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May 22, 2018

Mr. Jose Alvarez Clark County Community Planning PO Box 9810 Vancouver, Washington 98666-9810

Dear Mr. Alvarez and Members of the Freight Rail Dependent Use Advisory Committee:

#### Subject: Comments on buffers for Freight Rail Dependent Uses

Sent via email to: <u>Jose.Alvarez@clark.wa.gov</u>; <u>communityplanning@clark.wa.gov</u>

Thank you and the Freight Rail Dependent Use Advisory Committee for the opportunity to comment on the buffers applicable to various freight rail dependent uses. Futurewise works throughout Washington State to support land-use policies that encourage healthy, equitable, and opportunity-rich communities, and that protect our most valuable farmlands, forests and water resources. We have members across Washington State including Clark County.

Buffers are a recognized and effective method of reducing the impacts of certain uses on nearby sensitive uses. I understand that the committee discussed using the L3 or L5 standard to buffer freight rail dependent uses from residential uses. But the L3, L4, or L5 standards are landscaping and screening standards, they are not designed as buffers to protect residential and other uses from the noise, air emissions, risk of explosions, and other adverse impacts from freight rail dependent uses.¹ Clark County Code (CCC) 40.320.010 A is clear on this point, writing that the standards in CCC 40.320.010 "apply to <u>landscaping and screening</u> on private property."² This is why the widths of the required landscaping and screening are typically five to ten feet wide, although a in a few areas the landscaping must be 50 feet wide.³

Effective buffers are typically much wider. Enclosed with this letter is *Guidance for the Assessment of Environmental Factors: Separation Distances between Industrial and Sensitive Land Uses No. 3* which includes buffer widths for protecting residential and other sensitive uses from the uses being considered as freight rail dependent uses. We recommend using the buffers in Appendix 1 for those industrial uses being considered as freight rail dependent uses.<sup>4</sup> Please note the buffers widths are in meters, each meter is 3.28 feet.

It is important to recognize that many modern warehousing, shipping, and manufacturing uses operate multiple shifts, in some cases around the clock. Adequately sized buffers can help reduce adverse impacts on nearby uses.

<sup>3</sup> CCC Table 40.320.010-1 Landscaping Standards.

<sup>&</sup>lt;sup>1</sup> Clark County Code (CCC) Section 40.320.010, Landscaping and Screening on Private Property, accessed on May 21, 2018 at: <a href="http://www.codepublishing.com/WA/ClarkCounty/">http://www.codepublishing.com/WA/ClarkCounty/</a>.

<sup>&</sup>lt;sup>2</sup> Underlining added.

<sup>&</sup>lt;sup>4</sup> Western Australia Environmental Protection Authority, *Guidance for the Assessment of Environmental Factors:*Separation Distances between Industrial and Sensitive Land Uses No. 3 (June 2005) Appendix 1: Separation Distances between Industrial and Sensitive Land Uses accessed on May 21, 2018 at: <a href="http://www.epa.wa.gov.au/policies-guidance/separation-distances-between-industrial-and-sensitive-land-uses-gs-3">http://www.epa.wa.gov.au/policies-guidance/separation-distances-between-industrial-and-sensitive-land-uses-gs-3</a> and enclosed with this email.

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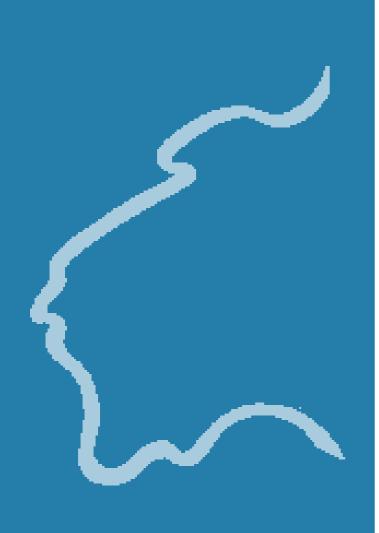
Thank you and the Advisory Committee for considering our comments. If you require additional information, please contact me at telephone 206-343-0681 Ext. 118 or email <a href="mailto:tim@futurewise.org">tim@futurewise.org</a>

Very Truly Yours,



Tim Trohimovich, AICP
Director of Planning & Law

Enclosure



# Guidance for the Assessment of Environmental Factors

(in accordance with the Environmental Protection Act 1986)

## Separation Distances between Industrial and Sensitive Land Uses

No. 3

June 2005

Western Australia

#### **FOREWORD**

The Environmental Protection Authority (EPA) is an independent statutory authority and is the key provider of independent environmental advice to Government.

The EPA's objectives are to protect the environment and to prevent, control and abate pollution and environmental harm. The EPA aims to achieve some of this through the development of environmental protection Guidance Statements for the environmental impact assessment (EIA) of proposals and schemes.

This document is one in a series being issued by the EPA to assist proponents, consultants, responsible authorities and the public generally to gain additional information about the EPA's thinking in relation to aspects of the EIA process. The series provides the basis for the EPA's evaluation of, and advice on, development proposals and schemes subject to the EIA process. The Guidance Statements are one part of assisting proponents and responsible authorities in achieving an environmentally acceptable outcome. Consistent with the notion of continuous environmental improvement and adaptive environmental management, the EPA expects proponents and responsible authorities to take all reasonable and practicable measures to protect the environment and to view the requirements of this guidance as representing the **minimum** necessary process to achieve an appropriate level of environmental protection.

This document provides advice on the use of generic separation distances (buffers) between industrial and sensitive land uses to avoid conflicts between incompatible land uses.

This Guidance Statement has the status of "**Final**" which means it has been reviewed by stakeholders and the public. The EPA has signed off the Guidance Statement and published it although it will be updated regularly as new information come to hand.

I am pleased to release this document which now supersedes the draft version.

Walter Cox

CHAIRMAN

W.J. Cesc

ENVIRONMENTAL PROTECTION AUTHORITY

June 2005

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#### Guidance Statement No. 3

## SEPARATION DISTANCES BETWEEN INDUSTRIAL AND SENSITIVE LAND USES

Key Words: buffer, industrial land use, sensitive land use, separation distance

#### 1 PURPOSE

Guidance Statements generally are developed by the EPA to provide advice to proponents, responsible authorities<sup>1</sup>, stakeholders and the public, about the minimum requirements for environmental management which the EPA would expect to be met when the Authority considers a proposal or scheme<sup>1</sup> during the EIA process. The generic process for Guidance Statements is set out in Appendix 2.

This Guidance Statement is termed "Final", and thus the EPA expects that proponents will give full attention to the information provided when they submit proposals for assessment.

This Guidance Statement replaces the draft Guidance Statements "Industrial-Residential Buffer Areas (Separation Distances)" released in July 1997, and "Separation Distances between Industrial and Sensitive Land Uses" released in June 2004. It specifically addresses generic separation distances between industrial and sensitive land uses to avoid conflicts between these land uses. It takes into account protection of the environment as defined by the *Environmental Protection Act 1986* (EP Act) with a focus on protecting sensitive land uses from unacceptable impacts on amenity that may result from industrial activities, emissions and infrastructure.

During the EIA process the EPA principally considers impacts to the physical and/or biological environment. In association with the Department of Health, it also considers health risk assessment from predicted emissions under normal operations. Industrial activities may also lead to increased levels of individual risk of fatality. The EPA currently considers off-site individual risk, as outlined in the EPA Guidance Statement No. 2 Risk Assessment and Management: Off-site

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<sup>&</sup>lt;sup>1</sup> This term is used in this Guidance Statement in the same way as it is defined in the *Environment Protection Act 1986* (see Section 7 Definitions).

individual risk from Hazardous Industrial Plant, when assessing new hazardous plant. The EPA seeks technical advice regarding off-site individual risk from the Department of Industry and Resources (DoIR), where the proposal relates to petroleum or major hazard facilities under DoIR's statutory regulation. Public risk assessment and management in Western Australia is undergoing review to ensure public safety issues are appropriately addressed by Government. It is expected that this Guidance Statement will need to be updated once the risk review and the legislative amendments to empower the responsible authority(s) has been completed.

Proponents and responsible authorities are encouraged to consider their proposals and schemes in the light of the guidance given. A proponent or responsible authority wishing to deviate from the advice in this Guidance Statement would be expected to put a well-researched, robust and clear justification arguing the need for that deviation.

This document provides the generic buffer (separation) distances referred to in the State Industrial Buffer Policy (Government of Western Australia 1997).

#### 2 THE ISSUE

A number of emissions are generated by industrial, commercial and rural activities and infrastructure. These include noise and air emissions (gases, dust and odours). The levels of emissions may at times exceed amenity levels considered acceptable in residential areas and at other sensitive land uses.

In line with the requirements of the EP Act, it is necessary for individual industrial developers to take all reasonable and practicable measures to prevent or minimise emissions from their premises. It is generally expected that, through appropriate site layout, design of facilities, and the implementation of engineering and process controls, emissions from an individual industrial land use can be prevented from causing an adverse environmental impact beyond the boundaries of the particular site or beyond the boundaries of an industrial estate.

Generally, but not always, impacts on the environment decrease with increasing distance from the source of the emission. If the impacts from a particular industry or industrial estate are considered to be unacceptable at the boundary of the site or estate, then there is usually a need for a buffer area to separate industrial land use and sensitive land use.

The determination of the buffer area is necessary in many situations to avoid or minimise the potential for land use conflict. While not replacing the need for best practice approaches to emission management, the use of buffers is a useful tool in achieving an acceptable environmental outcome.

The EPA's preferred hierarchy for the management of industrial emissions is:

- avoidance of impacts;
- minimise the creation and discharge of waste by implementing best practice (see EPA Guidance Statement 55, *Implementing Best Practice in proposals submitted to the Environmental Impact Assessment process*); or
- ensure environmental impacts from industrial emissions are acceptable and meet the relevant regulations and health criteria beyond the boundary of the site, industrial estate or buffer area.

The area that may be adversely affected by industrial emissions will depend on siteand process-specific factors such as the scale of the operation, plant processes and emission controls, storage of raw material and waste, local wind patterns and topography. The possibility of future expansion will also be relevant in the consideration of an appropriate separation distance.

A sound site-specific technical analysis is generally found to provide the most appropriate guide to the separation distance that should be maintained between an industry or industrial estate and sensitive land use.

However, in recognition that a site-specific study may not be necessary in all situations, generic separation distances have been developed. The generic separation distances in Appendix 1 are based on the experience of the Department of Environment (DoE) and other regulatory authorities (e.g. Environmental Protection Authority, Victoria) and limited site-specific quantitative scientific assessment. The table in Appendix 1 includes industries that historically have been associated with amenity impacts from gaseous, dust, noise and odorous emissions, as well as with elevated levels of off-site risk to the public. For some industries, separation distance ranges are specified. For others, generic distances are not applicable and separation distances need to be determined case by case.

This Guidance Statement provides advice on the use of the generic separation distances that have been developed by the DoE for a range of industrial land uses. The use and application of the generic separation distances is explained in more detail in Section 4 of this Guidance Statement.

#### 2.1 Types of industrial land uses

For the purposes of this Guidance Statement, "industrial land use" is used in a general way to encompass a range of industrial, commercial and rural activities, and infrastructure, associated with off-site emissions that may affect adversely the amenity of sensitive land uses.

The term includes:

- general industry;
- light industry;
- service industry;
- some commercial activities, e.g. service stations;
- rural industry and some forms of agriculture;
- rural intensive land use;
- resource processing industry;
- hazardous industry;
- noxious industry;
- extractive industry;
- technology parks;
- freight terminals;
- waste water treatment plants;
- power generation facilities;
- power distribution terminals and substations;
- solid waste disposal sites;
- resource recovery plants; and
- gas and petroleum pipelines.

The table in Appendix 1 includes a variety of land uses that may require consideration of buffers to manage off-site impacts on the environment. However, the list is not definitive. Other land uses where buffers need to be considered include airports and major sporting facilities, e.g. speedway racing, football and soccer. The principles in Section 4.1 apply to these land uses as well as to those listed in Appendix 1.

#### 2.2 Types of industrial emissions

The generic separation distances are based on the consideration of typical emissions that may affect the amenity of nearby sensitive land uses. These include:

- gaseous and particulate emissions;
- noise;
- dust; and
- odour.

The generic separation distances table also identifies a range of industrial land uses associated with higher levels of risk of injury or death from accidents.

#### 2.3 Types of sensitive land uses

Land uses considered to be potentially sensitive to emissions from industry and infrastructure include residential developments<sup>2</sup>, hospitals, hotels, motels, hostels, caravan parks, schools, nursing homes, child care facilities, shopping centres, playgrounds, and some public buildings. Some commercial, institutional and industrial land uses which require high levels of amenity or are sensitive to particular emissions may also be considered "sensitive land uses". Examples include some retail outlets, offices and training centres, and some types of storage and manufacturing facilities.

