



# Decision Document

## *Environmental Protection Act 1986 (WA) (CI), Part V*

---

**Proponent:** Shire of Christmas Island

**Licence:** L8708/2012/1

---

**Registered office:** 2 Murray Road,  
CHRISTMAS ISLAND WA 6798

**Premises address:** Christmas Island Waste Depot  
Lot 610 and 612  
Vagabond Road  
CHRISTMAS ISLAND WA 6798  
Being Lot 523 on Plan 220459

**Issue date:** Thursday, 6 December 2012

**Commencement date:** Saturday, 8 December 2012

**Expiry date:** Tuesday, 7 December 2017

### Decision

Based on the assessment detailed in this document, the Department of Environment Regulation (DER), has decided to issue an amended licence. DER considers that in reaching this decision, it has taken into account all relevant considerations and its conditions will ensure that an appropriate level of environmental protection is provided.

Decision document prepared by: Caroline Conway-Physick  
Licensing officer

Decision document authorised by: Steve Checker  
Delegated officer



## Contents

Contents	2
1 Purpose of this Document	2
2 Administrative Summary	3
3 Executive summary of proposal and assessment	4
4 Decision table	5
5 Advertisement and consultation table	10
6. Risk Assessment	11

## 1 Purpose of this Document

This decision document explains how DER has assessed and determined the application and provides a record of DER's decision-making process and how relevant factors have been taken into account. Stakeholders should note that this document is limited to DER's assessment and decision making under Part V of the *Environmental Protection Act 1986 (WA) (CI)*. Other approvals may be required for the proposal, and it is the proponent's responsibility to ensure they have all relevant approvals for their Premises.



## 2 Administrative Summary

Administrative Details							
Application Type	Works Approval <input type="checkbox"/> New Licence <input type="checkbox"/> Licence Amendment <input checked="" type="checkbox"/> Works Approval Amendment <input type="checkbox"/>						
Activities that cause the premises to become prescribed premises	<table border="1"> <thead> <tr> <th>Category Number(s)</th> <th>Design Capacity</th> </tr> </thead> <tbody> <tr> <td>64</td> <td>7 500 tonnes per annual period</td> </tr> <tr> <td>57</td> <td>500 tyres</td> </tr> </tbody> </table>	Category Number(s)	Design Capacity	64	7 500 tonnes per annual period	57	500 tyres
	Category Number(s)	Design Capacity					
	64	7 500 tonnes per annual period					
57	500 tyres						
Application Verified	Date: N/A						
Application Fee Paid	Date: N/A						
Works Approval has been complied with Compliance Certificate received	Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input checked="" type="checkbox"/>						
Commercial-in-confidence claim	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>						
Commercial-in-confidence claim outcome	N/A						
Is the proposal a Major Resource Project?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>						
Was the proposal referred to the Environmental Protection Authority (EPA) under Part IV of the <i>Environmental Protection Act 1986 (WA) (CI)</i> ?	<table border="1"> <tr> <td>Yes <input type="checkbox"/> No <input checked="" type="checkbox"/></td> <td>           Referral Decision No:            Managed under Part V <input type="checkbox"/>            Assessed under Part IV <input type="checkbox"/> </td> </tr> </table>	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Referral Decision No: Managed under Part V <input type="checkbox"/> Assessed under Part IV <input type="checkbox"/>				
Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Referral Decision No: Managed under Part V <input type="checkbox"/> Assessed under Part IV <input type="checkbox"/>						
Is the proposal subject to Ministerial Conditions?	<table border="1"> <tr> <td>Yes <input type="checkbox"/> No <input checked="" type="checkbox"/></td> <td>           Ministerial Statement No:            EPA Report No:         </td> </tr> </table>	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Ministerial Statement No: EPA Report No:				
Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Ministerial Statement No: EPA Report No:						
Does the proposal involve a discharge of waste into a designated area (as defined in section 57 of the <i>Environmental Protection Act 1986 (WA) (CI)</i> )	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Department of Water consulted Yes <input type="checkbox"/> No <input type="checkbox"/>						
Is the Premises within an Environmental Protection Policy (EPP) Area If Yes include details of which EPP(s) here.	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>						
Is the Premises subject to any EPP requirements? If Yes, include details here, e.g. Site is subject to SO <sub>2</sub> requirements of Kwinana EPP.	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>						



### 3 Executive summary of proposal and assessment

The Shire of Christmas Island (SOCl) Christmas Island Road Waste Depot is located at Lot 523 Vagabond Road in the north-eastern section of Christmas Island. The landfill is a manned facility and has been operating for approximately 42 years with minimal legislative or management controls in place for nearly half of that time.

