EPA

considers it important that groundwater contamination is investigated and that this information is made available to the local governments, WRC, HDWA and the DEP.

The EPA considers that additional groundwater investigations are required. On-going groundwater monitoring may also be necessary and should be documented. The EPA notes that the Responsible Authority has recognised that additional investigations will be required at the town planning scheme level and has stated that conditions on subdivision or development approval will ensure that any on-site contamination is remediated as necessary to rehabilitate the site to acceptable standards.

The EPA considers that provisions need to be made for off-site contamination in the town planning scheme to ensure the off-site plume is either remediated or the use constrained to those consistent with groundwater quality.

The EPA recommends that the proposed provisions put forward by the Responsible Authority (with some modifications) be applied as conditions to ensure that the site is remediated according to the criteria recognised by the EPA.

### **Summary**

Having particular regard to:

- the presence of contaminated soil and groundwater within the proposed amendment area and the potential for surrounding areas to be contaminating the groundwater that flows through the amendment area;
- the management measures proposed by the Responsible Authority which require further investigation and remediation of soil and groundwater contamination to acceptable criteria; and
- a Site Investigation and Management Plan, and Site Remediation and Validation Reports to be applied as conditions, including the requirement for on-going groundwater monitoring;

it is the EPA's opinion that the proposed scheme amendment can be managed to meet the EPA's objective for this factor, provided that the recommended conditions in Appendix 3 are incorporated into the Metropolitan Region Scheme and subsequent land use planning and development approvals.

## **3.3 Noise**

### **Description**

A freight railway runs north-south through the amendment area from Kwinana to the Fremantle Port. Currently there are about 6 train trips per week however the Fremantle Port Authority (FPA) has advised that this will increase to about 21 trips per week within approximately 10 years time.

The amendment area may also be impacted by heavy vehicle traffic associated with existing industrial land uses within the amendment area and industrial premises located south of Rollinson Road.

Acoustic consultants Herring Storer Acoustics (HSA) have undertaken a preliminary assessment of the potential noise impacts from freight trains to residential development in areas immediately adjacent to the railway (HSA, 1998). The assessment considered the existing use of the line as well as possible future scenarios involving more frequent use by either freight or passenger lines (WAPC, 2000a).

The potential noise impacts associated with these scenarios were assessed for future residences located at 15m and 30m from the rail line. The results were compared to a range of noise criteria including those applied by Westrail, the NSW Pollution Control Commission (Environmental Noise Control Manual) and the draft guidance proposed by the EPA (WAPC, 2000a).

HSA found that in order for a residence to comply with the draft EPA criteria at 15m from the railway, the bedrooms would need to be located at the rear of the house and an overall increase in the house attenuation of 4 dB(A) gained by special design consideration (HSA, 1998). A residence at 30m complies with the criteria if bedrooms are located at the rear. Bedrooms could be located at the front of the house if the overall house attenuation is increased by 3 dB(A) (HSA, 1998).

Both predictions by HSA for current and future usage found that external noise levels (ie within the yards of residences) would comply with the draft EPA guidelines. The draft EPA guidelines used by HSA specifies separate external and internal noise levels, and it is possible that external noise levels comply whilst achievement of internal noise levels requires acoustic treatment of the residences.

The HSA report also briefly discussed vibration impacts. They concluded that freight trains travelling at less than 40km/hr result in vibration levels that are typically below perception levels. The only time vibration levels would exceed the minimum perception level is if there were small imperfections such as crossing points (HSA, 1998). The EPA recognises that vibration is an issue which needs to be addressed. However, there is not enough information at this early stage of planning to determine the likely impacts on development. The factor of vibration is therefore considered to be a deferred factor, with the potential impacts to be considered by the planning authorities and, if necessary, the EPA at a subsequent planning stage.

### ***Submissions***

There were several submissions received relating to the factor of noise.

The FPA was one of the submitters and raised strong concerns regarding the development of land for residential purposes within close proximity to the only rail freight line to the Fremantle Port. The FPA suggested that in order to minimise land use conflict, the land use either side of the rail corridor should have compatible uses and reservations, such as commercial, industrial or open space. The EPA notes however that the Urban zoning under the MRS does allow a variety of land uses at the local town planning scheme level, including light industrial, commercial and residential land uses. It will not be until these town Planning Schemes and Structure Plans are prepared that the detailed land uses will be determined for this land.

A member of the public was concerned regarding an increase in residential traffic on South Terrace which would create in their opinion an unacceptable noise impact. The Responsible Authority responded that they believed the rezoning would result in improved traffic conditions in the locality due to the removal of the possibility of more heavy industrial traffic returning to the area. The EPA considers that any increase in residential traffic is an issue for the local authorities to consider in subsequent planning processes.

Landcorp's submission raised concerns that no consideration had been given to the noise generated by heavy industrial traffic using Rollinson Road which includes semitrailers. The EPA agrees that the noise impact from heavy vehicle usage on potential residents within the amendment area is an issue to be considered in this assessment.

One submission was received from a company located within the amendment area advising of the nature of their operations. Container Refrigeration on Lot 121 Rollinson Road involves the movement of containers which requires large trucks and the need to operate on a virtual 24 hour a day, 7 days a week basis to accommodate shipping routines. The operations result in there being significant noise from forklifts, container repairs and truck movements. The submission stated that in their opinion the use is not suitable for a residential area and any residences in the area will ultimately result in restrictions to the operations. The EPA considered this to be a relevant issue to be addressed.

## **Assessment**

The area considered for assessment of this factor is the amendment area.

The EPA's environmental objective for this factor is to protect the amenity of residents by ensuring that noise levels meet statutory requirements and acceptable standards.

The EPA notes that the Environmental Review document prepared by the Responsible Authority was not required to address noise from existing industries and their associated traffic. This issue was raised in the public submissions and the EPA now considers this should be addressed in this assessment.

The EPA considers that although the noise assessment undertaken by HSA provided a reasonable gauge by which to predict the likely impacts on potential future residents, it is considered that the noise assessment needs to be reviewed in light of the comments made by the FPA regarding future usage of the line and complemented by additional noise modelling to give a more clearer view of the noise impacts.

In order to ensure noise is adequately addressed the Responsible Authority has included a provision within the scheme amendment requiring the preparation of a Noise Management Plan prior to subdivision or development. Where necessary, the WAPC can then place specific conditions on subdivision applications, and the local governments can place conditions on development applications, to ensure that any new development involving sensitive land uses will not be adversely affected by noise.

Given that the site is so large and relatively unconstrained, there should be sufficient land on the site to require an adequate setback to noise sensitive premises should the predictions require it. As part of the structure planning process it is also possible that commercial or industrial land will be located adjacent to the railway to further reduce noise levels to noise sensitive premises. The Responsible Authority has stated that the Noise Management Plan will be developed when any detailed planning for redevelopment occurs (ie structure planning), such that strategic buffers or other design options can be included within the plan if required. The MRS condition proposed will ensure that the Noise Management Plan is prepared and implemented prior to any development occurring.

The issue of noise from heavy commercial /industrial traffic was raised during the submission period. Heavy or commercial vehicles generated from light industries within the amendment area and those established industries located south of Rollinson Road will continue to use certain accesses within the amendment area and along Rollinson Road. The EPA considers that the wording of the proposed MRS provision should be expanded to include heavy vehicle (industrial) traffic noise. Consideration of noise emanating from the activities from existing industries, such as Container Refrigeration, is considered as part of the EPA's recommendations on the factor of Incompatible land uses (Section 3.4).

The EPA is confident that with a condition requiring further investigations as part of a Noise Management Plan, their concerns and the concerns raised by the FPA during the public submission period are capable of being addressed. The EPA considers that noise does not raise any fatal flaws with the proposal and that noise impacts within the Amendment area are manageable.

## ***Summary***

Having particular regard to:

- the results of the noise assessment conducted by HSA;
- the concerns raised by the Fremantle Port Authority and Landcorp;
- the proposed condition requiring the preparation of a Noise Management Plan which requires both rail and heavy vehicle or commercial traffic noise to be addressed;

it is the EPA's opinion that the proposed scheme amendment can be managed to meet the EPA's objective for this factor, provided that the recommended conditions in Appendix 3 are incorporated into the Metropolitan Region Scheme.

### **3.4 Incompatible land uses**

#### **Description**

The amendment area abuts an existing industrial area to the south of Rollinson Road which contains a number of established industries. The amendment area itself also contains some existing industrial land uses.

The EPA recognises that there is the potential for land use conflict between future sensitive land uses (ie residential) and existing industries by way of noise, dust, odour or other emissions. The EPA has therefore included Incompatible land uses as an additional factor to be considered in the assessment of this amendment. The Responsible Authority was not required to address this factor as part of its Environmental Review.

#### ***Submissions***

During the public submission process the issue of potentially conflicting land uses was raised. Landcorp requested that buffers should be provided around existing and future industries to protect residents and the future operations of the industries. As discussed in Section 3.3 the operation of Container Refrigeration on Lot 121 Rollinson Road was the focus of one submission, detailing the significant noise from forklifts, container repairs and truck movements. The company felt that the proposed rezoning to allow for residential uses will ultimately result in restrictions to the operations of the industry. It was its opinion that the size, noise, frequency and time of container movements will interfere dramatically with residents' amenity.

#### **Assessment**

The area considered for assessment of this factor is the scheme amendment area.

The EPA's environmental objective for this factor is to provide adequate separation between industrial land uses and residents in cases where industrial land uses are unable to achieve emission levels at their boundary considered to be acceptable in residential areas.

The EPA notes that the MRS Zones and Reservations do not include notations restricting uses. The MRS Urban Zone allows for a variety of land uses including light industry, commercial use and local open space. It is understood that the detailed level of land use is considered at the local Town Planning Scheme amendment and Structure Planning stages.

The proposed City of Cockburn Town Planning Scheme No 2 Amendment No 201, which is to bring the local authority scheme in accordance with this MRS amendment, includes in its objectives: "Establish appropriate land use buffers to existing Industry south of Rollinson Road" and "To maintain existing light industries in the Urban Development area as appropriate".

The EPA also notes that the City of Cockburn District Zoning Scheme also requires that activities within the Light Industrial Zone can not have an adverse impact on adjacent properties. This should prevent any further industries which are incompatible with sensitive land uses locating within the amendment area. In addition the City of Cockburn has been actively implementing the DEP produced “Environmental Guidelines for Industries Operating in Coogee” which aims to ensure industry related odours and other impacts are contained south of Rollinson Road.

The EPA considers that there is a need to require as a condition on the amendment the identification of potential land use conflicts between existing industries and future sensitive uses, with buffers being established as necessary, as part of the structure planning process. It is the EPA’s opinion that subject to the imposition of this condition, the proposed amendment can avoid the potential for incompatible land uses being located within close proximity to each other.

### ***Summary***

Having particular regard to:

- the inability of the MRS to restrict land uses within the amendment area;
- recognition of the issue of land use conflicts by the local authority;
- the ability for future scheme amendments and structure planning to address land use conflicts and potential buffer requirements;
- the recommendation of land use conflicts and buffers as a condition;

it is the EPA’s opinion that the proposed scheme amendment can be managed to meet the EPA’s objective for this factor, provided that the recommended conditions in Appendix 3 are incorporated into the Metropolitan Region Scheme as it applies to subsequent land use planning decisions and approvals.