#### 3 SCOPE OF THE GUIDANCE

This Guidance Statement is intended to provide advice on generic separation distances between specific industry and sensitive land uses to avoid or minimise the potential for land use conflict. The distances outlined in Appendix 1 are not intended to be absolute separation distances, rather they are a default distance for the purposes of:

- identifying the need for specific separation distance or buffer definition studies; and
- providing general guidance on separation distances in the absence of sitespecific technical studies.

The separation distances are intended to be used as a tool, supplemented by other appropriate techniques, to assist in the assessment of:

- new individual industries, infrastructure and estates, in the vicinity of existing/proposed sensitive land uses; and
- new individual sensitive land uses or estates, in the vicinity of existing/proposed industry and infrastructure.

The separation distances are also intended to provide assistance to strategic planning studies and processes.

The separation distances outlined are not intended to replace the need for proponents and relevant authorities to take all reasonable and practicable measures to minimise emissions and off-site impacts.

To ensure an appropriate environmental outcome, the generic separation distances will need to be complemented by other assessment tools and the consideration of the full range of environmental factors.

The reader should be aware that the generic distances do not take into account:

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<sup>&</sup>lt;sup>2</sup> Residential development in a planning sense can also mean subdivision.

- cumulative impacts;
- non-typical emissions;
- the protection of natural resources and significant elements of the natural environment; and
- potential health impacts from emissions.

As part of comprehensive environmental impact management, the EPA expects that these will also be considered and managed as appropriate.

## 3.1 Relationship of the separation distances to codes of practice and management guidelines

A number of environmental codes of practice and management guidelines issued by State Government agencies provide advice on separation distances between specific industries, other land uses and natural resources. The DoE for example has issued codes of practice on turf farms, piggeries, cattle feedlots, the poultry industry, vineyards and dairies. This Guidance Statement has attempted to incorporate advice relating to separation distances from the various codes and guidelines to provide a comprehensive overview.

Some codes and guidelines may contain more detailed information on buffers that may be relevant to the achievement of an acceptable environmental outcome.

#### 3.2 Relationship of the separation distances to the State Industrial Buffer Policy

The Western Australia Planning Commission has prepared a Statement of Planning Policy entitled *State Industrial Buffer Policy* (Government of Western Australia 1997). This is a statutory policy prepared pursuant to the *Town Planning and Development Act 1928*. The Policy is intended to provide a consistent Statewide approach to the definition and securing of buffers for industry and infrastructure, protect industry and infrastructure from the encroachment of incompatible landuses, provide for the safety and amenity of land uses surrounding industry and infrastructure, and provide for the protection of the interests of both landowners affected by buffers, and industry and infrastructure encroached upon by sensitive land uses.

A role of this Guidance Statement is to complement and assist the implementation of the Western Australian Planning Commission's *State Industrial Buffer Policy*. The Policy makes specific reference to the generic buffer (or separation) distances developed by the DoE. At the time of publication of this Guidance Statement, the table in Appendix 1 lists the Department's and the EPA's generic separation distances.

#### 4 THE GUIDANCE

### 4.1 The EPA approach to protecting the amenity of sensitive land uses from emissions from industrial land uses

As stated in Section 2, the EPA's preferred hierarchy for the management of industrial emissions is:

- avoidance of impacts;
- minimise the creation and discharge of waste by implementing best practice (see EPA Guidance Statement 55, *Implementing Best Practice in proposals submitted to the Environmental Impact Assessment process*); or
- ensure environmental impacts from industrial emissions are acceptable and meet the relevant regulations and health criteria beyond the boundary of the site, industrial estate or buffer area.

To ensure an appropriate level of environmental protection, the EPA expects that individual industrial developers will take all reasonable and practicable measures to prevent or minimise emissions from their premises. This entails not only compliance with all recognised environmental protection criteria but also the adoption of best practicable measures for prevention or minimisation of adverse environmental impacts.

Wherever practicable, it is expected that adverse environmental impacts should not extend beyond the boundary of a particular industrial site. Where this is not possible, adverse environmental impacts should not extend beyond the boundaries of a buffer area, which should contain only compatible land uses. New sensitive land uses are not appropriate in the buffer.

Where a buffer has been agreed to by the relevant authorities, the EPA expects that effective measures will be applied, generally through the land use planning process, to ensure that only compatible land uses are allowed in the buffer area. The EPA also expects that appropriate management and monitoring of industries and the buffer area will be implemented to ensure that emissions do not exceed acceptable levels at the outer boundary of the buffer.

Generally, protection of sensitive land uses from industrial emissions is assisted by the identification of suitable buffers at the strategic and structure planning stages of the land use planning process, and in the early project formulation stages in the case of individual projects.

A sound site-specific technical analysis will provide the most appropriate guide to the separation distance that should be maintained between a particular industry and sensitive land uses, or between industrial precincts and sensitive land uses, to avoid or minimise land use conflicts.

Where a site-specific study is carried out, it should generally include a technical analysis and report on the nature and level of the possible emissions from the

industry, the site context, predicted impacts, acceptable criteria, and proposed management. Guidance on appropriate technical studies for particular circumstances is available from a range of sources including the DoE, other government agencies and the EPA, in the case of proposals and schemes subject to the EIA process.

A site-specific technical study to determine separation distances is generally expected in the case of a major heavy industrial estate, or a general industrial estate where emissions may result in cumulative impacts.

Where a proposal or scheme subject to the EIA process involves industrial development near sensitive development, the EPA will take into account the likelihood of industrial emissions that may affect the amenity of the sensitive land use, the management measures (including monitoring), and the separation proposed. Where separation is proposed, the EPA will consider the ability to apply effective mechanisms for establishing and enforcing the separation distance or buffer area.

Generally, the EPA expects the potential for land use conflicts to be resolved through the land use planning process, following consideration of adequate technical information and advice from the relevant agencies.

Generic separation distances have been developed by the EPA in recognition that a site-specific study to determine a buffer may not always be necessary, and that generic guidelines are a useful tool at the design and planning stages. The generic separation distances are included in this Guidance Statement in Appendix 1.

#### 4.2 When to use the generic separation distances

The generic separation distances are a tool to assist in the determination of suitable distances between industry and sensitive land uses where industry may have the potential to affect the amenity of a sensitive land use.

The data is helpful in the following instances:

- to identify the need for specific buffer definition studies where:
  - a new industrial land use is proposed near an existing or proposed sensitive land use; or
  - a new sensitive land use is proposed near an existing or proposed industrial land use; and
- to provide general guidance on separation distances in the absence of sitespecific technical studies, or, where only an estimation of the area that could be subject to land use conflicts is required.

It is not appropriate to use the generic separation distances where the industry involved is very large, utilises non-typical technology, or in some other way the circumstances are not typical.

Further, the separation distances should be used with caution in strategic and structure planning exercises, and in situations where cumulative impacts may result from the co-location of many industries.

#### 4.3 Risk and the generic separation distances table

For some industries, the table indicates the possibility of risk, in the sense of risk of an accident or incident causing injury or death to the public. This is provided for general information only. The EPA's current approach to risk is to identify whether a proposal for a new hazardous plant meets the EPA's off-site individual risk criteria (EPA 2000). The EPA seeks technical advice from DoIR for proposals under DoIR's statutory responsibility.

#### 4.4 How to use the generic separation distances in Appendix 1

The generic separation distances for a range of industrial land uses are listed in Appendix 1. This section addresses the use of the table in the following instances.

# 4.4.1 A new industrial land use is proposed near existing or proposed sensitive development, OR sensitive development is proposed near an existing/proposed industry

Where the separation between the industrial and sensitive land uses is **greater** than the generic distance, there will not usually be a need to carry out site-specific technical analyses to determine the likely area of amenity impacts due to emissions from the industry. The need for technical analyses is likely to be limited to such instances as major industrial developments, industries using new or non-typical processing techniques, or areas subject to cumulative impacts.

Where the separation distance is **less** than the generic distance, a scientific study based on site- and industry-specific information must be presented to demonstrate that a lesser distance will not result in unacceptable impacts.

If the distance from the industrial land use to the sensitive land use is less than the recommended separation distance, and it cannot be demonstrated that unacceptable environmental impacts are likely to be avoided, then other options should generally be pursued.

These may include:

- modifying the project to reduce emissions via engineering controls such as process design, process enclosure or other means; and
- pursuing land use planning and management controls (e.g. land acquisition, rezoning) to reduce environmental impacts to acceptable levels.

For proposals and schemes subject to the EIA process, where it cannot be demonstrated that there will be acceptable emission levels at present and future residences and other sensitive premises, the EPA is likely to recommend that the proposal or scheme is not environmentally acceptable.

If a referral is made to the EPA, information that will assist the EPA to set an appropriate level of assessment includes information on the location of existing industrial and sensitive premises, land zoning and scheme provisions, the results of any site-specific studies and consultation, and the proposed planning and environmental management measures.

#### 4.4.2 General guidance is required on separation distances in the absence of sitespecific technical studies, OR an estimation of the area that could be subject to land use conflicts is required

In most cases, land use conflicts resulting from industrial emissions are not expected where the generic separation distances are maintained. Further investigations should be carried out, however, in non-typical situations, and where cumulative impacts may occur.

Where a separation under consideration is less than in the table, it is recommended that a new project does not proceed in the absence of site-specific investigations and a report demonstrating that the separation distance will meet acceptability criteria and that enforceable management techniques will be applied to ensure an appropriate environmental outcome.

#### 5 APPLICATION

#### 5.1 Area

This Guidance Statement applies to all proposals and schemes subject to the EIA process throughout the State of Western Australia.

#### **5.2** Duration and Review

The duration of this Guidance Statement is for five years unless some unforseen circumstances require it to be revised earlier.

#### 6 RESPONSIBILITIES

#### 6.1 EPA responsibilities

The EPA will apply this Guidance Statement to proposals and schemes that are subject to the EIA process under Part IV of the EP Act.

#### **6.2** DoE responsibilities

The DoE will assist the EPA in applying this Guidance Statement to the EIA of proposals and schemes, and in conducting its functions under Part V of the EP Act.

#### 6.3 Proponent and responsible authority responsibilities

Where proponents and responsible authorities demonstrate to the EPA that the requirements of this Guidance Statement are incorporated into proposals and schemes in a manner which ensures that they are enforced and audited, the assessment of such proposals and schemes is likely to be assisted.

#### 7 DEFINITIONS

In this Guidance, the terms listed have the following definitions.

**Amenity** – factors which combine to form the character of an area and include the present and likely future amenity. For the purpose of this Guidance Statement, consideration of loss of amenity is limited to unreasonable impact on a person from gaseous, dust, noise and odorous emissions and risk.

**Buffer** – all the land between the boundary of the area that may potentially be used by an industrial land use, and the boundary of the area within which unacceptable adverse impacts due to industrial emissions on the amenity of sensitive land use are possible. This may be represented by the separation distance.

**Emission** – discharge of waste, emission of noise, odour or electromagnetic radiation or transmission of electromagnetic radiation.

**Industrial land use, industry** – a general term used in this Guidance Statement to encompass a range of industrial, commercial and rural land uses and infrastructure associated with emissions that may affect the amenity of sensitive land uses.

**Residential development** – any permanent structure whose primary use is as a dwelling place.

**Responsible authority** – as defined in the *Environmental Protection Act 1986*, and

generally, the authority responsible for:

- a town planning scheme, a regional planning scheme, a redevelopment scheme, or an amendment to any of the above;
- a statement of planning policy, or amendment to such a statement; or
- a subdivision or strata plan.

**Scheme** – as defined in the *Environmental Protection Act 1986*, and generally:

- a town planning scheme, a regional planning scheme, a redevelopment scheme, or an amendment to any of the above; or
- a statement of planning policy or an amendment to such a statement.

**Sensitive land use** – land use sensitive to emissions from industry and infrastructure. Sensitive land uses include residential development, hospitals, hotels, motels, hostels, caravan parks, schools, nursing homes, child care facilities, shopping centres, playgrounds and some public buildings. Some commercial, institutional and industrial land uses which require high levels of amenity or are sensitive to particular emissions may also be considered "sensitive land uses". Examples include some retail outlets, offices and training centres, and some types of storage and manufacturing.

**Separation distance** – the shortest distance between the boundary of the area that may potentially be used by an industrial land use, and the boundary of the area that may be used by a sensitive land use.