The landfill receives mainly domestic and commercial waste with small volumes of industrial wastes also accepted. The depot services an estimated floating population of 5,000, which has increased significantly since 2009 (approximately 1,000 – 1,500) due to additional services and asylum seekers on the island. The increase in people directly correlates with an increase in the amount of refuse being disposed of at the Vagabond Road facility. The premises accepts up to approximately 7,500 tonnes of waste per annum, including quarantine waste.

The facility is unlined and the underlying geology is comprised of karstic limestone over volcanic basalt. The ground water within the area is approximately 95m below ground level at monitoring bore 10 (MB10) and considered fresh to brackish in quality. Depth to groundwater is variable across the island from approximately 50m-100m. Monitoring bore MB10 is considered to be in a perched groundwater system. The landfill lies in the catchment of one of the islands drinking water abstraction points being the Waterfall Bay gallery.

The hydrogeological report completed in 2014/ 2015 by Tony Falkland confirmed that the landfill sits within an area considered to have “high to very high vulnerability” to potential contamination of groundwater resources.

The Vagabond Road Waste Depot is within 50m of the nearest sensitive receptor being the Phosphate Hill Immigration Detention Centre (IDC) to the North-west. The distance between the landfill and the nearest sensitive receptor does not meet the EPA Guidance Statement No.3 *Separation Distances between Industrial and Sensitive Land Uses* which suggests an external buffer of 500m. However there is existing tropical vegetation between the landfill and detention centre providing a windbreak / external buffer from the site. It is noted that the landfill had been operating in its current location for many years prior to the construction of the detention centre.

The premises consists of

- putrescible area
- battery storage area
- green waste area
- tyre area
- asbestos disposal area
- quarantine and biomedical area
- bio-solids disposal area
- grease trap disposal area
- white goods area
- vehicle area

The main potential emissions from the site are dust, odour and landfill leachate.

This Licence is the result of an amendment sought by DER to remove condition 1.3.4(c) as a result of a compliance inspection carried out at the premises on 17 June 2015. The condition conflicts with Condition 1.3.5, Table 1.3.3 ‘Cover requirements’. The Licence has also had administrative changes undertaken to update it to the latest DER licence format, v2.9.



## 4 Decision table

All applications are assessed in line with the *Environmental Protection Act 1986 (WA) (CI)*, the *Environmental Protection Regulations 1987 (WA) (CI)* and DER's Operational Procedure on Assessing Emissions and Discharges from Prescribed Premises. Where other references have been used in making the decision they are detailed in the decision document.

DECISION TABLE			
Licence section	Condition number L= Licence	Justification (including risk description & decision methodology where relevant)	Reference documents
General conditions	L1.2.1 L1.2.2 L1.2.3	<p><b>Operation</b> Condition 1.2.1 has been removed and placed as condition 1.1.5 within the amended Licence. Condition 1.2.2 has had administrative changes carried out in accordance with the updated new format. Condition 1.2.3 has been removed from the Licence in accordance with current DER procedure as the condition refers to the 'Code of Practice for the Storage and Handling of Dangerous Goods' which has not been approved for use by the DER CEO.</p> <p>Amendments to conditions 1.2.1 to 1.2.3 have been undertaken due to changes in current DER procedure in addressing issues of redundant conditions within the Licence. The conditions have been amended to be more site specific. The proponent (Colin Wheadon) was notified of this administrative change via email on 26/11/2015.</p>	<p>General provisions of the <i>Environmental Protection Act 1986 (WA) (CI)</i>.</p> <p><i>Environmental Protection (Unauthorised Discharges) Regulations 2004.</i></p>
Premises operation	L1.3.3 L1.3.4	<p><b>Operation</b> Condition 1.3.3, Table 1.3.2 has had administrative changes to 'process limits' for 'Special Waste Type 1' conditions. 'Special Waste Type 2' has had process limits updated with the removal of a duplicate condition already referenced within condition 1.3.5, Table 1.3.3, 'Cover requirements'.</p> <p>Condition 1.3.4 (c) has been removed from the Licence due to it contradicting the 'cover requirements' detailed within Condition 1.3.5, Table 1.3.3.</p> <p>This was identified through a compliance inspection carried out in 17 June 2015 and approved by Manager Licensing (Waste Industries) on 8/09/2015 to proceed for amendment to the Licence.</p>	<p>General provisions of the <i>Environmental Protection Act 1986 (WA) (CI)</i>.</p>