## **3.5 Railway transport**

### **Description**

The amendment area contains a freight railway which services the Fremantle Port. The proposed amendment may allow for residential and other sensitive development to locate directly adjacent to the railway reserve which has the potential to constrain the operations of the railway.

### ***Submissions***

The FPA has concerns regarding the development of land for residential purposes within close proximity to the rail freight line. The rail corridor operates 24 hours a day and provides the only freight link to the Inner Harbour of the Fremantle Port, which is the State’s major container port. With continuing growth in container trade through the Inner Harbour the FPA estimates there will be increasing use of the freight rail link.

The FPA states that the rail corridor should not be compromised as it will become a critical factor in the ability of the Inner Harbour to expand its capacity. It also states that some of the cargo transported by rail contains hazardous materials and that the factor of risk requires detailed consideration.

In its response to the FPA’s concerns, the Responsible Authority considered that the railway line passes through several residential areas and past significant tourist attractions on its way to the port. If hazardous materials are transported on this line, the Responsible Authority argued that appropriate risk management measures would need to be in place as determined by the Department of Minerals and Energy.



## Assessment

The area considered for assessment of this factor is the scheme amendment area.

The EPA's environmental objective for this factor is to ensure that development does not place any additional constraints on the use of the railway.

The Responsible Authority was not requested to address this factor within its Environmental Review. However the EPA now considers that this factor should be considered in the assessment of this amendment.

Risk levels are determined on the basis of land use. Given that the detailed land uses are not determined within this MRS Amendment, it is not possible for the EPA at this stage to assess or provide detailed advice regarding the management of risk within the amendment area. The factor of risk is therefore considered to be a deferred factor.

The EPA considers that the present use of the railway lines should not be constrained by the proposed amendment and subsequent planning decisions. The Responsible Authority and the local government authorities will need to consider this issue and undertake further investigations on the potential impacts of risk at a subsequent stage of the planning process. It would be appropriate to conduct these investigations as a part of the structure planning process. The results of these further investigations will then enable risk to be taken into account in the detailed planning for land uses in this area.

## Summary

Having particular regard to:

- the inability of the MRS to restrict land uses within the amendment area;
- the ability for future scheme amendments and structure planning to address possible constraints to the railway operations;
- the recommendation that the planning authorities undertake further investigations and consider risk when determining the detailed land uses for the amendment area;

it is the EPA's opinion that the proposed scheme amendment can be managed to meet the EPA's objective for this factor, so long as this environmental factor is considered in subsequent planning decisions and approvals.

## 4. Conditions

Section 48D of the *Environmental Protection Act 1986* requires the EPA to report to the Minister for the Environment on the conditions to which the proposed scheme amendment should be subject, if implemented. In addition, the EPA may make recommendations as it sees fit.

In developing recommended conditions, the EPA's preferred course of action is to have the Responsible Authority provide management measures and/or scheme provisions to ameliorate the impacts on the environment. However, these proposed provisions are not always sufficient to ensure that the EPA's objectives will be met.

Having considered the Responsible Authority's environmental management measures, scheme provisions and the information provided in this report, the EPA has developed a set of conditions which are consistent with those environmental management measures in the proposed scheme amendment documentation, if the proposed scheme amendment is approved for implementation.

These conditions are presented in Appendix 3. Matters addressed in the conditions include the following:

- (a) preparation and implementation of a Site Investigation and Management Plan for soil and groundwater contamination;
- (b) preparation of subsequent Site Remediation and Validation Reports;
- (c) preparation and implementation of a Noise Management Plan for noise from rail and heavy vehicle traffic; and
- (d) consideration of land use compatibility and the need for buffers during structure planning for the area.

It should be noted that other regulatory mechanisms relevant to the proposed scheme amendment are:

- Subsequent rezonings and reservations under the City of Cockburn and City of Fremantle Town Planning Schemes;
- Subdivision and development approval processes; and
- Department of Minerals and Energy requirements in relation to risk.

## **5. Other Advice**

Part of the Amendment area, Pt Lot 1815 Island St (see Figure 1), is located directly abutting the coastal foreshore reserve at South Beach. During the submission period there were a number of submissions which highlighted the public's desire to see all land west of the railway reserve become part of the foreshore reserve. One submission requested that the Environmental Review be extended to examine the issue of coastal processes and dynamics. It was suggested that coastal setbacks needed to be determined and should take into account the probability of a 1 in 100 year storm event and sea level rises resulting from effect of greenhouse induced climate change.

The EPA agrees that there is more information needed on the coastal stability and dynamics of this particular area to enable an appropriate setback for development to be determined. In their response to the submissions, the Responsible Authority has committed to ensure that any requirements for setbacks or any other management measures for the amendment area are appropriately determined at the structure planning stage. The Responsible Authority will require provision of appropriate information from the developers of the land for consideration by the Ministry for Planning. They also state that statutory imposition of any required setbacks will occur through the subdivision and development process.

Given these statements by the Responsible Authority, the EPA is confident that the planning process can manage the coastal foreshore issues.

## **6. Conclusions**

The EPA has concluded that although further information is necessary to confirm that the scheme amendment is acceptable, it is the EPA's opinion that subject to further investigations and satisfactory implementation by the Responsible Authority of the recommended conditions set out in Section 4, the proposal is capable of being managed to meet the EPA's objectives.

## 7. Recommendations

Section 48D of the *Environmental Protection Act 1986* requires the EPA to report to the Minister for the Environment on the proposed scheme amendment and on the conditions and procedures to which the proposed scheme amendment should be subject, if implemented. In addition, the EPA may make recommendations as it sees fit.

The EPA submits the following recommendations to the Minister for the Environment:

1. That the Minister notes that the proposed scheme amendment being assessed comprises the rezoning of 21 ha of land adjacent to South Beach in South Fremantle from the current MRS zoning of Industrial and Railway Reserve to Urban and Parks and Recreation reserve;
2. That the Minister considers the report on the environmental factors as set out in Section 3;
3. That the Minister notes that further investigations of soil and groundwater quality are to be undertaken to demonstrate the full nature and extent of the contamination at the site and determine environmental and health risk.
4. That the Minister notes that further investigations of the potential noise impacts from the rail and road traffic on the amendment area is to be undertaken to enable preparation of a Noise Management Plan.
5. That the Minister notes that the EPA has recommended that the planning authorities consider the issues of land use incompatibility and potential constraints to railway transport when determining detailed land uses in subsequent planning processes;
6. That the Minister notes that, although further information is necessary to confirm that the scheme amendment is acceptable, it is the EPA's opinion that subject to further investigations and satisfactory implementation by the Responsible Authority of the recommended conditions set out in Section 4, the proposal is capable of being managed to meet the EPA's objectives.
7. That the Minister imposes the conditions and procedures recommended in Appendix 3 of this report.

## **Appendix 1**

### **List of submitters**

**Organisations and Community Groups:**

Water and Rivers Commission

Health Department of Western Australia

Fremantle Port Authority

City of Cockburn

South Beach Residence Group

Wildflower Society of Western Australia

City of Fremantle

Landcorp

Steiger Australia Asia Pty Ltd

Wesfarmers Limited

Container Refrigeration Pty Ltd

South Fremantle Precinct Group

**Individual:**

Ms Bobby Wilson

Mr Bryn Davis

## **Appendix 2**

### **References**

- Alan Tingay and Associates (1998a) Initial Environmental Assessment for proposed rezoning of the ANI-Bradken site, Wesfarmers site and Westrail land adjacent to South Beach. Prepared for South Beach Pty Ltd.
- Alan Tingay and Associates (1998b) Summary of site investigations at Fremantle Foundry Site and Fremantle Woolstores and proposed remediation strategies. Prepared for Department of Environmental Protection.
- Dames and Moore (1998a) Environmental Review, ANI-Bradken Foundry Site, Fremantle. Prepared for Esanda Property Finance.
- Dames and Moore (1998b) Soil Investigations, ANI-Bradken Foundry Site, Fremantle. Prepared for Esanda Property Finance.
- Dames and Moore (1998c) Environmental Site Assessment, Fremantle Woolstore, Fremantle. Prepared for Wesfarmers Dalgety.
- Gutteridge Haskins and Davey Pty Ltd (1996) Site Contamination Assessment Report - Part 1. Robb Jetty Marshalling Yards. Prepared for Westrail.
- Herring Storer Acoustics (1998) Environmental Acoustic Assessment for Urban Development, South Beach. Prepared for South Beach Pty Ltd.
- Western Australian Planning Commission (2000a) Metropolitan Region Scheme Amendment No. 1008/33 Environmental Review. Bowman Bishaw Gorham, February 2000, Perth, WA.
- Western Australian Planning Commission (2000b) Metropolitan Region Scheme Amendment No. 1008/33 South Fremantle - Hamilton Hill, Amendment Report. Western Australian Planning Commission, February 2000, Perth, WA.

## **Appendix 3**

### **Recommended Environmental Conditions**



**STATEMENT THAT A SCHEME MAY BE IMPLEMENTED  
(PURSUANT TO THE PROVISIONS OF DIVISION 3 OF PART IV OF THE  
ENVIRONMENTAL PROTECTION ACT 1986)**

**METROPOLITAN REGION SCHEME AMENDMENT No. 1008/33  
SOUTH FREMANTLE / HAMILTON HILL**

**Scheme Purpose:** To rezone the subject land shown shaded in Figure 1 from the 'Industrial' Zone and the 'Railways' Reservation to the 'Urban' Zone and 'Parks and Recreation' Reservation, and to amend the Scheme maps accordingly.

**Responsible Authority:** Western Australian Planning Commission

**Responsible Authority Address:** 469 Wellington Street  
PERTH WA 6000

**Assessment Number:** 1256

**Report of the Environmental Protection Authority:** Bulletin 992

Subject to the following conditions, there is no known environmental reason why the Metropolitan Region Scheme amendment to which the above report of the Environmental Protection Authority relates should not be implemented.

**ENVIRONMENTAL CONDITIONS**

**1 Noise Management**

- 1-1 As part of the structure planning process and prior to application for subdivision or development approval within the amendment area, whichever occurs first, the Responsible Authority shall require the preparation of a Noise Management Plan.

This Plan shall:

1. include predictions of noise levels from trains and heavy or commercial vehicles;
2. identify the appropriate noise criteria against which noise impacts in the amendment area should be measured; and

3. show how noise sensitive land uses will be protected from adverse noise impacts from the adjacent rail line and heavy or commercial vehicle traffic.
- 1-2 The Noise Management Plan shall be prepared and implemented to the requirements of the Responsible Authority with the concurrence of the Department of Environmental Protection.

## **2 Soil and Groundwater Contamination**

- 2-1 Prior to finalisation of amendments to the relevant town planning schemes that are within the boundaries of Metropolitan Region Scheme Amendment No 1008/33 South Fremantle / Hamilton Hill, the Responsible Authority shall require the preparation of a Site Investigation and Management Plan, to the requirements of the Responsible Authority with the concurrence of the Department of Environmental Protection, Health Department of Western Australia and the Water and Rivers Commission.