#### 8 REFERENCES

Environmental Protection Authority 1997 *Industrial-Residential Buffer Areas* (Separation Distances) Draft Guidance No. 3, Environmental Protection Authority, Perth Western Australia

Environmental Protection Authority 2000 Guidance for Risk Assessment and Management: Offsite individual risk from Hazardous Industrial Plant Guidance No. 2, Environmental Protection Authority, Perth Western Australia

Environmental Protection Authority 2004 Separation Distances between Industrial and Sensitive Land Uses Draft Guidance No. 3, Environmental Protection Authority, Perth Western Australia

Western Australian Planning Commission 1997 State Industrial Buffer Policy: Statement of Planning Policy No. 4 Government of Western Australia, Perth Western Australia

**Index** Final Guidance June 2005

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**Status** Signed-off by the EPA

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Separation Distances between Industrial and Sensitive Land

Uses

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### **Appendix 1: Separation Distances between Industrial and Sensitive Land Uses**

#### Note:

These generic guidelines do not take into account:

- cumulative impacts;
- non-typical emissions;
- the protection of natural resources and significant elements of the natural environment; and
- potential health impacts from emissions.

Industry	Description of industry	DoE Licence or Registration category (*)	Key Government agencies for advice or approvals	Code of Practice (CoP) / environmental requirements		I	mpacts		Buffer distance in metres and qualifying notes	
					Gaseous	Noise	Dust	Odour	Risk	
Abattoir	killing of animals for human consumption or pet food – no rendering	√ (15) (Reg. 1)	DAWA, WRC, local gov't	CoP - Aug 1996. Regs. in Sept 1996		1	√	√		500-1000, depending on size
Abrasive blasting operations	metal or other material is cleaned or abraded by blasting with any abrasive material	√ (Reg. 5)	local gov't	CoP - 1993. Regs. in Sept 1996		V	V			case by case
Aluminium production	using electrolytic fusion technique	√ (44)	DoIR		√	<b>V</b>	<b>V</b>		<b>V</b>	1500-2000

Industry	Description of industry	DoE Licence or Registration category (*)	Key Government agencies for advice or approvals	Code of Practice (CoP) / environmental requirements	Impacts					Buffer distance in metres and qualifying notes	
					Gaseous	Noise	Dust	Odour	Risk		
Ammonia importation	unloading ammonia from ships and storage		DoIR, DPI		√ NH3				1	case by case	
Ammonium nitrate import/export	transfer of chemical from ship to land-based transport and vice versa	√ (58, 86)	DoIR, DPI						V	case by case	
Ammunition production	includes explosives and fireworks		DoIR						1	1000	
Animal feed manufacturing	manufacture of animal feed from grain and other food products	√ (23)	DAWA, local gov't			1	<b>V</b>	<b>V</b>		500	
Animal feedlot	intensive rearing of cattle (in rural zone, away from towns)	√ (1, 68)	DAWA, WRC, local gov't	Cattle Feedlots Guidelines - 2002		√	<b>√</b>	<b>V</b>		1000-2000, depending on size	
Animal feedlot	other intensive rearing, e.g. sheep (in rural zone, away from towns)	V	DAWA, WRC, local gov't			<b>V</b>	1	V		1000-2000, depending on size	

Industry	Description of industry	DoE Licence or Registration category (*)  Key Government agencies for advice or approvals	agencies for advice	environmental requirements		]	Buffer distance in metres and qualifying notes			
					Gaseous	Noise	Dust	Odour	Risk	
Aquaculture – ponds or tanks & natural waters included	propagation or rearing of aquatic fauna, with supplementary feeding	√ (3, 4)	Fisheries, WRC, local gov't	Fisheries, & WRC guidelines		√		<b>V</b>		100-300, depending on size
Asphalt works	asphalt is mixed and prepared	√ (35)	local gov't	CoP - 1991		<b>√</b>	1	<b>V</b>		1000
Automotive spray painting	liquid paint is directed onto automotive surfaces by airless, compression, electrostatic or other methods		local gov't	CoP - Oct 1997		V	V	1		200
Bakeries	day-time operations		local gov't			<b>√</b>		1		100-200, depending on size
	large night-time operations		local gov't			<b>√</b>		<b>V</b>		500
Bauxite refining	premises on which alumina is produced	√ (46)	DoIR			<b>√</b>	1	<b>V</b>		case by case

Industry	Description of industry	DoE Licence or Registration category (*)	Key Government agencies for advice or approvals	Code of Practice (CoP) / environmental requirements			Impact		Buffer distance in metres and qualifying notes	
					Gaseous	Noise	Dust	Odour	Risk	
Beverage manufacturing – alcoholic	alcoholic beverages are manufactured – brewery, distillery or winery	√ (25)	WRC		√	√	<b>√</b>	V		200-500, depending on size & type of product
- non-alcoholic	non-alcoholic beverages are manufactured, processed or packaged	√ (24)	WRC			√	<b>√</b>	1		200-500, depending on size
Boat building and maintenance – vessels are built,	organotin compounds <b>are not</b> used or removed from vessels	√ (82)	DPI, local gov't		√	√	<b>V</b>	<b>V</b>		200-500, depending on size
maintained or refurbished	organotin compounds <b>are</b> used or removed from vessels	√ (49)	DPI, local gov't		√	√	<b>V</b>	1		500-1000, depending on size
Briquettes manufacture	compressed coal-dust or wood-dust production		local gov't			<b>√</b>	V	1		300-500, depending on size

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					Gaseous	Noise	Dust	Odour	Risk		
Bulk material loading or unloading	clinker, coal, ore, ore concentrate or any other bulk granular material is loaded/unloaded from vessels	√ (58, 86)	DoIR, DPI			<b>V</b>	<b>V</b>		V	1000-2000	
Calcium-based compounds production, other than lime	calcium compounds are produced, mixed, blended or packaged (see cement works for lime manufacture)	√ (31, 33, 72, 74, 75)	DoIR, WRC		√	<b>V</b>	V	√	V	500-1000, depending on size & type of product	
Carbon stripping	reprocessing of carbon granules (gold extraction)	√ (79)	local gov't		√ acid fume			√		200-300	
Carpet backing	process using latex		local gov't		$\checkmark$	1		<b>V</b>		500	
Cattery zones	in urban areas		local gov't			1		<b>V</b>		200	
Cement product manufacturing works	concrete or cement is mixed, prepared or treated – up to 5000 tonnes per year	√ (77)	DoIR, WRC, local gov't	V		√	V			300-500, depending on size	

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					Gaseous	Noise	Dust	Odour	Risk		
	concrete or cement is mixed, prepared or treated – from 5000 to 150 000 tonnes per year	√ (77)	DoIR, WRC, local gov't	√		√	√			500-1000, depending on size	
	concrete or cement is mixed, prepared or treated – greater than 150 000 tonnes per year	√ (77)	DoIR, WRC	√		√	√			1000-1500, depending on size	
Cement or lime manufacturing works – use of furnace or kiln	Production of cement clinker or lime or cement clinker, clay, limestone or similar is ground or milled	√ (43)	DoIR, WRC, local gov't		√	<b>V</b>	V	V		1000-2000, depending on size	
Ceramic goods manufacturing	premises on which ceramic kitchen or table ware or other non- refractory ceramic products are made	√ (76)	DoIR, WRC, local gov't		√	<b>V</b>	V	V		300-500, depending on size	

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					Gaseous	Noise	Dust	Odour	Risk	
Charcoal production	wood, carbon material or coal is charred to produce a fuel or material of enriched carbon content	√ (37)	DoIR, local gov't		√	V	<b>V</b>		<b>V</b>	1000
Chemical blending or mixing	chemicals or chemical products are blended, mixed or packaged	√ (33, 74, 75)	DoIR, WRC, local gov't	draft - on hold	√	1	1	1	<b>V</b>	300-500, depending on size & type of chemicals involved
Chemical fertilizers	manufacture of artificial fertilizers	√ (31, 72)	DoIR, WRC, Water Corp.		√ HF, NH3, SO <sub>2</sub>	√	<b>√</b>	<b>√</b>	V	1000-2000, depending on size
Chemical manufacturing	chemical products are manufactured by a chemical process	√ (31, 72)	DoIR, WRC, Water Corp.		<b>V</b>	√	<b>√</b>	<b>V</b>	<b>V</b>	300-1000, depending on size & type of chemicals involved
	inorganic industrial chemical manufacture (other than listed elsewhere)	√ (31, 72)	DoIR, WRC, local gov't		√	<b>V</b>	1	<b>√</b>		300-1000, depending on size & type of chemicals involved

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					Gaseous	Noise	Dust	Odour	Risk		
	organic industrial chemical manufacture (other than listed elsewhere)	√ (31, 72)	DoIR, WRC, local gov't		√	<b>√</b>	√	√	<b>V</b>	500-1500, depending on size & type of chemicals involved	
Chemicals – non-industrial	production – other than listed elsewhere		WRC, Water Corp.			√	√			300-1000, depending on size & type of chemicals involved	
Chemical or oil recycling	waste liquid hydrocarbons or chemicals are refined, purified, reformed, separated or processed	√ (39)	DoIR, WRC, Water Corp.		√ VOCs			√	√	500-1000, depending on size	
Chemicals storage – minor	non-bulk storage of chemicals	<b>V</b>	WRC, Water Corp.	draft in preparation	<b>V</b>			1	<b>V</b>	200-300	
– bulk/major	bulk storage of acids, alkalis or chemicals	√ (73)	DoIR, WRC, Water Corp.		√				V	500-1000, depending on size	

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					Gaseous	Noise	Dust	Odour	Risk	
Chlor-alkali works	manufacture of caustic soda and chlorine	√ (31, 72)	DoIR, WRC		√ Cl <sub>2</sub>	√		<b>√</b>	<b>V</b>	2000-3000
Clay bricks or ceramic/refractor y products works	premises on which fired- clay bricks, tiles, pipes or pottery are manufactured	√ (41)	DoIR, DAWA, WRC		√ HF, HCl, SO <sub>2</sub>	√	<b>V</b>	<b>V</b>		300-1000, depending on size
Clay extraction or processing	Mining, extraction or processing of clay	√ (80)	DoIR, WRC			<b>V</b>	V			500-1000, depending on size & processing
Coal mine	extraction of coal – open cut method	√ (9)	DoIR, WRC			√	<b>V</b>			1000-2000
Coke production	coke is produced, quenched, cut, crushed and graded	√ (38)	DoIR, WRC		√	√	<b>V</b>	<b>V</b>	V	1000-2000

Industry	Description of industry	DoE Licence or Registration category (*)	Key Government agencies for advice or approvals	Code of Practice (CoP) / environmental requirements	Impacts					Buffer distance in metres and qualifying notes	
					Gaseous	Noise	Dust	Odour	Risk		
Composting facility	outdoor uncovered, regularly turned windrows	√ (67A)	WRC, local gov't	draft Organic Wastes Guidelines - Dec 1997		√	√	1		1000 for manures, mixed food/putrescible & vegetative food waste; 500 for biosolids & 150 for green waste	
	outdoor covered, turned windrows	√ (67A)	WRC, local gov't	draft Organic Wastes Guidelines - Dec 1997		√	√	√		750 for manures, mixed food/putrescible & vegetative food waste; 250 for biosolids & 150 for green waste	
	outdoor covered windrows with continuous aeration	√ (67A)	WRC, local gov't	draft Organic Wastes Guidelines - Dec 1997		√	<b>√</b>	<b>V</b>		500 for manures, mixed food/putrescible & vegetative food waste; 250 for biosolids & 150 for green waste	

Industry	Description of industry	DoE Licence or Registration category (*)	Key Government agencies for advice or approvals	Code of Practice (CoP) / environmental requirements	Impacts					Buffer distance in metres and qualifying notes	
					Gaseous	Noise	Dust	Odour	Risk		
	enclosed windrows with odour control	√ (67A)	WRC, local gov't	draft Organic Wastes Guidelines - Dec 1997		√	√	√		250 for manures, mixed food/putrescible & vegetative food waste; 150 for biosolids	
	in-vessel composting with odour control	√ (67A)	WRC, local gov't	draft Organic Wastes Guidelines - Dec 1997		1	<b>V</b>	V		150 for manures, mixed food/putrescible & vegetative food waste; 150 for biosolids	
Concrete batching plant or cement products (bricks) manufacture	concrete is made (batched) and loaded for transport or cement products are made	√ (77)	local gov't	CoP - 1991. Regs. 1998		√	<b>V</b>			300-500, depending on size	
Cosmetics production	manufacture of cosmetics and toiletries		local gov't			<b>√</b>		1		100	
Crematoria			local gov't		<b>V</b>	1			<b>√</b>	200-300	