This Plan shall include:

1. the methods and criteria, compatible with the intended land use, by which potential soil and groundwater contamination in the amendment area will be assessed;
  2. details of the nature and extent of the soil and groundwater contamination, including any contamination which has extended beyond the boundary of the amendment area as a result of previous land use within the amendment area;
  3. detailed description of how sensitive land uses, both in the scheme amendment area and other areas where contamination may have extended beyond the amendment area, will be protected from adverse impacts from soil or groundwater contamination including the details of any remediation works and any on-going groundwater restrictions or monitoring required; and
  4. the framework of the validation report and audit that will be undertaken, to confirm the success of the remediation.
- 2-2 This Plan shall be implemented prior to subdivision or development approval, whichever occurs first, to the requirements of the Responsible Authority with the concurrence of the Department of Environmental Protection, Health Department of Western Australia and the Water and Rivers Commission.
- 2-3 Prior to application for subdivision or development on any land that has residual soil or groundwater contamination, the Responsible Authority shall require the preparation of a Site Remediation and Validation Report to the requirements of the Responsible Authority and to the satisfaction of the Department of Environmental Protection, Health Department of Western Australia and the Water and Rivers Commission.

This Report shall be prepared prior to the backfilling of clean fill and/or commencement of site works for subdivision or development and shall verify that the remediation of the site, and any areas to which contamination has extended, has occurred to an acceptable standard that is compatible with the intended land use, consistent with appropriate criteria.

### **3 Buffers**

- 3-1 As part of the structure planning process and prior to application for subdivision or development approval, the Responsible Authority shall require that the potential for land use conflict between sensitive land uses and industrial premises has been identified, and buffers established where necessary, to the requirements of the Responsible Authority on advice of the relevant local government authority and the Department of Environmental Protection.

## **Appendix 4**

**Response by the Responsible Authority to environmental  
issues raised in submissions**



WESTERN AUSTRALIAN  
PLANNING COMMISSION

Enquiries: Andrew Trevor  
Our Ref: 809/2/1/61 Pt 1  
Your Ref: RS001/11

The Chairman  
Environmental Protection Authority  
Westralia Square  
141 St George's Terrace  
PERTH WA 6000

DEPARTMENT OF ENVIRONMENTAL PROTECTION RECORDS SECTION	
26 JUL 2000	
FILE No	RS001/11
NAME	S. HARLEY
FILE No	
NAME	

ATTENTION: Ms Stacey Harley

**METROPOLITAN REGION SCHEME AMENDMENT NO. 1008/33  
SOUTH FREMANTLE - HAMILTON HILL  
RESPONSE TO ENVIRONMENTAL ISSUES RAISED IN SUBMISSIONS**

With reference to the above, please find enclosed a Report which constitutes the response of the Western Australian Planning Commission to environmental issues raised during the submission period undertaken for this Amendment.

The Commission is required, under Section 33G(b) of the *Metropolitan Region Town Planning Scheme Act*, to inform the Environmental Protection Authority of its views on, and response to environmental issues raised in submissions within 42 days of the close of submissions, or such longer period as the Minister for Planning allows. In this instance, the Minister has assented to the extension of the relevant period until 28 July 2000. A copy of the request to the Minister indicating his agreement to the extension is attached for your information.

Following consideration of submissions, the Commission has supported the Amendment as advertised.

Fred Hainsworth  
COORDINATOR, REGION SCHEMES

26 July 2000

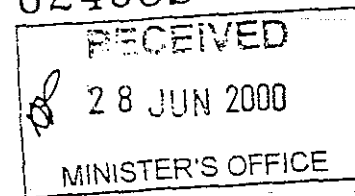
ABN 35 482 341 493

Albert Facey House, 469 Wellington Street, Perth, Western Australia 6000  
Tel: (08) 9264 7777 Fax: (08) 9264 7566 TTY: (08) 9264 7535 InfoLine: 1800 626 477  
E-mail: corporate@planning.wa.gov.au Internet: <http://www.wa.gov.au/planning>



157140

024033



THE HON MINISTER FOR PLANNING

**REQUEST FOR AN EXTENSION OF TIME FOR THE COMMISSION TO INFORM  
THE ENVIRONMENTAL PROTECTION AUTHORITY OF ITS VIEWS -**

**MRS AMENDMENT NO. 1008/33 - SOUTH FREMANTLE-HAMILTON HILL**

1. This matter relates to Metropolitan Region Scheme amendment procedures involving the Western Australian Planning Commission and the Environmental Protection Authority considering submissions.
2. The Commission is required under section 33G(b) of the *Metropolitan Region Town Planning Scheme Act* to inform the Environmental Protection Authority of its views on and response to environmental issues raised in submissions within 42 days of the close of submissions, or such longer period as the Minister allows.
3. Having regard to the intent of the *Planning Legislation Amendment Act 1996*, the Commission takes the position that its views on environmental issues should be finalised only after all submissions have been analysed, the Environmental Protection Authority has responded with a Summary of Environmental Issues, that people who wish to make a presentation before a Hearings Committee have been properly accommodated, and that the Commission has formally arrived at its recommendation. This in most instances requires substantially more than the 42 days prescribed by legislation.
4. Written submissions for Metropolitan Region Scheme amendment No. 1008/33 - South Fremantle - Hamilton Hill closed on 26 May, 2000. To have met the statutory 42 days would have meant responding by 7 July 2000. The hearing of submissions will occur in the second week of July, and following deliberations the Commission expects to be in a position to formally respond to the Environmental Protection Authority by 28 July 2000.

**Recommendation**

In compliance with section 33G(b) of the *Metropolitan Region Town Planning Scheme Act*, your approval is sought for an extension of time for the Western Australian Planning Commission to inform the Environmental Protection Authority of its views on and response to environmental issues relating to Metropolitan Region Scheme amendment No. 1008/33, and that the extension be to 28 July, 2000.

PETER MELBIN  
SECRETARY

WESTERN AUSTRALIAN PLANNING COMMISSION

27 JUNE, 2000

APPROVED

5-7-00  
GRAHAM KIERATH MLA  
MINISTER FOR PLANNING

**APPENDIX 2**

**RESPONSES TO ENVIRONMENTAL ISSUES IN SUBMISSIONS  
AS IDENTIFIED AND SUMMARISED  
BY  
THE DEPARTMENT OF ENVIRONMENTAL PROTECTION**

---

## APPENDIX 2

---

### THE PLANNING PROCESS FOR AMENDMENT 1008/33

Many of the WAPC responses to planning and environmental issues state that matters will be dealt with at later stages of the planning process, in particular, during preparation of the structure plan for the amendment area. Accordingly, a description of the stages of the planning process which follows the amendment Hearings is provided in the table below, including stages at which the public and/or government agencies are able to make their views known.

	Stage of Planning Process	Opportunity for Input
1	WAPC Hearings Committee	Verbal submissions - completed.
2	EPA determines conditions for inclusion in Schedule 1 of the MRS	Includes public "appeal" period for comment on the proposed conditions.
3	MRS amendment placed before Parliament.	"Motion of Disallowance" may occur.
4	Amendments to Cities of Fremantle and Cockburn District Zoning Schemes.  The Cities of Fremantle and Cockburn can request that processing of these runs concurrently with processing of the MRS amendment, however, they cannot be finalised before the MRS amendment is finalised.	Includes public submission period (usually 42 days).  The Local Governments may not necessarily advise State Government agencies on an individual basis of the submission period, therefore, agencies need to monitor the progress of the amendments themselves.
5	Assuming the EPA requires MRS conditions as proposed in the Environmental Review, preparation of: Noise Management Plan; Soil and Groundwater Contamination Plan.  Consultation with Ministry for Planning on coastal issues.	Noise Management and Soil and Groundwater Management Plans approved by WAPC on advice from the DEP.  Government agencies may contact the DEP to advise they wish to be consulted on these plans.



6.	<p>Preparation of structure plans for the amendment area by the Cities of Cockburn and Fremantle (in consultation with each other).</p> <p>Adoption by WAPC.</p> <p>Preparation of the structure plan can proceed concurrently with processing of the MRS and local amendments.</p>	<p>Proposed Amendment No. 49 to the City of Fremantle District Zoning Scheme provides that the City of Cockburn and State Government agencies be consulted during structure plan preparation.</p> <p>Proposed Cockburn Amendment No. 201 includes the requirement that a structure plan be prepared prior subdivision and development of the MRS amendment area.</p> <p>Proposed Cockburn Amendment No. 192 provides for State Government agencies to be consulted during the structure plan's advertising period.</p>
7.	<p>Subdivision approval with conditions by WAPC.</p>	<p>No public submission period. Issues expected to have been addressed at states 2 to 6 above.</p>

---

## DEP SUMMARY OF ENVIRONMENTAL ISSUES WITH WAPC RESPONSES (IN ITALICS)

---

### 1.0 BIOPHYSICAL

#### 1.1 Vegetation

---

- 1.1.1 The land labelled Pt Lot 1815 in Figure 1 of the Amendment Report is adjacent to native vegetation on primary dunes in land reserved as "Parks and Recreation". The proposed Urban zoning may place pressure on the dunal vegetation which is highly sensitive to trampling and can become unstable. This has not been addressed in the Environmental Review. (WSWA)

#### WAPC Response

*This matter was not addressed in the Environmental Review as it was appropriately not identified as a relevant environmental factor by the Environmental Protection Authority (EPA), since*

- i) redevelopment of the area would not involve disturbance to any existing coastal vegetation (i.e. the site is already developed), and*

- ii) *management of potential impacts to dunes and/or vegetation as a result of increased visitor pressure resulting from redevelopment of the area is assured through the existing foreshore rehabilitation and protection measures, including dune fencing and formalised beach accessways, which have already been installed by the City of Cockburn over the foreshore adjacent to the site.*

*Appropriate management of such issues as foreshore setbacks to development would be ensured by the WAPC's setting of approval conditions on subdivision applications for the area, after the location of specific land uses over the amendment area are determined*

*There is no requirement for this to occur at the MRS amendment stage of the planning process.*

---

1.1.2

To better provide for the preservation of the dunal vegetation, Pt Lot 1815 should be used for a car park, rather than residential purposes. A car park would provide a more adequate buffer to the vegetation on the adjacent dunes and would avoid the need for clearing of native vegetation to accommodate increased usage of the beach area in the future. (WSWA)

WAPC Response

*The primary mechanism for protecting the dunes is to restrict access to them. Accordingly, it is of no consequence whether there is carparking or urban development adjacent as, whatever the case, the dunes will be fenced and access across them only allowed at particular points.*

*It could also be argued that casual users of a car park (most of whom do not reside nearby) would have less concern for the coastal dunes than people who reside near them. The nearby residents are more likely to have a sense of ownership and interest in proper maintenance of the immediate environment of their homes. In addition, more intense usage of the beach would be expected from the adjacent carparks than from residential development*

*Although no evidence has been provided in submissions that there is, or will be, a need for additional parking, this land use is consistent with the Urban Zone. Therefore, there is the opportunity for the Local Government to consider the need for more parking to be included in the amendment area during preparation of the structure plan that will be required to be approved for the area prior to any subdivision or development occurring.*

*Should the Local Government determine a need for additional car parking in years to come, it is noted that there is an extensive area of cleared land adjacent to the existing car park at the western end of Rollinson Road.*

*The abovementioned structure plan will be required to be approved by the WAPC and the Cities of Cockburn and Fremantle.*

- 1.1.3 There is a need for a green belt between Fremantle and Cockburn local government areas in the area north of the Island Street reservation and Ocean Road (CoF)
- 1.1.4 A green belt buffer zone should be included connecting the landfill site through to South Beach for pedestrian and cycle access only.
- 1.1.5 A wide green belt (minimum 200 metres) should extend from South Beach to the north of Island Street up to Cockburn Road.
- 1.1.6 Adequate east-west green links should be incorporated into the plan so as to connect Cockburn Road and ultimately through to Beeliar Regional Park via the Manning Lake Reserve.
- 1.1.7 The rezoning of land north of Island Street to "Urban" is not supported and should be included in the "Parks and Recreation" Reservation. This will facilitate a regionally significant east-west recreational link that will join the coast area with the limestone ridge. It will link Hollis Park to Wilson Park and South Beach. This link was envisaged in both the Fremantle Green Plan and the FINCA Fremantle Green project.