Industry	Description of industry	DoE Licence or Registration category (*)	Key Government agencies for advice or approvals	Code of Practice (CoP) / environmental requirements	Impacts					Buffer distance in metres and qualifying notes
					Gaseous	Noise	Dust	Odour	Risk	
Crude oil extraction	oil or gas production from wells	√ (10)	DoIR		√	<b>V</b>		<b>√</b>	1	case by case
Crushing of building material	crushing or cleaning of waste building or demolition material	√ (13)	local gov't			√	<b>V</b>			1000
Dairies	milking shed operations		DAWA, WRC, local gov't	CoP - March 1998		√	<b>V</b>	<b>V</b>		500
Dog kennels	in rural zones		local gov't			1		$\sqrt{}$		500
	in or near urban areas		local gov't			<b>V</b>		$\sqrt{}$		1000
Dry-cleaners	dry-cleaning operations		local gov't			1		<b>V</b>		100
Edible oil or fat processing (vegetable oil production)	vegetable oil, oil seed or animal fat is processed – includes seed crushing and use of solvents to refine oils	√ (19)	WRC, Water Corp., local gov't			<b>V</b>	V	V		500

Industry	Description of industry	DoE Licence or Registration category (*)	Key Government agencies for advice or approvals			]	[mpact	Buffer distance in metres and qualifying notes		
					Gaseous	Noise	Dust	Odour	Risk	
Electric power generation	generating electricity – 20 megawatts or more (total) for natural gas & 10 megawatts or more (total) for other fuels	√ (52)	DoIR, WRC		√ NO <sub>X</sub> , SO <sub>X</sub>	<b>V</b>	V			3000-5000, depending on location & size
	natural gas-fuelled electricity production – more than 10, but less than 20, megawatts total	√ (84)	DoIR, WRC		√ NO <sub>X</sub>	√				2000-3000
Extractive industries – hard rock, Darling Scarp	quarrying (including blasting), crushing and screening	√ (5, 12, 70)	DoIR, WRC	CoP - 1990, revised in 1995		√	<b>√</b>		<b>V</b>	1000
– not hard rock	blasting, grinding and milling works – material processed by grinding, milling or separated by sieving, aeration etc	√ (5, 12, 70)	DoIR, WRC	CoP - 1990, revised in 1995		<b>V</b>	V		V	case by case

Industry	Description of industry	DoE Licence or Registration category (*)	Key Government agencies for advice or approvals	Code of Practice (CoP) / environmental requirements			Impact	Buffer distance in metres and qualifying notes		
					Gaseous	Noise	Dust	Odour	Risk	
– no blasting conducted	grinding and milling works – material processed by grinding, milling or separated by sieving, aeration etc	√ (5, 12, 70)	DoIR, WRC	CoP - 1990, revised in 1995		V	<b>V</b>			case by case
<ul><li>sand and</li><li>limestone</li><li>extraction</li></ul>	no grinding or milling works		WRC, local gov't			1	<b>V</b>			300-500, depending on size
Fellmongering	animal skins or hides are dried, cured or stored	√ (83)	WRC, Water Corp., local gov't			1		<b>V</b>		500
Fibreglass reinforced plastic manufacturing	using Low Styrene Emission (LSE) resins	√ (Reg. 3)	DoIR, local gov't	CoP - 1993. Regs. in Sept 1996			V	V		200
	using non-LSE resins	√ (Reg. 3)	DoIR, local gov't	CoP - 1993. Regs. in Sept 1996			V	<b>V</b>		500
Flour mill	grain or seed milling premises		local gov't			<b>V</b>	<b>V</b>			300-500, depending on size

Industry	Description of industry	DoE Licence or Registration category (*)	Key Government agencies for advice or approvals	Code of Practice (CoP) / environmental requirements	Impacts					Buffer distance in metres and qualifying notes
					Gaseous	Noise	Dust	Odour	Risk	
Fly ash disposal	premises on which fly ash is disposed	√ (53)	WRC, local gov't				V			case by case
Foam products manufacturing	resin is used to prepare or manufacture plastic foam or foam products using MDI or TDI	√ (51)	DoIR, local gov't		√			√	√	500
Food processing	fruit, vegetables or meat is cooked, dried, preserved, bottled, canned or processed	√ (18)	WRC, Water Corp., local gov't			√	√	√		200-500 for fruit & vegetables, 500 for meat
Food or beverage products	manufacture of food and beverage products not categorised	√ (18, 24, 25)	WRC, local gov't			<b>V</b>		1		100-300, depending on size & type of product
Formaldehyde	Formaldehyde production	√ (31)	DoIR, local gov't		<b>V</b>	<b>√</b>		<b>V</b>	<b>V</b>	500
Foundries – metal melting or casting	ferrous metals (alloys)	√ (45)	DoIR, local gov't	CoP - 1992		<b>√</b>	<b>V</b>	<b>V</b>		300-500, depending on size

Industry	Description of maustry	DoE Licence or Registration category (*)	agencies for advice or approvals	Code of Practice (CoP) / environmental requirements		]	Impact	Buffer distance in metres and qualifying notes		
				Gaseous	Noise	Dust	Odour	Risk		
	non-ferrous, aluminium	√ (45)	DoIR, local gov't	CoP - 1992		<b>V</b>		<b>V</b>		300-500, depending on size
	non-ferrous, other than aluminium	√ (45)	DoIR, local gov't	CoP - 1992	√ fume	<b>V</b>	1	1	<b>V</b>	500-1000, depending on metal & size
Fuel burning	any boiler(s) capable of consuming 500 kg or more per hour of combustible material, either alone or aggregate, for the supply of steam or in power generation equipment	√ (67, 87)	DoIR, WRC		√ NO <sub>X</sub> , SO <sub>X</sub>	√	√	√	√	200-500, depending on type of fuel used & size
Fuel importation	fuel unloading from ships, storage and despatching		DoIR, DPI						1	1000

Industry	Description of industry	DoE Licence or Registration category (*)	Key Government agencies for advice or approvals	Code of Practice (CoP) / environmental requirements		]	Impact		Buffer distance in metres and qualifying notes	
					Gaseous	Noise	Dust	Odour	Risk	
Fuel storage – crude oil and petroleum products in tanks or vessels exceeding 2000 tonnes capacity	Fixed Rooves	√ (73)	DoIR	draft in house				<b>V</b>	<b>V</b>	300-500, depending on type of fuel stored & size
	Floating Rooves	√ (73)	DoIR	draft in house				1	<b>V</b>	200-1000, depending on fuel stored & size
Gas distribution	works to supply mains		Alinta Gas					V	$\sqrt{}$	300
Gasworks	premises on which coal, coke and oil (mixtures or derivatives of) are processed to produce combustible gas	√ (11, 34)	DoIR		√	V	V	V	<b>V</b>	1000-2000, depending on raw materials used, odorising process used & size
Glass or glass fibre works	premises on which glass or glass fibre is produced	√ (40)	DoIR, local gov't		$\sqrt{}$	<b>√</b>	<b>√</b>			500

Industry	<b>Description of industry</b>	DoE Licence or Registration category (*)	Key Government agencies for advice or approvals	Code of Practice (CoP) / environmental requirements			Impact	Buffer distance in metres and qualifying notes		
					Gaseous	Noise	Dust	Odour	Risk	1
Gold ore	grinding and milling works – rocks ore etc processed by grinding, milling or separated by sieving, aeration etc	√ (5, 12, 70)	DoIR, WRC			V	<b>V</b>			1000-2000, depending on location, process used & size
Gold roaster	gold extraction from sulphide ores	√ (44)	DoIR		$\sqrt{SO_2}$	√	1	1		5000
Grain cleaning (no milling)	premises on which grain or seed is cleaned, graded, sorted or processed		local gov't			<b>√</b>	<b>√</b>	<b>√</b>		300-500, depending on size
Grain elevator	grain transfer using conveyor belts etc		local gov't			√	<b>V</b>		1	500
Greenhouse/ hothouse	using manure		local gov't			√		1		200-300
	using compost		local gov't			V		V		200-300
Hay processing plant	hay processing, handling or storage premises		local gov't			<b>V</b>	V	V	<b>V</b>	500-1000, depending on size

Industry	Description of mutatry	DoE Licence or Registration category (*)	Key Government agencies for advice or approvals	Code of Practice (CoP) / environmental requirements			Impact	ts		Buffer distance in metres and qualifying notes
					Gaseous	Noise	Dust	Odour	Risk	
Heavy industrial site	proposals for "greenfield" sites	√ various	√ various		√	√	<b>√</b>	<b>√</b>	<b>V</b>	case by case
Horse stables	keeping horses		local gov't	draft in preparation		<b>V</b>	1	V		100-500, depending on size
Incineration	for biomedical, chemical or organic waste	√ (59, 60)	local gov't		<b>V</b>	√	1	V	<b>V</b>	500-1000, depending on size
	for plastic or rubber waste	√ (60)	local gov't		<b>V</b>	√	1	1		1000
	for waste wood	√ (60)	local gov't			<b>V</b>	1	1		300
Industrial gases	production, processing, refining or storage of industrial gases	√ (31, 72)	DoIR, local gov't		√	<b>V</b>		V	V	500-1000, depending on size & type of gases
	commercial/retail outlets		local gov't		$\sqrt{}$	$\sqrt{}$			V	50
Iron ore smelting	production of iron from iron ore	√ (44)	DoIR		1	√	<b>V</b>	V		1000

Industry	<b>Description of industry</b>	DoE Licence or Registration category (*)	Key Government agencies for advice or approvals	Code of Practice (CoP) / environmental requirements	Impacts					Buffer distance in metres and qualifying notes
					Gaseous	Noise	Dust	Odour	Risk	
Joinery & wood working premises	production of wooden furniture & household items such as doors, kitchen fittings, flooring & mouldings		local gov't	CoP - 1995, being revised		1	<b>√</b>	<b>V</b>		100-300, depending on size
Liquid Petroleum (LP) gas retailing – above ground tanks	LP gas storage & handling at automotive retail outlets – up to 8000L tank – 8000L to 16 000L tank		DoIR, local gov't	AS 1596 Supplement No.1 - 1994				V	<b>V</b>	55 for sensitive uses & up to 8000L tank, 85 for sensitive uses & from 8000L to 16 000L 15 for residential uses
– underground tanks	LP gas storage & handling at automotive retail outlets – up to 65 000L tank		DoIR, local gov't	AS 1596 Supplement No.1 - 1994				V	<b>V</b>	55 for sensitive uses & 15 for residential uses
Livestock saleyard or holding pen	holding of live animals pending sale, shipment or slaughter	√ (55)	DAWA, WRC, local gov't			<b>√</b>	<b>V</b>	<b>V</b>		at least 1000, depending on size
Malt-works	malt production from grain		local gov't			<b>V</b>	<b>V</b>	<b>V</b>		500

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					Gaseous	Noise	Dust	Odour	Risk	
Market gardens	broad-scale operations		WRC, local gov't	draft in house	<b>√</b>	<b>√</b>	<b>√</b>	1		300-500, depending on size
Metal coating	metal products are powder-coated or enamelled	√ (81)	local gov't	Powder coating - July 1994. Regs. 1998		√	V	V		200
Metal coating – industrial spray-painting	site on which spray- painting is conducted inside a spray booth	√ (81)	local gov't	CoP - Sept 1995. Regs. 1998		√	<b>V</b>	<b>V</b>		200
	work is conducted in the open (no spray booth)	√ (81)	local gov't	CoP - Sept 1995. Regs. 1998		√	<b>V</b>	V		500
Metal fabrication	sheet metal, structural metal and iron and steel products – up to 50 000 tonnes per year		DoIR, local gov't			√	<b>√</b>			500-1000, depending on size
Metal finishing	galvanizing	√ (48A)	DoIR, WRC, local gov't		√ acid fume	√	<b>√</b>	<b>√</b>		500

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					Gaseous	Noise	Dust	Odour	Risk	
	other than galvanizing	√ (48)	DoIR, WRC, local gov't		√ acid fume	<b>√</b>	<b>√</b>	<b>√</b>		200
Metal leaching – vat or <i>in situ</i>	metal extraction from ore with a chemical solution	√ (7)	DoIR, WRC			√	<b>√</b>	<b>√</b>		500
Metal smelting, refining, melting, casting, fusing, roasting or processing works	where metal, metal ores, concentrates or wastes are treated to produce metal (other than iron & aluminium)  • up to 100 tonnes per year  • between 100 & 1000 tonnes per year  • greater than 1000 tonnes per year	√ (45) √ (44)	DoIR, local gov't		√ √ √	\ \ \	\ \ \	\ \ \	√	100-200 300-500 case by case, depending on process