#### WAPC Response

*These submissions suggest that the portion of the amendment comprising the current Railways Reservation north of the Island Street road reservation (unconstructed) should be reserved for Parks and Recreation in the MRS. This would then join with open space to the west (Hollis Park and the tip site) to form a wide east west open space and buffer between South Fremantle and any new development in the amendment area.*

*The land that would form the portion of the suggested open space link or buffer area between the amendment site and the southern extent of residential development in South Fremantle is zoned Urban in the MRS. In the local scheme, a portion of the land is zoned Inner Urban and the balance is unzoned.*

*Accordingly, there is no implication in the current pattern or designation of MRS classifications or local scheme classifications that any of the Railways Reservation in the amendment area should be reserved for Parks and Recreation.*

*Further, the suggested link is not part of the "Region Open Space Concept Plan" included in METROPLAN - A Planning Strategy for the Perth Metropolitan Region (December 1990)*

*Further, there are already large expanses of Parks and Recreation Reservation in the South Fremantle and Hamilton Hill localities. No evidence is provided in submissions that there is a need for additional land to be reserved for regional recreation needs in the amendment area.*

*There is no conservation imperative for reservation of land for Parks and Recreation within the amendment site (or the open space to the west, which is not within the amendment site). The land is not identified in Perth's Bushplan or the Department of Environmental Protection's System 6 document.*

*Separation of the amendment area from the existing South Fremantle residential area by a Parks and Recreation Reservation would also pre-empt the resolution of issues relating to the integration of any new residential area with the existing community which needs to be considered through local structure planning.*

*An Urban zoning does not prevent the allocation of local open space either in the form of parks or pedestrian and cycle routes through the locality and the appropriate time for these matters to be considered is at the structure planning stage for the amendment area.*

---

1.1.8      The tip site has a use as a flora and fauna reserve.

WAPC Response

*The tip site is not part of this amendment.*

---

1.1.9      Through fragmentation of the land by traffic access there will be a loss of the framework already in place for a major park (referred to as South Park). A traffic free park should be created comprising of South beach, Wilson Park and the tip site.

WAPC Response

*As mentioned above, the current MRS and Local Scheme zones do not indicate that a framework for a "major park" exists to the north of the amendment site.*

*Road reserves already exist in and around the amendment site some of which pass through the area suggested as being suitable for Parks and Recreation Reservation.*

*The appropriate time to consider the existing road system and whether any changes to it should be made, for example, in response to any proposals for local open space, or pedestrian and bicycle links, would be at the structure planning stage for the amendment area.*

- 
- 1.1.10 There should be a comprehensive tree planting and landscaping element built into the development.

WAPC Response

*Landscaping of any new development in the amendment area is a matter for consideration by the Local Government and/or the developer. This is not a matter for consideration through the MRS amendment process.*

---

**1.2 Coast**

---

- 1.2.1 Consideration to any impacts at the interface between the subject land and the foreshore reserve will need to be addressed as part of the structure plan preparation process. (CoC)

WAPC Response

*The Local Government is responsible for managing the interface between any new development and foreshore reserve. Consideration of such impacts will be addressed during structure planning.*

---

- 1.2.2 No residential land use should be permitted to the west of Ocean Drive. (WSWA)

- 1.2.3 The land to the west of the railway line should be zoned "Parks and Recreation" for the following reasons:

- i) the current land use is an anomaly with the zonings to the north and south of this area;
- ii) the coastal reserves which surround this site on three sides stretch north to the Fremantle city centre and south to Coogee and on to Woodman Point. If the current zoning anomaly is corrected this would complete a coastal recreation reserve with regional significance; and
- iii) the creation of a continuous coastal reserve will enhance the works undertaken in the area for the South Beach Redevelopment project and the Catherine Point/North Coogee landscape project;

- 1.2.4 There is great merit in the Bradken land becoming a coastal reserve.

## WAPC Response

*Before the WAPC agrees to reserve land for Parks and Recreation, there must be a proven need for the land for this purpose. In the case of Pt Lot 1815, no arguments presented in submissions conclusively prove that there is a need for this land to be reserved for Parks and Recreation.*

*The current Industrial zoning of Pt Lot 1815 is a part of the historical land use pattern on the coast south of Fremantle. It is one of a number of pockets of land use west of the Railways Reservation which include:*

*the "Fishing Boat Harbour" complex;*

*Challenger and Success Harbours; \_*

*the old South Fremantle power station; and*

*the MRS "Special Industrial" zoning in the vicinity of Ahoy Road, Spearwood.*

*The suggestion that development west of the railway line at the amendment site is inappropriate has not been proven in submissions. As discussed elsewhere in this report, any potential adverse effects on the dune system and foreshore reserve can be addressed through normal planning processes.*

*Accordingly, it is not considered correct to refer to the current or proposed MRS zones on Pt Lot 1815 as an "anomaly".*

*The proposed amendment does not interrupt or prevent north south access along the beach within the Parks and Recreation Reservation. In addition, this amendment will increase the width of the Parks and Recreation Reservation between Pt Lot 1815 and the beach as well as increasing the Reservation at the southern end of Pt Lot 1815.*

*Given that the site has been developed, there is no merit from a conservation viewpoint in reserving it. Similarly, no need is seen from a regional recreation viewpoint for more land to be reserved in addition to the extensive areas of land already reserved for Parks and Recreation along the coast at South Fremantle and inland at Hamilton Hill.*

---

1.2.5

What is the impact on Cockburn Sound? e.g. pressure for marine development etc.

### WAPC Response

*The proposed Urban Zone and subsequent development is likely to have a beneficial impact on the adjacent marine environment. Potential onsite contamination, which may leach into the groundwater and then into the ocean, will be investigated and remediated in accordance with the proposed MRS conditions as outlined in the Environmental Review document.*

*Any new development will be connected to the sewerage and drainage systems in the locality.*

*It seems unlikely that the scale of any future development within the amendment area would itself lead to demand for a marina. Whatever the case, such a proposal would be dealt with on its merits in accordance with statutory approval processes and applicable government policies.*

- 
- 1.2.6      The current access to the site via the beach to the Bradken site is not good for the beach and has been the basis for repeated community protests over the years. There would be an increase in this problem if the site was to be redeveloped.

### WAPC Response

*This matter was addressed in the WAPC response to point 1.1.1*

---

- 1.2.7      No development should occur within 100m of the high water mark in accordance with coastal management regulations. It would be ideal to have no development west of the Railway line.
- 1.2.8      The Environmental review should be extended to examine the apparent erosion at the beach below the Bradken site as this could affect the long term viability of the development.
- 1.2.9      —      The proposed rezoning is contrary to the current WAPC guidelines and policy. The WAPC's DC 6.1 "Country Coastal Planning Policy" states that a coastal setback of 100m is the recommended minimum that should be applied. Currently the area proposed to be rezoned is within 40m of the coastline at the northern end of the site. This land clearly cannot be rezoned to Urban as it would place private development on the site at an unacceptable risk due to the dynamic nature of the coastal zone. The Environmental Review has not addressed the issue of coastal processes and information on the coastal dynamics is essential in order to adequately determine the appropriate MRS zoning of this site.

1.2.10 Coastal setbacks should take into account the probability of a 1 in 100 year storm event and sea level rises resulting from the effect of green house induced climate change. A site specific study of coastal dynamics and processes is required to establish an appropriate coastal setback.

1.2.11 The coast line in the area to the west of Pt lot 1815 has with the past 10 to 20 years undergone significant change leading to a loss of the dune area and a retreat of the coastline some 10 to 20 metres to the east. Irrefutable evidence of coastal erosion can be seen in comparing the current coastline i.e. the line of dune vegetation with aerial photographs and mapping of the coastline (see Environmental Review figures 1, 2 and 3).

#### WAPC Response

*The WAPC does not have "coastal management regulations" that apply to the subject area. The Ministry for Planning is preparing a generic coastal planning document that will apply to the metropolitan area and will include references to coastal setbacks. Whatever the outcome, there will not be an inflexible setback designated. Every case will be subject to determination of what is appropriate in accordance with individual circumstances.*

*Several factors indicate that there are no coastal management issues that suggest this amendment should not proceed*

- i) the Ministry for Planning has sighted Department of Transport Coastline Movement Map No. 374 02 03 which indicates that the coastline at the amendment site has accreted since records commenced in 1942;*
- ii) as with many sections of coastline in the metropolitan area, the coastline at South Fremantle has been modified and engineered over the years so that it can no longer be considered to be a "natural" coastline - the purpose of such modification is to maintain stability of the coast to protect nearby public and private development; and*
- iii) Pt Lot 1815 is private property with an Industrial zoning in the MRS and local scheme which would allow for the site to be developed and used now (subject to appropriate approvals) - it is not appropriate for the WAPC to prevent a change in zoning on the basis of coastal management issues when there is no basis to suggest that a change in zoning will affect the exposure of the land to erosion, particularly when the available information suggests the adjacent coastline is stable or accreting.*

*The WAPC will, in any case, ensure that any requirements for setbacks or any other management measures are appropriately determined at the structure planning stage when the location of different land uses over the amendment area*



are determined. This will require provision of appropriate information from the developers of the land for consideration by the MFP

Statutory imposition of any required setbacks will be by way of the subdivision and development approval process.

The WAPC "Country Coastal Planning Policy" does not apply to the metropolitan region. It does, in any case, provide for flexible, case by case consideration of proposals. It is also important to note that the circumstances of natural, unmodified coastlines in country areas are quite different from those near the amendment site.

---

## 2.0 POLLUTION MANAGEMENT

### 2.1 Odour

---

2.1.1 Section 2.2.1 of the Environmental Review contains a comment on the agreement between the City of Cockburn and the State requiring that impacts of any development, including odours, are to be contained on site. This is incorrect. The agreement states "An appropriate odour control level will be drawn up by the EPA in consultation with Council and enforced by the EPA". (LandCorp)

2.1.2 The "Special Industry (A)" area on the southern side of Rollinson Road has been appropriately covenanted to ensure each lot is "self contained" in respect to odour. These conditions can be found in the "Environmental Guidelines for Industries Operating in Coogee" and the "Coogee Master Plan - Final Report, January 1993."

#### WAPC Response

Point 2.1.1 above is correct. The 1988 agreement between the State and the City of Cockburn states that "An appropriate odour control level will be drawn up by the EPA in consultation with the Council, and enforced by the EPA."

The requirement that industry related odour be retained on site was a component of the subsequent 1994 "Environmental Guidelines for Industries Operating in Coogee".

The reference to industry on the south side of Rollinson being "appropriately covenanted" refers to the requirements of the 1994 Guidelines, not to any legal covenants, for example on Certificates of Title.

*The intent of the 1994 Guidelines is to contain industry related odours south of Rollinson Road in accordance with the following statements:*

- i) "Emission of offensive odours from the operation should be minimised at source, either by the use of alternative process(es) or process design, or suitable odour control technology "*
- ii) "Where the emission of offensive odours from an operation cannot be eliminated, suitable technology and management practices should be used to ensure that offensive odours are not detected outside the boundaries of the premises ...."*
- iii) "Additional controls should be instituted to ensure that, under the most adverse circumstances, no offensive odours extend beyond the boundaries of the North Coogee Industrial area. "*
- iv) In conjunction with the above, suitable buffer zones are required to separate malodorous industries from residential areas - however, buffer zones should only be used to minimise the off-site impacts of odour emissions and they are not an alternative to odour source reduction and control.*

---

## **2.2 Air pollutants**

---

- 2.2.1 There is much to be gained for the community in rezoning the land in terms of reduction in air pollution.

### WAPC Response

*Noted.*

---

## **2.3 Soil Contamination**

---

- 2.3.1 The environmental criteria (ANZECC/NHMRC guidelines) specified in the proposed management plan should be amended to reflect that accepted criteria could change. (WRC)
- 2.3.2 It is recommended that this land be managed as a contaminated site and remediation should occur before development begins. The Department of Environmental Protection should seek appropriate advice from the Health Department of WA. (HDWA)

- 2.3.3 The level of remediation should reflect the intended land use. (HDWA)
- 2.3.4 The submission of detailed studies relating to the nature and extent of soil contamination and their remediation will be required prior to the preparation of structure plan for the subdivision and development of the land
- 2.3.5 Environmental issues, particularly soil contamination can be adequately managed.
- 2.3.6 Thorough environmental investigations on Lot 100 Rollinson Road reveal a clean site in terms of soil contamination.

WAPC Response

*Point 2.3.1 is noted and agreed. The Responsible Authority will (with advice from the DEP) ensure that management for potential soil contamination is developed in accordance with the appropriate criteria/guidelines current at the time that the management plan is prepared.*

*As stated in the Environmental Review, investigation of potential soil contamination and remediation, where required, will be undertaken prior to development occurring. This will be enforced by the proposed MRS condition. The remediation will be to a level compatible with the proposed land uses, in accordance with the EPA's requirements.*

*It is because the level of remediation should reflect the intended land use that preparation of contamination management strategies will be required at the time of structure planning, when the land uses are determined.*

*The Contaminated Sites Branch of the DEP is the recognised authority with respect to contamination studies. The Branch will consult with other government agencies such as the Health Department of WA as it considers appropriate.*

- 
- 2.3.7 A disadvantage to the community as a result of the amendment is the pressure to develop the tip site without fully recognising the extremely hazardous nature of the site and its value as a buffer zone. The community fought strongly to stop any development of this site and is aware of the health impacts it will have on surrounding residential areas or potential uses of the site should it be disturbed.

WAPC Response

*The tip site is not part of this amendment.*

*The tip site is zoned Urban in the MRS and Inner Urban R25 in the City of Fremantle Town Planning Scheme. The land is owned by the City of Fremantle and therefore not subject to pressure for development in the same sense that privately owned land generally is. Accordingly, it is not considered that development of the amendment site will increase pressure to develop the tip site.*

*Whatever the case, any proposal to develop the tip site would be considered on its merits in accordance with whatever Local and State Government policies are applicable.*

---

## **2.4 Groundwater Contamination**

---

- 2.4.1 The submission of detailed studies relating to the nature and extent of groundwater contamination and their remediation/management will be required prior to the preparation of a structure plan for the subdivision and development of the land. (CoC)
- 2.4.2 Environmental issues, particularly groundwater contamination, can be adequately managed.
- 2.4.3 The site should be decontaminated before any development proceeds. Particular attention should be given to groundwater pollution taking into account a possible plume spreading beneath the site from the nearby tip site.
- 2.4.4 Thorough environmental investigations on Lot 100 Rollinson Road reveal a clean site in terms of groundwater contamination.

### WAPC Response

*The Environmental Review describes how potential groundwater contamination will be investigated and managed and how the proposed MRS condition will ensure that this occurs prior to any sensitive development occurring in the amendment area. The possibility of a plume of nitrogen contaminated groundwater emanating from the tip site was identified and addressed within the Environmental Review.*

---

## **2.5 Noise**

---

- 2.5.1 A key factor which may restrict the capacity of rail usage and which require detailed consideration is the impact of noise. Clause 4.1.2 of the Environmental Review indicates that presently one train operator generate 2-3 train movements per week from the Inner harbour. That was the case one year ago. However,

there has been an increase in rail as has occurred and at present there are three operators using the line, with a potential fourth emerging, generating at present about 6 trips per week. This is expected to increase to a minimum of 3 per day, or 21 a week, 24 hours a day. (FP)

2.5.2 Concern that the Noise Management Plan does not form part of the MRS amendment process and that it may only address the noise levels based on rail usage at the time. It is important that forecast/potential growth in rail is included. (FP)

2.5.3 The Noise Management Plan should be completed prior to any development or subdivision plans. The issue should be considered prior to the MRS amendment being finalised to ensure land development is not too close to the rail line. The MRS process may then incorporate the findings of the plan. (FP)

2.5.4 The noise study conducted by consultants Herring Storer makes assumptions regarding the type, size, time and frequency of freight operation on this rail line, all of which may not be sufficiently conservative. (FP)

2.5.5 The report suggests that current and proposed noise criteria are likely to be met subject to the incorporation of appropriate noise attenuation measures. If there are any errors in the assumptions, the modelling or the effectiveness of the attenuation measures then this could result in significant restrictions on rail operations. The planning controls should ensure the noise impacts will be manageable without the incorporation of attenuation methods. (FP)

2.5.6 The submission of detailed studies relating to the nature and extent of noise and its management will be required prior to the preparation of a structure plan for the subdivision and development of the land. (COC)

#### WAPC Response

*The methodology of the Noise Assessment report referred to in the Environmental Review allows for up to 24 freight movements per day, far in excess of projected movements. The assessment criteria used was based on 1 movement per hour. Even with this rate of movements, subsequent residential development in the area would comply with the relevant noise criteria*

*The Noise Management Plan will appropriately be developed when any detailed planning for redevelopment occurs (ie structure planning), such that strategic buffers or other design options can be included within that plan, if required. The MRS condition proposed in the Environmental Review will ensure that the Noise Management Plan is prepared and implemented prior to any development occurring*

*Any government agency concerned with this matter can contact the DEP and request that it be consulted when the Noise Management Plan is submitted to the DEP.*

*The Environmental Review states that there are a range of measures which could successfully be applied to manage noise impacts to subsequent development in the area. These included, but were not restricted to, attenuation methods*

---

- 2.5.7 South Terrace currently carries a considerable amount of traffic to and from South Beach and any increase in the quantity of traffic would create an unacceptable noise pollution factor. The R60 zoning could result in up to 600 dwelling units with a minimum of 1200 cars.

WAPC Response

*It is not possible to make assumptions about the type and density of development that may occur in the amendment area at this stage of the planning process. This also related to potential traffic increases.*

*However, this amendment will facilitate improved traffic conditions in the locality due to the removal of the possibility of industrial traffic returning to the area as would occur if the current MRS Industrial Zone remained. Specifically, residential traffic is less noisy than industrial traffic and this factor alone is sufficient to indicate that the issue of increased traffic noise is not a matter which suggests the amendment should not proceed.*

*The Main Roads WA publication "Average Weekday Traffic Flow - Perth Metropolitan Area - 1 July 1992 to 30 June 1999" quotes traffic counts on some of Perth's major roads. For South Terrace south of Douro Road the following figures exist:*

- i) 1986 / 1987 3,720
- ii) 1990 / 1991 4,140
- iii) 1992 / 1993 3,860;
- iv) 1996 / 1997 1,890
- v) 1998 / 1999 1,090

*The decrease in traffic from 1992 / 1993 is most likely explained by the cessation of industrial uses in the amendment area. If the Industrial Zone remained in the MRS, the land would eventually be redeveloped for that purpose and it could be expected that industrial traffic would return to its previous levels.*

*Even if the development increased the traffic flow on South Terrace by the 1200 vehicles mentioned, in response to this submission, the noise management consultants quoted in the Environmental Review advise the noise level increase would be negligible, at around 2 dB(A). They also advise that the overall noise levels on South Terrace that would result from adding this level of traffic use to the existing volumes would be within the Main Roads Noise Level Objectives and DEP Guidelines.*

*Whatever the case, consideration of appropriate traffic circulation and its effect on existing development is a matter for resolution through the structure planning process. The Environmental Review includes a proposed MRS condition requiring a Noise Management Plan be prepared to WAPC satisfaction on the advice of the DEP.*

---

2.5.8

*The environmental issues identified by the EPA have been deficient in that noise is only referred to in relation to the railway reserve. Noise generated by industry will be a critical factor. Residential activity should be restricted to those areas that would not be impacted upon by noise emanating from infrastructure or industrial uses, present either at or in the future. (Landcorp)*

#### WAPC Response

*As outlined in the Environmental Guidelines for Industry Operating in Coogee (1994), the industrial area to the south of Rollinson Road is required to limit potential noise emissions so that they do not affect the amendment area.*

*The only part of the amendment site that could be affected by industrial related traffic noise is the area on the northern side of Rollinson Road which may be used by industrial vehicles servicing industrial land south of Rollinson Road and on O'Connor Close.*

*There is the possibility that a strip of land on the north side of Rollinson Road could be used for light industrial or commercial uses so that residential development could be separated from Rollinson Road. Whatever the case, consideration of noise factors will occur during structure planning for the amendment area when options are considered for the most appropriate form of development for the land on the north side of Rollinson Road.*

*This is not a matter that suggests the transfer of the land from an Industrial to an Urban Zone should not proceed.*

*The wording of the proposed MRS condition relating to noise management is not specifically confined to rail noise. However, the "Environmental Factor" in the EPA's earlier Environmental Instructions only refers to rail noise. The EPA has the opportunity to expand the condition to include traffic noise if it considers this appropriate.*

---

- 2.5.9 Section 4.1.3 makes the statement that various authorities will have responsibility to ensure that rail noise is managed to meet EPA objectives. This should be amended to state noise amelioration will be undertaken by future developers to ensure rail noise does not adversely impact upon residential uses that may encroach on the industrial area. (Landcorp)

WAPC Response

*Noise management/amelioration requirements will be undertaken by the developers of the subject land.*

*The reference in the Environmental Review to various authorities having the responsibility for ensuring that rail noise is managed to EPA objectives refers to the application by the WAPC and the Local Governments of subdivision and development conditions to any approvals in the amendment area. The conditions will need to be complied with by the developers.*

*This will ensure continuation of the rail reserve use now and in the future.*

---

- 2.5.10 Section 4.1.4 references work undertaken by Herring Storer Acoustics. It would be helpful if the relevant levels were quoted for future reference if conflict arises between the residential encroachment and Westrail/Industry. The techniques used to comply with the most stringent of current and proposed noise criteria should be undertaken at the cost of the developer not of existing rail and industry. (Landcorp)

WAPC Response

*It is assumed that "relevant levels" relates to noise level objectives and criteria. These are stated in the Environmental Review.*

*The Noise Management Plan is required to be to the satisfaction of the WAPC on the advice of the DEP.*

*As stated under point 2.5.9 above, noise management will be at the developers' cost as requirements will be made by way of subdivision and development conditions.*



- 
- 2.5.11 The conditions proposed to be included in the MRS appear to be grossly inadequate. No consideration has been given to the noise generated by industrial traffic and traffic management relevant to the Industrial/Urban interface. Full recognition should be given to the industrial traffic which will be utilising Rollinson Road including semi-trailers etc. The issues should be resolved prior to the Amendment being put in place. (Landcorp)
- 2.5.12 Environmental issues, particularly rail noise can, be adequately managed.
- 2.5.13 The "Special Industry (A)" area on the southern side of Rollinson Road has been appropriately covenanted to ensure each lot is "self contained" in respect to noise. These conditions can be found in the "Environmental Guidelines for Industries Operating in Coogee" and the "Coogee Master Plan - Final Report, January 1993".