Industry	<b>Description of industry</b>	DoE Licence or Registration category (*)	Key Government agencies for advice or approvals	Code of Practice (CoP) / environmental requirements	Impacts					Buffer distance in metres and qualifying notes
					Gaseous	Noise	Dust	Odour	Risk	
Milk processing	milk is separated, evaporated or a dairy product is manufactured	√ (17)	WRC, local gov't			V		1		200-500, depending on size, wastewater treatment & disposal system
Mine dewatering, tailings or residue disposal	water extracted and discharged to allow mining of ore; or mining or processing of ore occurs and tailings or residue are discharged into a dam	√ (6)	DoIR, WRC			√	√			case by case
Mineral sands – dry processing only	grinding and milling works – material processed by grinding, milling or separated by sieving, aeration etc	√ (8)	DoIR		√ H <sub>2</sub> S	V	<b>V</b>	√		1000-2000
– secondary treatment plant	treatment of primary concentrate from mine – zircon, rutile/leucoxene and ilmenite	√ (8)	DoIR, WRC			√	<b>√</b>	<b>√</b>		1000-2000

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					Gaseous	Noise	Dust	Odour	Risk	
– synthetic rutile plant	mining of mineral sands and processing to produce concentrate	√ (8)	DoIR, WRC		$\sqrt{\frac{1}{12}}$ H <sub>2</sub> S SO <sub>2</sub>	√	<b>√</b>	√		3000-5000
Mineral wool or ceramic fibre	manufacture of mineral wool or ceramic fibre	√ (42)	DoIR, WRC		<b>V</b>	√	1	1		500
Motor body works	including panel beaters		local gov't	CoP - Oct 1997		√	1	1		200
Mushroom farm	using on-site blended soils or compost	√ (67A)	WRC, local gov't			√		1		500-1000, depending on size
Nurseries	no composting		local gov't			<b>V</b>				100
Oil or gas extraction from land or offshore	production from wells involving primary separation or treatment	√ (10)	DoIR, DPI		√	√		1	<b>V</b>	2000
Oil or gas production (other)	production of oil or gas, including gas reforming	√ (11)	DoIR		<b>V</b>	√		1	<b>V</b>	2000
Oil or gas refineries	crude oil or condensate is refined or processed	√ (34)	DoIR		1	<b>V</b>		1	<b>V</b>	2000

Industry	Description of industry	DoE Licence or Registration category (*)	Key Government agencies for advice or approvals	Code of Practice (CoP) / environmental requirements	Impacts  Gaseous Noise Dust Odour Risk					Buffer distance in metres and qualifying notes	
Open cut mining (large operations)	other than coal	√ (5, 6, 12, 70)	√ various	V		√	<b>√</b>		1	1500-3000	
Orchards	broad-scale operations		DAWA, local gov't		<b>V</b>	√				500	
Paints and inks	blending and mixing	√ (33, 74)	WRC, Water Corp.		√ VOCs	√		1		200 for water-based, 300 for solvent- based	
	manufacturing	√ (31, 72)	DoIR, WRC, Water Corp.		√ VOCs	√		<b>V</b>	<b>V</b>	500 for water-based, 1000 for solvent- based	
Pesticides manufacturing	herbicide, insecticide or pesticide manufacture by a chemical process	√ (32)	DoIR, WRC, Water Corp.		<b>√</b>	√	<b>V</b>	<b>V</b>	<b>V</b>	300-1000, depending on size	
Pharmaceuticals	Production – including veterinary products	√ (31, 72)	WRC, Water Corp.			√		<b>V</b>	<b>V</b>	300-1000, depending on size	

Industry	<b>Description of industry</b>	DoE Licence or Registration category (*)	Key Government agencies for advice or approvals	Code of Practice (CoP) / environmental requirements	Impacts					Buffer distance in metres and qualifying notes
					Gaseous	Noise	Dust	Odour	Risk	
Piggery – intensive,  – 5000 pigs or more  – 500 to 5000 pigs  – 50 to 500 pigs  – less than 50 pigs	premises on which pigs are fed, watered and housed in indoor pens	√ (2, 69)	DAWA, WRC, local gov't	DAWA Guidelines for New & Existing Piggeries - May 2000		√		√ ·		5000 for piggeries with more than 5000 pigs, 3500 for piggeries with 500 to 5000 pigs, 2000 for piggeries with 50 to 500 pigs, and 500 for piggeries with less than 50 pigs
Piggery – extensive (all premises)	premises on which pigs are fed, watered and housed in outside paddocks or enclosures		DAWA, WRC, local gov't	DAWA Guidelines May 2000			<b>√</b>	<b>V</b>		1000 for all extensive piggeries
Plaster manufacturing	plaster, plasterboard, gyprock or other products comprised wholly or mostly of gypsum are made	√ (78)	local gov't			<b>V</b>	<b>V</b>		√	200

Industry	Description of industry	DoE Licence or Registration category (*)	Key Government agencies for advice or approvals	Code of Practice (CoP) / environmental requirements	Impacts					Buffer distance in metres and qualifying notes
					Gaseous	Noise	Dust	Odour	Risk	
Ports	bulk material that is loaded or unloaded onto a vessel		local gov't			√	<b>√</b>		√	case by case
Poultry industry	intensive farming		DAWA, WRC, local gov't	CoP - 1999		1	<b>√</b>	<b>V</b>		300-1000, depending on size
Pulp, paper or paperboard manufacturing	manufacture of paper pulp, wood pulp, kraft paper, kraft paperboard, cardboard paper or paperboard	√ (30)	DoIR, WRC, Water Corp.		√ H <sub>2</sub> S, SO <sub>2</sub>	√	<b>V</b>	<b>V</b>		1000-1500, depending on process used, wastewater treatment system & size
Quicklime plant	clay, limesand or limestone material fired in a furnace or kiln to produce quicklime	√ (43)	DoIR, local gov't		√	√	<b>√</b>			500 for no quarrying on the premises, 1000 if quarrying is conducted
Rabbitries	intensive husbandry		local gov't	1995 flyer			V	<b>V</b>		500
Raceways for motor vehicles	Speedways and drag strips	√	local gov't	draft in preparation		<b>V</b>	<b>V</b>			case by case

Industry	Description of industry	DoE Licence or Registration category (*)	Key Government agencies for advice or approvals	Code of Practice (CoP) / environmental requirements	Impacts					Buffer distance in metres and qualifying notes
					Gaseous	Noise	Dust	Risk		
Rendering works	animal matter is processed or extracted for use as fertilizer, stock food or other purposes	√ (16)	WRC, Water Corp., local gov't	CoP - 1991, revised in Oct 1995		1		√		1000-1500, depending on wastewater treatment/disposal system, location & size
Resins manufacturing	polyester resins manufacture	√ (31, 72)	DoIR		V	<b>V</b>	V	V	V	500-1000
Resins manufacturing	rubber & synthetic resins manufacture	√ (31, 72)	DoIR		<b>V</b>	<b>√</b>	<b>V</b>	1	1	1000
Rockwool manufacturing	mineral wool or ceramic fibre manufacture	√ (42)	DoIR, WRC			<b>√</b>	<b>V</b>	1		500
Rubber products manufacturing	using either organic solvents or carbon black		DoIR, local gov't		$\sqrt{\text{VOCs}}$	<b>√</b>	<b>V</b>	1		300-500
Sawmill	timber (tree) milling		local gov't			√	<b>V</b>			500-1000, depending on location & size

Industry	Description of industry	DoE Licence or Registration category (*)	Key Government agencies for advice or approvals	Code of Practice (CoP) / environmental requirements	Impacts					Buffer distance in metres and qualifying notes
				Gaseous	Noise	Dust	Odour	Risk		
Scrap metal recycling works	scrap metal is fragmented or melted to recover metal (including lead battery reprocessing)	√ (45, 47)	DoIR, WRC, local gov't	CoP - 1992		V	<b>√</b>	<b>√</b>		300-500
Screening works	screening or sieving of sand, rocks, chemicals and minerals	√ (12, 70)	DoIR, local gov't			<b>√</b>	<b>V</b>			500
Seafood processing	fish or other seafood is processed or packaged	√ (22)	WRC, Water Corp., local gov't					<b>V</b>		500
Service stations, involving vehicle cleaning/detailing facilities & the retailing of spare parts & foodstuffs	for premises operating during normal hours, i.e. Monday - Saturday from 0700-1900 hours		DoIR, local gov't	draft in house	1	V		1	V	50
	freeway service centre (24 hour operations)		DoIR, local gov't		<b>V</b>	√		<b>V</b>	<b>V</b>	100

Industry	<b>Description of industry</b>	DoE Licence or Registration category (*)	Key Government agencies for advice or approvals	Code of Practice (CoP) / environmental requirements			Impact	ts		Buffer distance in metres and qualifying notes
					Gaseous	Noise	Dust	Odour	Risk	-
	all other 24 hour operations		DoIR, local gov't	draft in house	√	√		<b>√</b>	<b>√</b>	200
Silicon refining	silicon smelter operations	√ (44)	DoIR		<b>V</b>	√	V		V	1500-2000
Smallgoods	not including abattoir facilities or rendering works		Water Corp., local gov't			√		1		100
Smoking, drying or curing operations	meat or other edible products are smoked, dried or cured	√ (Reg. 2)	Water Corp., local gov't	Regs. in Sept 1996	V	√		V		200-300, depending on size
Sodium cyanide manufacturing	production of sodium cyanide	√ (31, 72)	DoIR		√ HCN, NO <sub>X</sub>	√	<b>V</b>		<b>V</b>	1000-2000
Sodium silicate manufacturing	production of sodium silicate	√ (31, 72)	DoIR			√	V	V	<b>√</b>	1000
Solar salt manufacturing	salt is produced by solar evaporation	√ (14)	DoIR			√	V			1000

Industry	Description of industry	DoE Licence or Registration category (*)	Key Government agencies for advice or approvals	Code of Practice (CoP) / environmental requirements			Impac	Buffer distance in metres and qualifying notes		
					Gaseous	Noise	Dust	Odour	Risk	-
Starch manufacturing	starch or gluten is manufactured	√ (20)	WRC, local gov't			√	<b>√</b>	V		300-500, depending on size
Straw pulp and paper mill	processing cereal straw and mixing with waste paper to produce container board	√ (30)	WRC, local gov't		√ H <sub>2</sub> S, SO <sub>2</sub>	√		<b>√</b>		1000-1500, depending on process used, wastewater disposal system & size
Sugar milling or refining	sugar cane is crushed or sugar is refined	√ (21)	DoIR, WRC			√	√	<b>V</b>		1000-1500, depending on wastewater disposal system & size
Sulphuric acid plant	production of sulphuric acid	√ (31, 72)	DoIR, WRC		√ SO <sub>2</sub> , SO <sub>3</sub>	<b>V</b>	<b>V</b>	1		2000-3000
Tailings disposal	containing cyanide	√ (5)	DoIR, WRC				<b>√</b>	V	<b>V</b>	case by case
	not containing cyanide – (fly ash, red mud)	√ (5)	DoIR, WRC				<b>V</b>	V		case by case

Industry	<b>Description of industry</b>	DoE Licence or Registration category (*)	Key Government agencies for advice or approvals	Code of Practice (CoP) / environmental requirements	Impacts					Buffer distance in metres and qualifying notes
					Gaseous	Noise	Dust	Odour	Risk	
Tannery	treatment and drying of animal skins, leather and artificial leather – using sulphide process	√ (50)	WRC, Water Corp., local gov't		√ H <sub>2</sub> S	√		<b>V</b>		1000-2000, depending on process used, wastewater treatment system & location
Tannery	treatment and drying of animal skins, leather and artificial leather – small premises, non-sulphide	√ (50)	WRC, Water Corp., local gov't			<b>V</b>		V		200-300, depending on size & wastewater treatment & disposal system
Textile production  – artificial & synthetic fibre manufacturing or treatment	cellulose nitrate, viscose fibre, cellophane, artificial rubber or other man-made textiles manufacture	√ (26, 31, 72)	DoIR, local gov't			1	√	<b>V</b>		500

Industry	<b>Description of industry</b>	DoE Licence or Registration category (*)	Key Government agencies for advice or approvals	Code of Practice (CoP) / environmental requirements	Impacts					Buffer distance in metres and qualifying notes
					Gaseous	Noise	Dust	Odour	Risk	
- carpet making & other forms of manufacturing, ginning, milling or production of natural fibres	manufacture, bleaching, dyeing or finishing of cotton, linen, woollen yarns & other natural textiles	√ (26)	DoIR, WRC, Water Corp.			√		<b>V</b>		200-300, depending on type of fibre & wastewater treatment & disposal system
Textile operations  – chemical or physical processes	using carbon disulphide (CS2) as a solvent	√ (26, 31, 72)	WRC, Water Corp., local gov't		√ CS <sub>2</sub>	V		<b>√</b>		500-1000, depending on wastewater treatment & disposal system
– chemical or physical processes	using other substances	√ (26, 31, 72)	WRC, Water Corp., local gov't			<b>V</b>		√		200-500, depending on process used & wastewater treatment & disposal system
Timber preserving premises	timber preservation by chemical means, including chromated copper arsenate (CCA)	√ (29)	WRC, local gov't			√	<b>√</b>	<b>V</b>		300-500, depending on size