WAPC Response

*As mentioned earlier, noise management and amelioration will be addressed in a Noise Management Plan.*

*In relation to traffic management on Rollinson Road, the main issue will be how to manage the potential mixing of residential and industrial traffic. Options will be considered at structure planning stage and an appropriate solution incorporated into the plan.*

*There is no need for the issue to be resolved prior to the MRS amendment being finalised.*

*The issue cannot be resolved prior to the MRS amendment being finalised as its resolution depends on decisions made at structure planning stage as to what land uses will occur and the access options into and out of the amendment area.*

---

- 2.5.14 The operation of Container Refrigeration on Lot 121 Rollinson Road involves the movement of containers. This requires large trucks and the need to operate on a virtual 24 hour day, 7 days a week basis to accommodate shipping routines. The operations result in there being significant noise from forklifts, container repairs and truck movements. It is not suitable for a residential area and any residences in the area will ultimately result in restrictions to the operations. The size, noise, frequency and time of container movements will interfere dramatically with residents occupancy.

### WAPC Response

*The proposed City of Cockburn Town Planning Scheme No. 2, amendment No. 201 (not advertised for public submissions at the time of writing) includes in its objectives the following:*

- i) *"Establish appropriate land use buffers to existing industry south of Rollinson Road", and*
- ii) *"To maintain existing light industries in the Urban Development area as appropriate"*

*As stated previously, the need for buffers between different land uses in the amendment area will be considered by way of the Noise Management Plan and structure planning. Buffers of non-residential land use are compatible with the proposed Urban zoning.*

*Lot 121 is zoned Light Industry in the City of Cockburn District Zoning Scheme, and this refers to an industry "in which the processes carried on, the machinery used and the goods and commodities carried to and from the premises will not cause any injuries to or will not adversely effect the amenity of the locality by reason of the emission of light, noise, vibration, smell, fumes, smoke, vapour, steam, soot, ash, dust, wastewater or other waste products."*

*Therefore, regardless of what MRS and local scheme zonings eventually occur in the locality, there is already an onus on industries on O'Connor Close to not adversely effect surrounding properties.*

---

2.5.15

*There may be much to be gained for the community in rezoning the land in terms of loss of noise pollution and the removal of industrial traffic through South Fremantle.*

### WAPC Response

*The rezoning will remove the potential for redevelopment of the area for industry and is also likely to result in less light and service industry that would currently be allowed in the area.*

*As some access roads to the amendment area pass through residential areas, the Urban zoning will significantly reduce the potential for the adverse impacts of industrial vehicles on the locality*

---

2.5.16 Heliport facilities will cause noise invasion.

WAPC Response

*No heliport facilities are known in the area and none are proposed as part of this amendment. Any such proposal would be considered on its merits at the time of application by the appropriate approval authority/ies*

---

2.6 Buffers

---

2.6.1 To minimise land use conflict the land use either side of the rail corridor should have compatible uses and reservations. The most appropriate uses would include commercial, industrial or open space. Unless the MRS amendment is to include specific notation allowing only commercial use of the land either side of the rail corridor, then the Urban zoning is not seen as appropriate. (FP)

2.6.2 Experience shows that a relatively small non-residential buffer either side of a transport corridor can significantly ease potential constraints on transport operation that might otherwise arise due to noise and risk impacts. The exact size of such a buffer would require further study and should be undertaken by the proponents prior to the MRS amendment proceeding. The result can then be incorporated as part of the MRS amendment to ensure the correct use and reservation of the land occurs. (FP)

WAPC Response

*Appropriate land uses either side of the railway reservation will be considered at the structure plan stage. The proposed Noise Management Plan will address the need for buffers. The Noise Management Plan will be required to be approved by the WAPC on the advice of the DEP. In this regard, the DEP will be informed by the draft EPA Policy on Road and Rail Noise (January 1998).*

*The Fremantle Port Authority can contact the DEP and request to be consulted in relation to the Noise Management Plan.*

*The Environmental Review showed, via the noise assessment, that potential noise impacts were readily manageable within the Urban zoning.*

*MRS Zones and Reservations do not include notations restricting use. This detailed level of land use is considered at the Local Scheme amendment and structure planning stages*

*The MRS Urban Zone can include light industry, commercial use and local open space. As stated in the advertised "Amendment Report", the MRS Industrial Zone is no longer considered appropriate for land with exceptionally favourable circumstances for residential land, therefore, buffers of MRS Industrial Zone are not proposed.*

---

- 2.6.3      The Urban zoning should not impact upon either the industrial activities within O'Connor Close (immediately to the west) or the Special Industrial estate immediately to the south (Robb Jetty Industrial Estate). If a structure plan were to be placed over the area giving clear and explicit guidelines in relation to the development of that area, so as not to adversely impact upon its current industrial use, there would be no major reason to object. (Landcorp)

WAPC Response

*As discussed in previous sections, a Noise Management Plan and a structure plan will be prepared for the amendment area prior to any subdivision or development occurring.*

*As mentioned above, the DEP will refer to the January 1998 draft EPA policy on Road and Rail Transportation Noise when considering the Noise Management Plan. LandCorp can request the DEP that it be consulted on this plan.*

*The proposed City of Cockburn Town Planning Scheme No.2, amendment No. 201 (not advertised for public submissions at the time of writing) includes in its objectives the following:*

- i) "Establish appropriate land use buffers to existing industry south of Rollinson Road"; and*
  - ii) "To maintain existing light industries in the Urban Development area as appropriate".*
- 

- 2.6.4      Prior experience with the establishment of a container depot on Lot 452 Tydeman Road, North Fremantle resulted in community angst and substantial amendments to the operating procedures by the lessee. The EPA imposed conditions to ensure that the activities of the company did not adversely impact upon residential areas. In this case, in accordance with the State Industrial Buffer 5AA policy, industry will require to be protected from encroaching residential uses. (Landcorp)

- 2.6.5 Noise generated by industry will be a critical factor as will conflicting land use, buffer zone requirements and the 5AA policy in relation to buffers. These issues cannot be ignored within any environmental assessment to be undertaken. Residential activity should be restricted to those areas that would not be impacted upon by noise emanating from infrastructure or industrial uses, present either at or in the future. (Landcorp)

WAPC Response

*Point 2.6.4 relates to the container storage activity on Lot 121, on the corner of Rollinson Road and O'Connor Close, within the amendment area.*

*The WAPC Statement of Planning Policy No. 4 - "State Industrial Buffer Policy" (referred to above as a "5AA" policy) applies to "all industry infrastructure and special use categories where on-site and off-site buffer areas are required".*

*The EPA 1997 "Guidelines for Environment and Planning" 1997 do not mention container storage in its list of industries requiring buffer distances to residential areas.*

*Accordingly, the State Industrial Buffer Policy does not apply to Lot 121.*

*Further, the City of Cockburn District Zoning Scheme requires that activities within the Light Industrial Zone do not have adverse impacts on adjacent properties.*

*Despite the above, the matter of noise generated by Lot 121 can be considered during structure planning for the amendment area.*

*The State Industrial Buffer Policy has as one of its objectives "To protect industry, infrastructure and special uses from the encroachment of incompatible land uses". However, this is in the context of the policy being relevant to industries requiring buffers, not industries without designated buffer requirements.*

- 
- 2.6.6 Please discuss the references attached to submission No. 21 and the implications they have on the Amendment. The attachments include:
- a an EPA briefing note to Coogee Redevelopment Technical Committee Meeting in 1991 which refers to a 300m noise and odour buffer encircling the boundary of the "Biotechnology Park";
  - b environmental guidelines June 1994 sec. 5 (iii);

- c. correspondence from the DEP dated May 1997 which states in relation to the review of land uses in North Coogee, "It is essential that adequate buffers between residential and industrial land uses are maintained or can be achieved. the encroachment of residential land toward important industrial land will only compromise the amenity and health of future residents and the viability of the industrial land uses which are or will locate there"; and
- d. the draft July 1997 EPA "Policies, Guidelines and Criteria for Environmental Impact Assessment No. 3 - Industrial Residential buffer areas (separation distances).

#### WAPC Response

- a. EPA Briefing Note 1991

*The Briefing Note needs to be considered in its historical context.*

*The 1991 EPA Briefing Note concerned a proposed biotechnology park proposed to be contained within the North Coogee Industrial Area (south of Rollison Road). The general planning strategy at the time (as developed in the 1993 Coogee Master Plan) was that noxious industries would locate to the proposed biotechnology park in the vicinity of the former Robbs Jetty Abattoir. However, the exact locations of these industries and the associated buffers were not finalised.*

*The Coogee Master Plan was developed as a form of structure planning for the area. The Plan recognised that buffer requirements to existing residential development on the north site of Rollinson Road (the "Fremantle Village and Chalet Centre") would extend south of Rollinson Road into the industrial area, up to the approximate location of the former abattoir. The Plan also concluded that the entire strategy of locating noxious industries within a biotechnology park would need to be reassessed if the abattoir closed.*

*The local scheme zoning for the proposed Biotechnology Park was "Special Industry A" and this zone remains over the area despite other changes that have occurred as mentioned below. This zone allows for abattoirs and meat and livestock related industries, rock lobster related industries and the manufacture of edible goods.*

*To assist in the implementation of the Master Plan for North Coogee, the DEP prepared the "Environmental Guidelines for Industries Operating in Coogee" in 1994. These made the following requirements in relation to odour for industries establishing south of Rollinson Road:*

*"The plant should be managed and operated such that emissions of gases, dust and noise are within standards acceptable by the Department. Acceptable standards include air quality guidelines and the draft noise regulations. All reasonable and practical measures should be taken to minimise these emissions." (section 4 of the Guidelines);*

*Emission of offensive odours from the operation should be minimised at source. (section 5 (i));*

*Suitable odour control technology and management practices should be used to ensure that offensive odours are not detected outside the boundaries of the premises (section 5 (ii));*

*No offensive odours should extend beyond the boundaries of the North Coogee Industrial area (section 5 (iii));*

*suitable buffer zones are required to separate malodorous industries from sensitive uses such as residential areas, however, "they are not an alternative to odour source reduction and control" (section 5 (iv)).*

*Underlining in dot points 1 to 4 is from the original document.*

*In addition to their application in general in the locality, the 1994 guidelines had the effect of protecting the existing Urban zone on Rollinson Road (containing the "Fremantle Village and Chalet Centre") which adjoins the subject area.*

*The abattoir closed in 1994. The 1993 Master Plan had recommended that if and when this occurred, the Master Plan area would need to be reassessed as the abattoir was viewed as the core industry in the area. An addendum to the 1993 Master Plan acknowledges the abattoir closure and that "this represents an important change to the future scope of operations within the proposed Biotechnology Park."*

*Accordingly, planning for the area was reviewed in consultation with stakeholders. Revised planning strategies for the area have now been prepared by way of the Coogee Master Plan Review and will be released by the WAPC for comment in the future. The review will supercede the 1993 Master Plan.*

*The Coogee Master Plan Review and this amendment will be presented for submissions with consistent recommendations for the amendment area.*

*Although the 1991 Briefing Note refers to a 300m buffer around the proposed Biotechnology Park, as mentioned above, the 1994 DEP guidelines supercede this and require that any adverse impacts of industry are contained south of Rollison Road. The 1993 Master Plan itself states in the Executive Summary that "Facilities to control odour generation from industries will be required to ensure that unacceptable odours do not emanate from the Biotechnology Park."*

*In summary, the current planning context for the locality is such that the 1991 Briefing Note has little relevance to the proposed MRS amendment. This amendment and the Master Plan Review will set the new planning context for the locality.*

b. DEP 1994 Environmental Guidelines

*Section 5 (iii) supports the conclusion in the Environmental Review that odour is required to be contained within the industrial estate and would not constrain a rezoning of the amendment area to Urban. It states.*

*"Additional controls should be instituted to ensure that, under the most adverse circumstances, no offensive odours extend beyond the boundaries of the North Coogee industrial area."*

c. DEP Correspondence of May 1997

*It is apparent that the above correspondence relates to a specific proposal somewhere near the proposed Port Catherine development some 2km south of the amendment site. It appears that the correspondence relates to an area of land with different planning circumstances and there is no implication that the advice applies to the amendment area.*

d. draft July 1997 policy on Industrial buffer distances

*The table referred to in the LandCorp submission, attachment 5, is actually a modified version of the abovementioned table. The same table appears in the August 1997 DEP "Guidelines for Planning and Environment".*

*The draft July 1997 policy and table provides guidelines to proposals involving residential developments which encroach on existing industrial buffers. There is no designated buffer over the proposed amendment area.*

*The only existing industries immediately south (ie within 400m) of the amendment area are a frozen seafood storage operation which does not adjoin the amendment area and a leather finishing facility which treats pre-tanned hides. Another frozen seafood operation has been approved directly south of the Fremantle Village and Chalet Centre which has a small frontage to the amendment site.*



*Under the draft July 1997 policy none of these industries require a buffer which would affect the amendment area.*

*Combined with the "Community Facilities" zone on the corner of Bennet and Rollinson Roads (which is used for drainage) the existing industries effectively provide a buffer between the amendment area and future development in the industrial estate.*

*As previously discussed, planning for the industrial estate from the Coogee Master Plan onwards, including the 1994 DEP Environmental Guidelines for the area require establishing industries to control potential emissions such that offsite impacts from the industrial estate do not occur.*

*Any industry proposing to establish south of Rollinson Road already has to comply with the June 1994 Guidelines for Industries Operating in Coogee regarding setbacks from the existing Urban Zones and residential areas. Therefore, there are already restriction on new industrial development in the area and the proposed amendment will make no extra requirement.*

- 
- 2.6.7      The final paragraph on page 6 makes reference to the proposed Urban zoning not conflicting with the current light industrial uses of the area. It is questioned whether residential development in close proximity to Container Refrigeration's uses on Lots 199, 120 and 121 is conflicting. (Landcorp)

WAPC Response

*The implication in point 2.6.7 that residential development is already proposed "in close proximity" to the Container Refrigeration operation is incorrect. The Environmental Review explains at a number of stages that the allocation of specific land uses within the amendment area will be determined at the detailed planning stage.*

*At that time, any conflicts that may arise between proposed uses, including potential noise impacts would have to be addressed. The Responsible Authority will ensure this occurs, prior to any redevelopment, through specific conditions proposed for the MRS amendment in conjunction with the planning controls available at subsequent stages of the development process.*

*This matter has also been discussed in relation to points 2.5.14 and 2.6.4.*

---

- 2.6.8 The conditions proposed to be included in the MRS appear to be grossly inadequate. No credibility has been given to existing industry buffer zones required by industry likely to establish within the Robb Jetty Industrial Estate. The issues should be resolved prior to the Amendment being put in place. (Landcorp)

WAPC Response

*The proposed Urban zoning will not conflict with existing land uses in the area. As mentioned in the response to section 2.6.6, there are no existing buffer requirements which impinge on the amendment area and the DEP's 1994 Environmental Guidelines, combined with the current strategies for the area will ensure that industries establishing to the south of Rollinson Road will not affect the amendment area.*

---

- 2.6.9 Industrial development would be potentially incompatible with the residential community of South Fremantle, as unlike the industrial land to the south of Rollinson Road, this area does not have restrictive environmental guidelines that ensure urban compatibility.

- 2.6.10 Lot 100 Rollinson Road has been used as a wool storage facility for over 45 years. The use of a woolstore is a light industrial use which is compatible and can be accommodated within the proposed Urban zone. However, we are presently decommissioning the woolstore and moving the wool to our new premises at Bibra Lake.

- 2.6.11 If necessary, a light industrial buffer, which is a conforming use within the proposed Urban Zone, could be developed on our southern boundary as a further buffer to the "Special Industry (A)" area. However, at present it appears that the properties within the "Special Industry (A)" zone that are adjacent to the Lot 100 Rollinson Road are all being purpose built and used for "cold storage" which under the EPA's Guidelines do not require a buffer to urban uses.

- 2.6.12 The impact of adjacent land uses can be adequately managed.

WAPC Response

*These points are supportive of the amendment and re-iterate various comments made elsewhere in this report supporting the amendment.*

---

### 3.0 SOCIAL SURROUNDINGS

#### 3.1 Risk

---

- 3.1.1 Some of the cargo transported by rail contains hazardous materials. A key factor which may restrict the capacity of rail usage and which require detailed consideration is the impact of risk. (FP)

##### WAPC Response

*The Environmental Review was prepared in accordance with the EPA's instructions. It was considered that, since the rail line which traverses the amendment area continues through central Fremantle, including the tourist precinct adjacent to the "Round House" and within several metres of residential development in High Street, Fremantle, it was not a factor requiring consideration in the Environmental Review. As described in the Environmental Review, the same rail line interfaces with residential development in the Urban Zone for 5km in near by Spearwood and Hamilton Hill.*

*If hazardous materials are transported on this rail line, appropriate risk management measure would need to be in place as determined by the Department of Minerals and Energy For rail transport, this would generally involve the use of specialised rail carriages, appropriate for the material carried.*

*Risk levels are determined on the basis of land use. The location of specific land uses within the Urban Zone will be determined at the detailed planning stage and be subject to the planning controls available to the Responsible Authority at that time.*

- 
- 3.1.2 South Terrace currently carries a considerable amount of traffic to and from South Beach and any increase in the quantity would create an unacceptable risk.

##### WAPC Response

*The submission does not specify what type of "risk" is being referred to. It may refer to increased risk of traffic accidents or personal injuries. In response, the following comments are made on the potential for increased traffic on South Terrace as a result of the amendment.*

*Whether or not South Terrace will be used for traffic from the amendment area (in whole or in part) will be addressed during structure planning for the subject land. The quantity of traffic will depend on the R-Coding for the subject land that eventuates from the local scheme amendment process and the proportion of residential and industrial use.*

*Traffic "risks" would be expected to be greater if redevelopment of the land occurred in accordance with the current Industrial Zone.*

*The Main Roads WA publication "Average Weekday Traffic Flow - Perth Metropolitan Area - 1 July 1992 to 30 June 1999" quotes traffic counts on some of Perth's major roads. For South Terrace south of Douro Road the following figures exist:*

- i) 1986 / 1987 3,720
- ii) 1990 / 1991 4,140
- iii) 1992 / 1993 3,860;
- iv) 1996 / 1997 1,890
- v) 1998 / 1999 1,090

*The decrease in traffic from 1992 / 1993 is most likely explained by the cessation of industrial uses in the amendment area.*

---

### 3.2 Recreation

---

3.2.1 The area of land west of the railway line should be rezoned to "Parks and Recreation" as South Beach and the adjoining Catherine Point Reserve are currently a recreation resource of regional significance. The area attracts growing numbers of people from adjoining suburbs.

3.2.2 The proposed rezoning to Urban to the east of the railway line will increase the local population and thus increase the pressure on existing reserves and necessitates an increase in open space demand in the local area.

#### WAPC Response

*This issue has been discussed under points 1.1.1, 1.1.2 and 1.2.3.*

*The WAPC and the Local Governments can consider the need for additional local public open space at the structure planning and subdivision approval stages.*

- 4.1 The impact of the Amendment on the rail corridor is a concern. The rail corridor operates 24 hours a day and provides the only freight rail link to the Inner Harbour of the Fremantle Port, which is the State's singular major container port. With continuing growth in container trade through the Inner Harbour there will be increasing use of the freight rail link (FP)
- 4.2 The rail corridor should not be compromised, as it will become a critical factor in the ability of the Inner Harbour to expand its capacity. The location of a major freight link adjacent to proposed Urban reserves should be examined in the context of the strategic importance of the freight rail link to the State of Western Australia. (FP)
- 4.3 A structure plan is required for the proposed development area to examine land use, transport, open space provisions and the other issues prior to any applications for subdivision or development. (CoF)

WAPC Response

*These matters have been addressed under points 2.6.1 and 2.6.2.*

---

- 4.4 The statement is made under Section 2.3 of the Environmental Review that lots 113 to 120 inclusive along O'Connor Close were created for light industrial purposes but the majority have remained undeveloped. This statement is incorrect. Six of the 9 lots are developed. (Landcorp)

WAPC Response

*The inaccuracy is acknowledged. The statement was related to development on the O'Connor Close lots when the Environmental Review was prepared. However, the change in the number of lots developed does not affect the manner in which the issues raised in submissions have been addressed in this report.*

---

- 4.5 Any Amendment is considered premature as the entire area is currently the subject of the Coogee Master Plan Review. Until the outcome of the review is known, the MRS Amendment should not be considered.

WAPC Response

*This MRS amendment and the Review of the Coogee Master Plan are presenting consistent recommendations.*

---

4.6

Urban development will generally enhance the environment of the locality, which is currently an old industrial area heading for dereliction.

WAPC Response

*Support noted.*

---

4.7

Solar principles should be applied to the development.