Industry	Description of industry	DoE Licence or Registration category (*)	or agencies for advice or approvals (C	Code of Practice (CoP) / environmental requirements			Buffer distance in metres and qualifying notes			
					Gaseous	Noise	Dust	Odour	Risk	-
Titanium dioxide pigment plant	production of titanium dioxide (Cl <sub>2</sub> process)	√ (31, 72)	DoIR, WRC		√ Cl <sub>2,</sub> TiCl4	√	<b>√</b>	√	<b>√</b>	2000-3000
Transport vehicles depot	buses, trucks and other heavy vehicles depot		DoIR, local gov't		<b>V</b>	√	<b>V</b>	1		200
Turf farms and lawns	broad-scale turf production		WRC, local gov't	Guidelines - Dec 2001		√	V	V		500
Used tyre storage  – general  – tyre fitting	premises on which used tyres are stored	√ (56, 57)	WRC, local gov't				<b>√</b>		√	100-200, depending on size
- recycling	premises on which used tyres are crumbed, granulated or shredded	√ (56, 57)	WRC, local gov't		<b>√</b>	1	<b>√</b>	√	V	500-1000

Industry	Description of industry	DoE Licence or Registration category (*)	Key Government agencies for advice or approvals	Code of Practice (CoP) / environmental requirements		]	Impact		Buffer distance in metres and qualifying notes	
					Gaseous	Noise	Dust	Odour	Risk	
Vanadium mine	extraction and processing of vanadium	√ (5, 12, 70)	DoIR		√	<b>√</b>	<b>√</b>	<b>√</b>	1	1500-3000
Vineyards (viticulture)	broad-scale operations (including winery)	√ (25)	DAWA, WRC, local gov't	CoP - 2002	<b>V</b>	√	<b>V</b>	V		500
Waste disposal industrial liquid waste	site on which liquid waste from other premises is stored, reprocessed, treated or irrigated/discharged	√ (61)	DoH, WRC, local gov't			V		<b>V</b>		case by case
inert landfill site (Class 1)	site only accepting inert waste, contaminated solid waste (meeting criteria for Class 1), special wastes (type 1), as specified, for burial	√ (63)	WRC, local gov't	Draft CoP - May 1997. Guidelines for Acceptance of Solid Waste to Landfill - Jan 2001		√	√			150 for residential uses & an internal buffer of 25 from boundary

Industry	<b>Description of industry</b>	DoE Licence or Registration category (*)	Key Government agencies for advice or approvals	Code of Practice (CoP) / environmental requirements	Impacts					Buffer distance in metres and qualifying notes
					Gaseous	Noise	Dust	Odour	Risk	
putrescible landfill site (Class 2 & 3)	site accepting inert, putrescible, contaminated solid waste (meeting criteria for Class 2 & 3), special wastes (type 1 & 2), as specified, for burial	√ (64, 89)	WRC, local gov't	Guidelines for Acceptance of Solid Waste to Landfill - Jan 2001. Regs (Rural Landfill) 2002. Draft Rural Landfill Management CoP		1	√ ·	√ ·		500 for sensitive uses (subdivisions), 150 for single residences & an internal buffer of 35 from boundary
secure landfill site (Class 4)	site accepting inert waste, contaminated solid waste (meeting criteria for Class 2, 3 & 4) and special wastes (type 1 & 2), as specified, for burial	√ (65)	DoH, WRC, local gov't	Guidelines for Acceptance of Solid Waste to Landfill - Jan 2001	√	√	√	V	<b>V</b>	case by case

Industry	Description of industry	DoE Licence or Registration category (*)	Key Government agencies for advice or approvals	Code of Practice (CoP) / environmental requirements	Impacts					Buffer distance in metres and qualifying notes
					Gaseous	Noise	Dust	Odour	Risk	
intractable waste landfill site (Class 5)	site only accepting intractable waste, as specified, for burial	√ (66)	DoH, WRC, local gov't	Guidelines for Acceptance of Solid Waste to Landfill - Jan 2001		√	√	√	√	case by case
waste depot	premises on which waste is stored or sorted, pending final disposal or re-use	√ (62)	DoH, WRC, local gov't	Guidelines for Acceptance of Solid Waste to Landfill - Jan 2001		<b>V</b>	√	<b>V</b>		200
waste – resource recovery plant	premises on which solid waste is stored, reprocessed, treated or discharged	√ (60, 61A, 67)	DoH, WRC, local gov't		<b>V</b>	√		√	√	case by case

Industry	Description of mutstry of	or agencies for advice (C Registration or approvals en	agencies for advice	Code of Practice (CoP) / environmental requirements		]	Impact	Buffer distance in metres and qualifying notes		
				Gaseous	Noise	Dust	Odour	Risk		
Wastewater treatment plant	sewage treatment facility (including Mechanical/Biologica l and Pond Systems and Facultative Pond Systems) 20-100 m³ per day >100 m³ per day	√ (85) (54)	Water Corp., Fisheries, WRC, local gov't		√	√		√	V	buffer studies in progress to determine appropriate separation distances
Wastewater disposal site (treated sewage)	site from which treated sewage is discharged (including by Spray irrigation and Flood/Channel Irrigation): 20-100 m³ per day >100 m³ per day	√ (85) (54)	Water Corp., Fisheries, WRC, local gov't DoH					√	√	case by case
Wastewater pumping stations	vacuum pumping station		local gov't	<b>V</b>	√	√		<b>V</b>	V	20
	wastewater pumping station ( = 40L/s)</td <td></td> <td>local gov't</td> <td><b>V</b></td> <td><b>V</b></td> <td><b>√</b></td> <td></td> <td></td> <td><b>V</b></td> <td>10</td>		local gov't	<b>V</b>	<b>V</b>	<b>√</b>			<b>V</b>	10

Industry	Description of industry	DoE Licence or Registration category (*)	Key Government agencies for advice or approvals	Code of Practice (CoP) / environmental requirements	Impacts					Buffer distance in metres and qualifying notes
					Gaseous	Noise	Dust	Odour	Risk	
	wastewater pumping station ( = 90L/s)</td <td></td> <td>local gov't</td> <td>√</td> <td>V</td> <td><b>V</b></td> <td></td> <td>V</td> <td>1</td> <td>20</td>		local gov't	√	V	<b>V</b>		V	1	20
	wastewater pumping station ( = 180L/s)</td <td></td> <td>local gov't</td> <td><b>V</b></td> <td>1</td> <td><b>V</b></td> <td></td> <td>1</td> <td><b>V</b></td> <td>30</td>		local gov't	<b>V</b>	1	<b>V</b>		1	<b>V</b>	30
	wastewater pumping station ( = 350L/s)</td <td></td> <td>local gov't</td> <td>V</td> <td>V</td> <td><b>V</b></td> <td></td> <td>1</td> <td><b>V</b></td> <td>50</td>		local gov't	V	V	<b>V</b>		1	<b>V</b>	50
	wastewater pumping station – major		Water Corp., WRC		V	<b>V</b>		<b>V</b>	1	150
Wastewater tanking manhole	used as a temporary measure – buffer primarily for visual amenity		Water Corp., local gov't	√	√			V	V	100
oxygen injection site	with a storage tank		DoIR			<b>√</b>			1	10 (under review)
oxygen injection site	with an on-site generator		DoIR			<b>V</b>				20 (under review)

Industry	Description of industry	DoE Licence or Registration category (*)	Key Government agencies for advice or approvals	Code of Practice (CoP) / environmental requirements		]	Impact	Buffer distance in metres and qualifying notes		
					Gaseous	Noise	Dust	Odour	Risk	
odour control facility	varying process		DoIR			√				30 (under review)
Water treatment plants	including chemical dosing facilities for potable water	√ (Reg. 4)	DoIR, WRC	Regs. in Sept 1996	√	√		1	<b>V</b>	case by case – (under review)
Water pumping stations	minor		local gov't	√		<b>V</b>				20 (under review)
	major		local gov't							25 (under review)
Water supply regulating valves	>/= 300mm diameter		local gov't	<b>V</b>		1				16 (under review)
Cathodic protection ground beds	induced electrical current to protect pipes from corrosive soils		local gov't	<b>V</b>					V	case by case – (under review)
Wood-board manufacturing – (including MDF plants)	premises on which particleboard or chipboard is fabricated or manufactured	√ (28)	DoIR, WRC			√	<b>√</b>	<b>√</b>		1000-2000, depending on size and location

Industry	Description of industry	DoE Licence or Registration category (*)	Key Government agencies for advice or approvals	Code of Practice (CoP) / environmental requirements	Impacts					Buffer distance in metres and qualifying notes
					Gaseous	Noise	Dust	Odour	Risk	
Woolscouring	scouring and primary treatment of wool	√ (27)	DoIR, WRC			V	V	V		500-1000, depending on wastewater treatment & disposal system & size
Wreckers (automotive)	vehicle parts recycling		local gov't	CoP - Oct 1997		<b>√</b>	<b>√</b>			300

#### Notes on table

DAWA Department of Agriculture Western Australia

DoE Department of Environment

DoH Department of Health

DoIR Department of Industry and Resources
DPI Department for Planning and Infrastructure

Fisheries Department of Fisheries

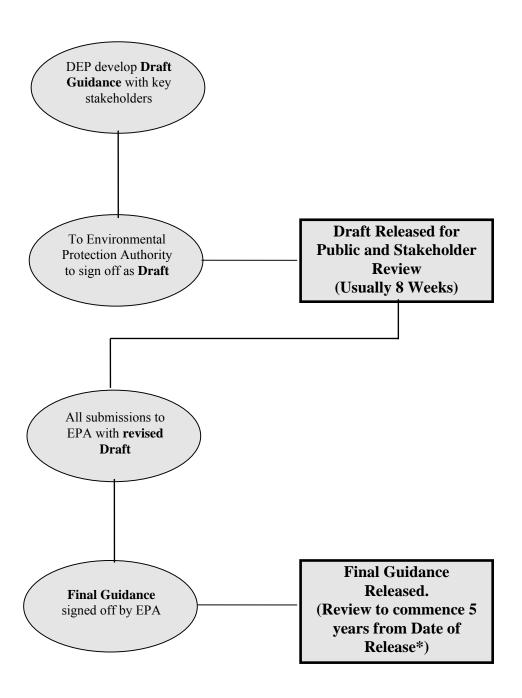
WRC Water and Rivers Commission (to become the Department of Environment)

Certain industries with the potential to pollute the environment (prescribed premises) must hold a Works Approval (for construction) and a Licence or Registration (for operation) under the *Environmental Protection Act 1986*. The *Environmental Protection Regulations 1987* set out the categories for prescribed premises.

Prescribed premises must hold a Works Approval prior to commencing any work or construction on a premises that would cause the premises to become prescribed. Prior to operating these premises a Licence must be obtained for some categories of prescribed premises (covered under Schedule 1, Part 1 of the Regulations). The remainder of the categories of prescribed premises may be registered instead of holding a Licence but still require a Works Approval to construct (Schedule 1, Part 2). A further five categories of premises require a registration only and do not require a Works Approval (Schedule 2).

The Department of Environment can refer any proposal that needs a Works Approval, Licence or Registration to the EPA. Usually the Department refers a proposal to the EPA if it has the potential to cause significant environmental impacts. This is generally the case if the siting is inappropriate, i.e. too close to residential areas, coastal areas, wetlands or areas protected by Environmental Protection Policies.

### **Appendix 2: Generic Flow Diagram for the Guidance Statement Process**



<sup>\*</sup> Guidance may be reviewed earlier if circumstances require it.

From: <u>David McDonald</u>
To: <u>Alvarez, Jose</u>

 Cc:
 Orjiako, Oliver; Cook, Christine

 Subject:
 FRDU-services to rural areas

Date: Wednesday, May 23, 2018 7:58:29 AM
Attachments: Urban Governmental Services.pdf

Jose:

Attached please find for the committee, and for the record, e-mails obtained through public records request.

Thank you,

David

David T. McDonald David T. McDonald, P.C. Courtroom Lawyer Suite 625 833 SW 11th Portland, Oregon 97205 503-226-0188 (o) 503-226-1136 (f) Admitted To Practice In Oregon and Washington State and Federal Courts

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From: To: John Peterson Barnett, Jerry

Cc: Subject: Robin Krause RE: 5517

Date:

Friday, November 17, 2017 8:45:43 AM

I don't think the issue is so much one of equity...we are always extending the system and we have frameworks for developers to pay for line extensions and new users to pay connection charges as a buy in to the system. The issue is more of a legal prohibition under GMA that sewer service is intended to be confined to urban areas to support urban densities. It is about drawing a bold line between urban and rural with sewer falling only on the urban side of the boundary as I understand it.

#### John M. Peterson, P.E.

General Manager | Clark Regional Wastewater District

From: Barnett, Jerry [mailto:Jerry.Barnett@clark.wa.gov]

Sent: Friday, November 17, 2017 8:41 AM

**To:** John Peterson **Cc:** Robin Krause **Subject:** RE: 5517

Thanks John. Wouldn't conveying/treating sewage in these areas have to be disproportionally subsidized by customers in the urban areas?

From: John Peterson [mailto:JPeterson@crwwd.com]

Sent: Friday, November 17, 2017 8:35 AM

To: Barnett, Jerry Cc: Robin Krause Subject: RE: 5517

Hi Jerry,

Thank you for thinking of us. Like Jeff, I want to first disclaim my status as a non-attorney. If this discussion ever gets to a more formal stage, we would be happy to engage our legal counsel and provide an official response.

Understanding that context, from my perspective, I think Jeff's comments are accurate. There is a clear prohibition for extending sanitary sewer service outside of urban areas, as was confirmed here in Clark County through the legal processes around the Cowlitz Tribe's casino project at the La Center Junction. Sewer is an urban service and, as such, the District would not be in a position to extend service along the rail line once it left the urban growth boundary areas.

Let me know if you need more...

#### John M. Peterson, P.E.

General Manager | Clark Regional Wastewater District

From: Barnett, Jerry [mailto:Jerry.Barnett@clark.wa.gov]

Sent: Thursday, November 16, 2017 10:45 AM

To: Robin Krause; John Peterson

Subject: FW: 5517

Gentlemen,

Below is Jeff Swanson's dissent on SB5517. I wanted to share it and also get any feedback you may

have. Thanks, Jerry

From: Jeff Swanson [mailto:Jeff.Swanson@cityofbg.org]

Sent: Wednesday, November 15, 2017 12:07 PM

To: Barnett, Jerry Subject: FW: 5517

Just FYI...

Jeff Swanson City Manager office (360) 342-5005



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From: Jeff Swanson

Sent: Wednesday, November 15, 2017 12:07 PM

To: 'Eric Temple' < etemple@pvjr.com>

Cc: amber.carter@comcast.net

Subject: RE: 5517

Hi Eric,

The City of BG is definitely on board. We supported both House and Senate versions of the bill early in session. The issue comes down to what the final bill allows, technically speaking.

I'm not trying to make "perfect" the enemy of "good enough", however the issue is significant enough that I felt I needed to raise the concerns. I recognize that the likelihood of an appeal to whatever the County implements is high, but feel that the recommendation of the RRAB and Subcommittee is clearly inconsistent with both the GMA and the bill language that became effective law, and, if adopted by the County unnecessarily increases the exposure to litigation.

The problematic language is in RCW 36.70A.108(2), which reads:

Any county located to the west of the crest of the Cascade mountains that has both a population of at least four hundred thousand and a border that touches another state, and any city in such county, may include development of freight rail dependent uses on land adjacent to a short line railroad in the transportation element required by RCW 36.70A.070. Such counties and cities may also modify development regulations to include development of freight rail dependent uses that do not require urban governmental services in rural lands. (emphasis added)

RCW 36.70A.030(20) defines "urban governmental services" as:

"Urban governmental services" or "urban services" include those public services and public facilities at an intensity historically and typically provided in cities, specifically including storm and sanitary sewer systems, domestic water systems, street cleaning services, fire and police protection services, public transit services, and other public utilities associated with urban areas and normally not associated with rural areas.

RCW 36.70A.030(18) defines "rural governmental services" as:

"Rural governmental services" or "rural services" include those public services and public facilities historically and typically delivered at an intensity usually found in rural areas, and may include domestic water systems, fire and police protection services, transportation and public transit services, and other public utilities associated with rural development and normally not associated with urban areas. Rural services do not include storm or sanitary sewers, except as otherwise authorized by RCW 36.70A.110(4).

The reference to RCW 36.70A.110(4) is:

In general, cities are the units of local government most appropriate to provide urban governmental services. In general, it is not appropriate that urban governmental services be extended to or expanded in rural areas except in those limited circumstances shown to be necessary to protect basic public health and safety and the environment and when such services are financially supportable at rural densities and do not permit urban development.

In my unwashed opinion this says if a county or city wants to include development of freight rail dependent uses it may do so provided they do not require urban governmental services in rural lands. This is the major flaw in the final implementation of SB 5517 compared to the Rural Industrial Land Bank (RILB) approach: the RILB essentially designates a rural area for industrial development where provision of urban governmental services is allowed under the GMA, effectively creating an urban growth boundary around the land bank for this purpose. Where the County is having difficulty in the RILB approach is with respect to the de-designation process for resource land, in this case ag land. SB 5517 addresses the de-designation challenge by stating freight rail dependent uses are allowed on resource lands (like ag), but by itself does not address this issue of urban governmental services provided outside of urban growth areas except to the extent it seems to prohibit that.

The point could be made, "well, these are resource lands, not rural lands." However, resource lands are not "urban", making them a subset or type of "rural land", subject to the prohibition in SB 5517. Regardless of intent, this is the language in the law, and would be interpreted consistently with the

rest of the GMA and related case law.

In my mind an ideal fix would be to insert language from SB 5517 into both RCW 36.70a.365 and RCW 36.70a.367. This language from the bill would work:

Any county located to the west of the crest of the Cascade mountains that has both a population of at least four hundred thousand and a border that touches another state, and any city in such county, may adopt development regulations to assure that agriculture, forest, and mineral resource lands adjacent to short line railroads may be developed for freight rail dependent uses.

This would address both the de-designation issue and the urban governmental services issue because it would be done under the RILB statutes. It should be palatable to Futurewise because it narrows the broad scope of SB 5517 and provides for quality economic development, not just more houses and commercial uses. The steeper hill to climb would be to modify RCW 36.70A.108(2) striking problem language to read:

Any county located to the west of the crest of the Cascade mountains that has both a population of at least four hundred thousand and a border that touches another state, and any city in such county, may include development of freight rail dependent uses on land adjacent to a short line railroad in the transportation element required by RCW 36.70A.070. Such counties and cities may also modify development regulations to include development of freight rail dependent uses that do not require urban governmental services in rural lands.

This would maintain the broad scope of SB 5517, and the definition of freight rail dependent uses as both urban and rural in RCW 36.70A.030(9) would likely provide a sufficient basis for Clark Public Utilities and Clark Regional Wastewater District to provide services to those areas, though it would still probably come under appeal because the permissiveness is not more explicit. But, Futurewise would probably fight that approach vehemently.

Remember, I only play a land use attorney on TV periodically (although that series was cancelled)... I'm not an actual attorney, just a paid actor. ©

Jeff Swanson City Manager office (360) 342-5005



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From: Eric Temple [mailto:etemple@pvjr.com]
Sent: Tuesday, November 14, 2017 8:19 AM

From: <u>David McDonald</u>
To: <u>Alvarez, Jose</u>

Cc: <u>Cook, Christine</u>; <u>Orjiako, Oliver</u>

Subject: FRDU for the record

**Date:** Wednesday, May 23, 2018 8:13:37 AM

Attachments: Amber Carter.pdf

#### Mr. Alvarez:

I am submitting these as an individual citizen and in no other capacity.

Please provide the following information to the FRDU committee and for the record.

Amber Carter has stated that she is testifying on behalf of Identity Clark County. She has also served as Mr. Temple's alternate on the committee.

Ms. Carter is a registered lobbyist and is the lobbyist for the PVJR (Mr Temple). According to WA PDC records, PVJR pays Ms. Carter a retainer as lobbyist for PVJR at the rate of \$3000 per month. Identity Clark County is a business "non-profit" that has board members. Those board members include Eric Fuller, who is a member of this committee. In addition, Mr. Temple's attorneys are the Horenstein Law Group (Steve Horenstein) and Jordan Ramis (Jamie Horsley) and are listed as "investors" on the Identity Clark County website. In addition, Mr. Fuller's Group is also an "investor" in ICC.

ICC pays Ms, Carter \$1800 per month and PVJR (Mr. Temple) pays her \$3000 per month for a total of \$4800/month which appears to include attending, testifying at and sitting as the exoffico's alternate at the FRDU meetings. Again, according to the PDC records, it also appears that the total paid by these two groups is approximately 1/3 of her monthly salary as a lobbyist. Therefore, the public record should reflect that when Ms. Carter speaks, she is getting paid as a lobbyist.

Thank you.

David T. McDonald

David T. McDonald David T. McDonald, P.C. Courtroom Lawyer Suite 625 833 SW 11th Portland, Oregon 97205 503-226-0188 (o) 503-226-1136 (f)

Admitted To Practice In Oregon and Washington

State and Federal Courts

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Home » AMBER CARTER GOVT RELATIONS LLC\* » L2 Filing

# AMBER CARTER GOVT RELATIONS LLC\* - April, 2018

Share via email...

120 41ST AVE NE OLYMPIA, WA 98506

**United States** 

Phone: 3605614861

Filed: May 15, 2018 - 7:00 pm

### Personal Expenses

Personal expenses reimbursed by employer.

No reimbursed personal expenses reported for April, 2018

Sum of all personal expenses not reimbursed by employer.

No non-reimbursed personal expenses reported for April, 2018

### Compensation

Detailed compensation by employer.

**EMPLOYER** 

**AMOUNT** 

PORTLAND VANCOUVER JUNCTION RAILROAD	3000.00
BASEBALL CLUB OF SEATTLE (SEATTLE MARINERS) (RICK L WICKMAN)	2167.00
IDENTITY CLARK CO	1816.66
COLUMBIA RIVER STEAMSHIP OPERATORS ASSN	1667.17
MARITIME FIRE & SAFETY ASSN	1250.00
PORT OF VANCOUVER	4250.00
Barreled, LLC	0.00

Payments to sub-contracted lobbyists.

No payments to sub-contracted lobbyists reported for April, 2018

### Entertainment

Itemized entertainment expenses.

No itemized entertainment expenses reported for April, 2018

Non-itemized entertainment expenses.

No non-itemized entertainment expenses reported for April, 2018

### Contributions

Reporting of all monetary and in-kind contributions made by the lobbyist or transmitted by the lobbyist on behalf of the lobbyist's client, PACs or other contributors.

Itemized contributions by employer.

No itemized contributions by employer reported for April, 2018

From: Amber Carter
To: Alvarez, Jose

**Subject:** RE: Public Comments 5-23

**Date:** Wednesday, May 23, 2018 11:24:59 AM

Attachments: <u>Buffer Comparison.pdf</u>

Jose, can you please confirm that you received this? I tried a recall but it appears to have failed. Want to make sure you have the correct version. This is the correct copy to share. Thank you.

**From:** Amber Carter <amber.carter@comcast.net>

**Sent:** Wednesday, May 23, 2018 11:18 AM **To:** 'Alvarez, Jose' < <u>Jose. Alvarez@clark.wa.gov</u>>

Subject: RE: Public Comments 5-23

Thank you Jose, please also share this attachment that compares "buffer" language from the vetoed HB 1504 and the law that was passed in SB 5517 for freight rail dependent uses.

Amber Carter

**From:** Alvarez, Jose < <u>Jose.Alvarez@clark.wa.gov</u>>

**Sent:** Wednesday, May 23, 2018 10:41 AM **To:** Alvarez, Jose < <u>Jose. Alvarez@clark.wa.gov</u>>

**Cc:** Kay, Jenna < <u>Jenna.Kay@clark.wa.gov</u>>; Cook, Christine < <u>Christine.Cook@clark.wa.gov</u>>; Wiser,

Sonja <<u>Sonja.Wiser@clark.wa.gov</u>> **Subject:** Public Comments 5-23

FYI – Public comments received this morning.



Jose Alvarez
Planner III
COMMUNITY PLANNING

564.397.2280







Top of Form

Bottom of Form

This e-mail and related attachments and any response may be subject to public disclosure under state law.

# Freight Rail Dependent Uses

# Comparison of Buffer Language

SB 5517, Ch. 18, 2017 Laws 3rd Special Session	HB 1504
Jul 6	May 16
Governor signed.	Governor vetoed.
Section 3. RCW 36.70A.060(1)(a) Any county located to the west of the crest of the Cascade mountains that has both a population of at least four hundred thousand and a border that touches another state, and any city in such county, may adopt development regulations to assure that agriculture, forest, and mineral resource lands adjacent to short line railroads may be developed for freight rail dependent uses.	Section 3. RCW 36.70A.060(1)(a) Each of the following counties, and each of the cities in such counties, may adopt development regulations to assure that agriculture, forest, and mineral resource lands adjacent to short line railroads may be developed for freight rail dependent uses: Counties located to the east of the crest of the Cascade mountains; and counties located to the west of the crest of the Cascade mountains that have both a population of at least two hundred 31 forty thousand and a border that touches another state. Any development regulations related to the development of agriculture, forest, and mineral resource lands adjacent to short line railroads for freight rail dependent uses must require buffers sufficient to prevent encroachment on or impacts to the adjacent resource lands.