WAPC Response

*This is not a matter for consideration at the MRS amendment stage. The matter can be considered during structure planning and when approving subdivisions and developments within the amendment area.*

---

## **Appendix 5**

**Table 2. Identification of Environmental factors**

**Table 2- Identification of Environmental Factors**

Preliminary Environmental Factors	Amendment component with possible impact	Government Agency and Public Comments	Identification of Environmental Factors
<b>BIOPHYSICAL</b>			
Coast	The amendment area is located directly adjacent to the South Beach Coastal Recreation Area.	<ul style="list-style-type: none"> <li>No residential land use should be permitted to the west of Ocean Drive (public).</li> <li>No development should occur within 100m of the high water mark (public).</li> <li>The Environmental Review should be extended to examine the apparent erosion at the beach below the Bradkens site as this could affect the long term viability of the development (public).</li> <li>The Environmental Review has not addressed the issue of coastal processes and information on the coastal dynamics is essential in order to adequately determine the appropriate MRS zoning of this site. Coastal setbacks should take into account the probability of a 1 in 100 year storm event and sea level rises resulting from effect of greenhouse induced climate change. A site specific study of coastal dynamics and processes is required to establish an appropriate coastal setback (public).</li> <li>The coast line in the area to the west of Pt lot 1815 has in the past 10 to 20 years undergone significant change leading to a loss of the dune area and a retreat of the coastline some 10 to 20 metres to the east. (public)</li> <li>Consideration to any impacts at the interface between the subject land and the foreshore reserve will need to be addressed as part of the structure plan preparation (City of Cockburn)</li> </ul>	<p><b>The Responsible Authority will ensure that any setbacks or other management measures for the amendment area are appropriately determined at the structure planning stage.</b></p> <p><b>Not considered to be a relevant environmental factor for this assessment, however the EPA provides 'other advice' on this factor.</b></p>
Terrestrial Vegetation	The amendment area is directly adjacent to the South Beach Coastal Recreation Area. The amendment area does not contain any remnant vegetation of significance.	<ul style="list-style-type: none"> <li>The land labelled Pt 1815 in Figure 1 of the amendment report is adjacent to native vegetation on primary dunes, in land reserved as 'Parks and Recreation'. The proposed Urban zoning may place pressure on the dunal vegetation which is highly sensitive to trampling and can become unstable. This has not been addressed in the Environmental Review (Wildflower Society of WA).</li> <li>There is a need for a green belt between Fremantle and Cockburn local government areas in the area north of the Island Road reservation and Ocean Rd (City of Fremantle)</li> </ul>	<p><b>The amendment area does not contain any remnant vegetation of regional significance. The provision of open space of local significance within the amendment area is a local government planning issue.</b></p> <p><b>Not considered to be an environmental factor relevant to the EPA's assessment.</b></p>



Preliminary Environmental Factors	Amendment component with possible impact	Government Agency and Public Comments	Identification of Environmental Factors
<b>POLLUTION</b>			
Noise	<p>The amendment area contains a railway which services the Fremantle Port.</p> <p>The amendment area may be impacted by heavy vehicle traffic associated with Industrial land uses within the amendment area and those Industries south of Rollinson Road.</p> <p>Surrounding areas may experience a rise in general traffic associated with the development of this land for residential purposes</p>	<ul style="list-style-type: none"> <li>• There has been an increase in rail usage and at present there are three operators using the line, with a potential fourth emerging, generating at present about 6 trips per week. This is expected to increase to a minimum of 3 per day, or 21 a week, 24 hours a day (Fremantle Port Authority - FPA)</li> <li>• Concern that the Noise Management Plan does not form part of the MRS Amendment process. It is important that forecast/potential growth in rail is included (FPA)</li> <li>• The report suggests that current and proposed noise criteria are likely to be met subject to the incorporation of appropriate noise attenuation measures. If there are any errors in the assumptions, the modelling or the effectiveness of the attenuation measures then this could result in significant restrictions on rail operations (FPA).</li> <li>• To minimise land use conflict the land use either side of the rail corridor should have compatible uses and reservations. The most appropriate uses would include commercial, industrial or open space. Unless the MRS Amendment is to include specific notation allowing only commercial use of the land either side of the rail corridor, then the Urban zoning is not seen as appropriate (FPA).</li> <li>• South Terrace currently carries a considerable amount of traffic to and from South Beach and any increase in the quantity of traffic would create an unacceptable noise pollution factor. The R60 zoning could result in up to 600 dwelling units with a minimum of 1200 cars (public).</li> <li>• No consideration has been given to the noise generated by Industrial traffic which will be utilising Rollinson Road including semitrailers etc. (Landcorp)</li> <li>• The operation of Container Refrigeration on Lot 121 Rollinson Road involves the movement of containers. This requires large trucks and the need to operate on a virtual 24 hour a day, 7 days a week basis to accommodate shipping routines. The operations result in there being significant noise from forklifts, container repairs and truck movements. It is not suitable for a residential area and any residences in the area will ultimately result in restrictions to the operations. The size, noise, frequency and time of container movements will interfere dramatically with residents occupancy (public).</li> </ul>	<p><b>The amendment allows for residential uses that could be adversely affected by noise from traffic associated with industrial land uses and rail movements.</b></p> <p><b>Considered to be a relevant environmental factor which requires further investigation and management.</b></p>

<b>Preliminary Environmental Factors</b>	<b>Amendment component with possible impact</b>	<b>Government Agency and Public Comments</b>	<b>Identification of Environmental Factors</b>
Vibration	The amendment area contains a railway which services the Fremantle Port	<ul style="list-style-type: none"> <li>The Herring Storer Acoustics report also briefly discussed vibration impacts. They concluded that freight trains travelling at less than 40km/h result in vibration levels that are typically below perception levels. The only time vibration levels would exceed the minimum perception level is if there were small imperfections such as crossing points (HSA, 1998) (DEP)</li> </ul>	<p>The amendment area may be affected by vibration from rail movements.</p> <p>Considered to be a 'deferred' environmental factor. The impacts from vibration may need to be considered in subsequent planning stages.</p>
Soil contamination	Past and present industrial land uses within the amendment area have the potential to cause soil contamination.	<ul style="list-style-type: none"> <li>The environmental criteria (ANZECC/NHMRC guidelines) specified in the proposed management should be amended to reflect that accepted criteria could change (Water and Rivers Commission).</li> <li>It is recommended that this land be managed as a contaminated site and remediation should occur before development begins. The DEP should seek appropriate advice from the Health Department of WA (HDWA)</li> <li>The level of remediation should reflect the intended land use (HDWA)</li> </ul>	<p>The amendment area may contain contaminated soil.</p> <p>Considered to be a relevant environmental factor which requires further investigation and management.</p>
Groundwater contamination	Past and present industrial land uses within the amendment area have the potential to cause groundwater contamination.	<ul style="list-style-type: none"> <li>The site should be decontaminated before any development proceeds. Particular attention should be given to groundwater pollution taking into account a possible plume spreading beneath the site from the nearby tip site (public).</li> </ul>	<p>The amendment area may contain contaminated groundwater.</p> <p>Considered to be a relevant environmental factor which requires further investigation and management.</p>
Land use compatibility	There are existing industries within and surrounding the amendment area which may have off site noise, odour, dust and other impacts on future residents.	<ul style="list-style-type: none"> <li>Residential activity should be restricted to those areas that would not be impacted upon by noise emanating from industrial uses, present either now or in the future. (Landcorp).</li> <li>The 'Special Industry (A)' area on the southern side of Rollinson Road has been appropriately covenanted to ensure each lot is 'self contained' in respect to noise. These conditions can be found in the 'Environmental Guidelines for Industries Operating in Coogee' and the 'Coogee Master Plan - Final Report, January 1993.' (public)</li> <li>The operation of Container Refrigeration on Lot 121 Rollinson Road result in there being significant noise</li> </ul>	<p>The amendment may result in conflicting land uses.</p> <p>Considered to be a relevant environmental factor which requires further investigation and management.</p>

Preliminary Environmental Factors	Amendment component with possible impact	Government Agency and Public Comments	Identification of Environmental Factors
		<p>from forklifts, container repairs and truck movements. It is not suitable for a residential area and any residences in the area will ultimately result in restrictions to the operations. The size, noise, frequency and time of container movements will interfere dramatically with residents occupancy (public)</p> <ul style="list-style-type: none"> <li>The conditions proposed to be included in the MRS appear to be grossly inadequate. No credibility has been given to existing industry buffer zones required by industry likely to establish within the Robb Jetty Industry Estate. The issues should be resolved prior to the Amendment being put in place (Landcorp)</li> <li>If necessary, a light industrial buffer, which is a conforming use within the proposed urban zone, could be developed on the southern boundary as a further buffer to the 'Special Industry (A)' area. However, at present it appears that the properties within the 'Special Industry (A)' zone that are adjacent to Lot 100 Rollinson Road are all being purpose built and used for 'cold storage' which under the EPA's Guidelines do not require a buffer to urban uses.</li> </ul>	

## SOCIAL SURROUNDINGS

Railway transport	The use of the railway line within the amendment area could be potentially constrained by development.	<ul style="list-style-type: none"> <li>The impact of the amendment on the rail corridor is a concern. The rail corridor operates 24 hours a day, and provides the only freight rail link to the inner harbour of the Fremantle Port, which is the State's singular major container port. With continuing growth in container trade through the Inner Harbour there will be increasing use of the freight rail link (FP).</li> <li>The rail corridor should not be compromised, as it will become critical factor in the ability of the inner harbour to expand its capacity. The location of a major freight link adjacent to proposed Urban reserves, should be examined in the context of the strategic importance of the freight rail link to the State of Western Australia (FP).</li> </ul>	<b>Railway transport is considered to be a relevant environmental factor which requires further investigation and management.</b>
Risk	<p>The amendment area contains a railway line which may transport hazardous materials.</p> <p>Rezoning to Urban may result in more general traffic flow through the road</p>	<ul style="list-style-type: none"> <li>Some of the cargo transported by rail contains hazardous materials. A key factor which may restrict the capacity of rail usage and which require detailed consideration is the impact of risk (FPA).</li> <li>South Terrace currently carries a considerable amount of traffic to and from South Beach and any increase in the quantity of traffic would create an unacceptable risk. (public)</li> </ul>	<b>The railway line passes through several residential areas and past significant tourist attractions on its way to the port. If hazardous materials are transported on this line, appropriate</b>

Preliminary Environmental Factors	Amendment component with possible impact	Government Agency and Public Comments	Identification of Environmental Factors
	network.		<p>risk management measures would need to be in place as determined by the Department of Minerals and Energy. Risk is considered to be a deferred environmental factor which will require consideration at a later stage in the planning process.</p> <p>Any possible increase in residential traffic movements is considered a local government planning issue. Traffic risks would be expected to be greater if redevelopment of the land occurred in accordance with the current Industrial zoning.</p>
Recreation	The amendment area abuts a coastal area of significant recreation value	<ul style="list-style-type: none"> <li>• The area of land west of the railway line should be rezoned to 'Parks and Recreation' as South Beach and the adjoining Catherine Point Reserve are currently a recreational resource of regional significance. The area attracts growing numbers of people from adjoining suburbs. (public)</li> <li>• The proposed rezoning to Urban to the east of the railway line will increase the local population and thus increase the pressure on existing reserves and necessitates an increase in open space demand in the local area. (public)</li> <li>• The rezoning of land north of Island Street to 'Urban' is not supported and should be included in the 'Parks and Recreation' reservation. This will facilitate a regionally significant east-west recreational link that will join the coast area with the limestone ridge. It will link Hollis Park to Wilson Park and South Beach. This link was envisaged in both the Fremantle Green Plan and the FINCA Fremantle Green Plan project. There should be a comprehensive tree planting and landscaping element built into the development (public)</li> </ul>	<p>The provision of open space and recreational infrastructure within the amendment area is a local government planning issue.</p> <p>Not considered to be an environmental factor relevant to the EPA's assessment.</p>