NOTE: HB 1504, sponsored by Rep. Pike was vetoed. This is the only version of the bill that contained language relating to buffers. Buffer language is NOT in SB 5517 as signed by the Governor. Given the veto of more specific buffer requirements in HB 1504, existing buffers described in county code for light and heavy industrial is really all that is needed to implement SB 5517.

### **HB 1504 - VETOED**

9 **Sec. 3.** RCW 36.70A.060 and 2014 c 147 s 2 are each amended to 10 read as follows:

(1) (a) Each county that is required or chooses to plan under RCW 11 36.70A.040, and each city within such county, shall adopt development 12 13 regulations on or before September 1, 1991, to assure 14 conservation of agricultural, forest, and mineral resource lands designated under RCW 36.70A.170. Regulations adopted under this 15 subsection may not prohibit uses legally existing on any parcel prior 16 17 to their adoption and shall remain in effect until the county or city 18 adopts development regulations pursuant to RCW 36.70A.040. Such 19 regulations shall assure that the use of lands adjacent to agricultural, forest, or mineral resource lands shall not interfere 20 with the continued use, in the accustomed manner and in accordance 21 with best management practices, of these designated lands for the 22 production of food, agricultural products, or timber, or for the 23 extraction of minerals. Each of the following counties, and each of 24 25 the cities in such counties, may adopt development regulations to 26 assure that agriculture, forest, and mineral resource lands adjacent 27 to short line railroads may be developed for freight rail dependent uses: Counties located to the east of the crest of the Cascade 28 29 mountains; and counties located to the west of the crest of the 30 Cascade mountains that have both a population of at least two hundred 31 forty thousand and a border that touches another state. Any development regulations related to the development of agriculture, 32 33 forest, and mineral resource lands adjacent to short line railroads for freight rail dependent uses must require buffers sufficient to 34 prevent encroachment on or impacts to the adjacent resource lands. 35

### SB 5517, Ch. 18, 2017 Laws 3rd Special Session

extraction of minerals. Any county located to the west of the crest
of the Cascade mountains that has both a population of at least four
hundred thousand and a border that touches another state, and any
city in such county, may adopt development regulations to assure that
agriculture, forest, and mineral resource lands adjacent to short
line railroads may be developed for freight rail dependent uses.

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(b) Counties and cities shall require that all plats, short plats, development permits, and building permits issued for development activities on, or within five hundred feet of, lands designated as agricultural lands, forest lands, or mineral resource lands, contain a notice that the subject property is within or near designated agricultural lands, forest lands, or mineral resource lands on which a variety of commercial activities may occur that are not compatible with residential development for certain periods of limited duration. The notice for mineral resource lands shall also inform that an application might be made for mining-related

p. 6 3ESB 5517.SL

From: Amber Carter

To: Alvarez, Jose
Cc: etemple@pvjr.com
Subject: FRDUAC Public Comments

 Date:
 Wednesday, May 23, 2018 11:30:18 AM

 Attachments:
 Work Session PVJR Testimony 12.4.17.docx

Jose,

Please share these public comments from Eric with the FRDUAC. He is traveling and unable to send them to you directly. Thank you.

Amber Carter



December 4, 2017

Board of County Councilors Public Service Center 1300 Franklin Street Vancouver, WA 98660

### Dear Clark County Councilors:

Thank you for providing me the opportunity to submit written comments prior to the Work Session on December 6<sup>th</sup>. I am deeply grateful to the support provided by Clark County Councilors in the passage of SB 5517 and the ongoing support to expedite implementation in the 2017 Comp Plan. However, I remain concerned that the opportunity granted by the Legislature and Governor is not being fully realized and additional changes to the proposed Comp Plan changes are necessary.

SB 5517 is well designed and reflects the very changes Clark County needed to realize its goal of an industrial land bank to grow jobs and provide economic opportunity for its citizens. The legislation is consistent with guidance provided by Department of Commerce Guidebooks for compliance with the Growth Management Act and Comprehensive Planning. More importantly, the intent and definition of "Freight Rail Dependent Uses" is clear:

**RCW 36.70A.030(9)** "Freight rail dependent uses means buildings and other infrastructure that are used in the fabrication, processing, storage, and transport of goods where the use is dependent on and makes use of an adjacent short line railroad. Such facilities are both urban and rural development."

#### RCW 36.70A.108

"Such counties and cities may also modify development regulations to include development of freight rail dependent uses that do not require urban governmental services in rural lands."

Please amend the proposed Comp Plan Policy 3.9.3 to better align with ESB 5517 for purposes of urban governmental services. The policy should reference the definition of Freight Rail Dependent Uses in RCW 36.70A.030(9) to allow for buildings and other infrastructure that are used in rail dependent activities:

3.9.3: Freight rail dependent uses as defined by RCW 36.70A.030(9) are allowed for buildings and other infrastructure that are used in rail dependent activities. These facilities are both urban and rural development. The use of these facilities may either require, or may not require urban governmental services, and shall be allowed in rural lands, including industrial Land Bank lands and Land Bank and Rural Resource Lands, outside of the Urban Growth Area.

### Consider the following:

- 1. The Legislature and Governor changed the Growth Management Act to allow building and infrastructure superseding previous law and court decisions;
- 2. The definition of Freight Rail Dependent Uses means "infrastructure" which is commonly defined as "the system of public works of a county, state or region;
- 3. The term "infrastructure" is synonymous with dozens of descriptions used within the GMA and County Code and for purposes of Freight Rail Dependent Uses includes storm and sanitary sewer.
- 4. ESB 5517 allows infrastructure for both urban and rural development for Freight Rail Dependent Uses and resolves conflicts and limitations resulting from the definition of "rural governmental services" and "urban governmental services".
- 5. The Department of Commerce has approved Comp Plans adopted by other counties with solutions that reconcile urban and rural governmental services by imposing a requirement to tight-line sewer to prohibit additional hookups or expansions.

The Legislature and Governor specifically authorized Clark County, and the cities in Clark County, to allow economic development infrastructure for Freight Rail Dependent Uses that are both urban and rural development.

RCW defines urban and rural differently, so by including them as both, they can be treated as either as circumstances require. They are authorized to be either and get all the benefits of that status without limits. Knowing that the development is specific to counties (not cities/urban areas), it's a clear indication that the Legislature intended them to be able to have urban services, otherwise the language would have no purpose.

The word "infrastructure" is used 80 times in the 113-page Department of Commerce Capital Facilities (synonymous with Public Facilities) guidebook, and the shorthand version of Capital Facilities or Public Facilities – simply "facilities" - is used well over 100 times.

The word "infrastructure" is used 81 times in the 198-page Department of Commerce Urban Growth Area Guidebook. The word "facilities" is used about 194 times.

These two words are interchangeable, infrastructure and facilities. The Department of Commerce Guidebooks - created to assist among others, attorneys and staff who write

legislation and code - find these terms acceptable and synonymous. The Department of Commerce are the experts.

An unlimited number of examples are available to reinforce that facilities and infrastructure are interchangeable. There is simply no other word, other than infrastructure, which "public facilities" could be referencing.

The very definition of "freight rail dependent uses" is Urban Public Facilities. Urban Public Facilities means storm and sanitary sewer among other items (see definitions of Urban Governmental Services and then Public Facilities).

You may also hear about a provision in the GMA, RCW 36.70A.110(4), where some might attempt to argue Storm and Sanitary Sewer are not allowed in Rural areas. There are exceptions. The key words are "In General", as this is not a prohibition, and therefore allows exceptions. One of the exceptions is SB 5517. It specifically allows Clark County and cities in Clark County to allow Urban Public Facilities on Resource Lands if they do "stuff". What is prohibited, see Washington Supreme Court Cooper Point, is an expansion of sewer in rural areas not authorized by law. There, they were trying to expand sewer and add 100 homes to a sewer extension. SB 5517 is not an "expansion" but is a connection to a now legally allowed use.

By making the requested policy change, Clark County will meet the Legislative intent for counties "to improve their planning under the growth management act to provide much needed infrastructure for freight fail dependent uses". It will also meet the intent of ensuring that "such facilities are both urban and rural development".

I'm available any time if you'd like to discuss my comments. Thank you once again for all your efforts.

Sincerely,

Eric Temple
President
Portland Vancouver Junction Railroad

### Appendix 1 - Definitions

### Clark County Comprehensive Plan 2016 – Glossary

Infrastructure - the physical systems and services which support development and people, such as streets and highways, transit service, water and sewer systems, storm drainage systems and airports.

#### Merriam Webster Definition of INFRASTRUCTURE

- 1: the underlying foundation or basic framework (as of a system or organization)
- 2: the permanent installations required for military purposes
- 3: the system of public works of a country, state, or region; also: the resources (such as personnel, buildings, or equipment) required for an activity

### Merriam Webster Definition of Public Utility

3a: Public Utility

- **b** (1): a service (such as light, power, or water) provided by a public utility
- (2) : equipment or a piece of equipment to provide such service or a comparable service

### **RCW 36.70A.030 (13) GMA Definitions**

"Public facilities" include streets, roads, highways, sidewalks, street and road lighting systems, traffic signals, domestic water systems, storm and sanitary sewer systems, parks and recreational facilities, and schools.

### RCW 36.70A.215(3)(b)(i) GMA Review and Evaluation

infrastructure gaps (including but not limited to transportation, water, sewer, and stormwater)

#### RCW 36.70A.217 GMA – Guidance for Local Government

(d) Infrastructure costs, including but not limited to transportation, water, sewer, stormwater, and the cost to provide new or upgraded infrastructure if required to serve development;

#### RCW 39.108.010 Public Works Definitions

- (12)(a) "Public improvements" means:
- (i) Infrastructure improvements within the local infrastructure project area that include:
- (A) Street, road, bridge, and rail construction and maintenance;
- (B) Water and sewer system construction and improvements;
- (C) Sidewalks, streetlights, landscaping, and streetscaping;
- (D) Parking, terminal, and dock facilities;

- (E) Park and ride facilities of a transit authority and other facilities that support transportation efficient development;
- (F) Park facilities, recreational areas, bicycle paths, and environmental remediation;
- (G) Stormwater and drainage management systems;
- (H) Electric, gas, fiber, and other utility infrastructures; and
- (ii) Expenditures for facilities and improvements that support affordable housing;
- (iii) Providing maintenance and security for common or public areas in the local infrastructure project area; or
- (iv) Historic preservation activities authorized under RCW <u>35.21.395</u>.

### RCW 36.70A.030 (18) Rural Governmental Services

"Rural governmental services" or "rural services" include those public services and public facilities historically and typically delivered at an intensity usually7 found in rural areas, and may include domestic water systems, fire and police protection services, transportation public transit services, and other public utilities associated with urban areas. Rural services do not include storm or sanitary sewers, except as otherwise authorized by RCW 36.70A.110(4).

### RCW 36.70A.030 (20) Urban Governmental Services

"Urban governmental services" or "urban services" include those public services and public facilities at an intensity historically and typically provided in cities, specifically including storm and sanitary sewer systems, domestic water systems, street cleaning services, fire and police protection services, public transit services, and other public utilities associated with urban areas and normally not associated with rural areas.

#### RCW 36.70A.110(4)

In general, cities are the units of local government most appropriate to provide urban governmental services. In general, it is not appropriate that urban governmental services be extended to or expanded in rural areas except in those limited circumstances shown to be necessary to protect basic public health and safety and the environment and when such services are financially supportable at rural densities and do not permit urban development.

### Appendix 2 – Department of Commerce Guidebook

### Department of Commerce – Capital Facilities Guidebook

Page 2 - For purposes of conducting the inventory required by RCW 36.70A.070(3)(a), "public facilities" as defined in RCW 36.70A.030(13) are synonymous with "capital facilities owned by public entities."

### Department of Commerce – Capital Facilities Guidebook

Publication Summary "Short Description" - This guidebook presents strategies and techniques to draft the capital facilities element of comprehensive land use plans. It includes guidance regarding planning for and financing infrastructure and services needed to accommodate anticipated growth.

### Department of Commerce – Capital Facilities Guidebook

Page 5 - Capital Facilities and Economic Development Key factors of economic recovery – good jobs, significant private investment, effective infrastructure and adequate public funding – have an interdependent relationship. Planning for them in an integrated fashion is a powerful strategy for local vitality. Infrastructure planning leads to strategic infrastructure investments that help the community achieve its intended future.

### Department of Commerce – Capital Facilities Guidebook

Page 10 - Areas to be annexed may require significant investment for maintenance of roads, infrastructure, or both. Cities and towns should assess the condition of all existing or needed facilities,