DECISION TABLE			
Licence section	Condition number L= Licence	Justification (including risk description & decision methodology where relevant)	Reference documents
		The Licensee (Colin Wheadon) was emailed on 16/10/2015 confirming that a DER initiated amendment process had been started for the above reasons.	
<b>Fugitive emissions</b>	L2.6.1 L2.6.2	<p><u>Emission Description</u>  <i>Emission:</i> Dust from machinery activity onsite  <i>Impact:</i> Nuisance impacts to nearby receptors. Whilst the nearest receptor (detention centre) is within 50m of the landfill boundary, there is a buffer of tall, thick tropical vegetation between the sites which provides an effective barrier for dust emissions. The humid, wet environment also assists with mitigating dust issues as well. Traffic volume is generally low to the facility due to the limited number of vehicles/ population on the island.</p> <p>DER is not aware of any dust complaints regarding this facility. The detention centre is not operational currently and the waste depot has been proposed for removal to a new location through application to the Commonwealth of Australia during 2015. This is as a result of a 2014/ 2015 hydrogeological survey that was undertaken for the Waste Depot which identified risk to groundwater.</p> <p><i>Controls:</i> Due to heavy rainfall and damp conditions, soil at the premises is often moist reducing the potential of dust emissions ('lift off'). This, incorporated with speed restrictions at the premises, further manage any potential dust issues.</p> <p><u>Risk Assessment</u>  <i>Consequence:</i> Minor  <i>Likelihood:</i> Possible  <i>Risk Rating:</i> Moderate</p> <p><u>Regulatory Controls</u>            Generic dust management conditions 2.6.1 and 2.6.2 will be removed from the Licence and any dust emissions will be addressed under section 49 of the <i>Environmental Protection Act, 1986 (WA)(CI)</i> in accordance with current DER procedure for low risk premises.</p>	General provisions of the <i>Environmental Protection Act 1986 (WA) (CI)</i> .



DECISION TABLE			
Licence section	Condition number L= Licence	Justification (including risk description & decision methodology where relevant)	Reference documents
		<p><u>Residual Risk</u>  <i>Consequence:</i> Minor  <i>Likelihood:</i> Unlikely  <i>Risk Rating:</i> Low</p>	
Odour	L2.7.1	<p><b>Operation</b>  <u>Emission Description</u>  <i>Emission:</i> Odour from waste  <i>Impact:</i> Nuisance impacts to nearby receptors. Whilst the nearest receptor (detention centre) is within 50m of the landfill boundary, there is a buffer of heavy tropical vegetation between the sites which provides some barrier for odour emissions. DER is not aware of any odour complaints regarding this facility. The detention centre has currently been closed down on the island as well which has reduced the potential for impact to potential sensitive receptors.  <i>Controls:</i> Limitations on types and volumes of waste accepted; Regular covering of waste.</p> <p><u>Risk Assessment</u>  <i>Consequence:</i> Minor  <i>Likelihood:</i> Possible  <i>Risk Rating:</i> Moderate</p> <p><u>Regulatory Controls</u>            Generic odour management condition 2.7.1 has been removed from the Licence and any dust emissions will be addressed under section 49 of the <i>Environmental Protection Act, 1986 (WA) (CI)</i> in accordance with current DER procedure for low risk premises.</p> <p><u>Residual Risk</u>  <i>Consequence:</i> Minor  <i>Likelihood:</i> Unlikely  <i>Risk Rating:</i> Low</p>	General provisions of the <i>Environmental Protection Act 1986 (WA) (CI)</i> .



<b>DECISION TABLE</b>			
<b>Licence section</b>	<b>Condition number L= Licence</b>	<b>Justification (including risk description &amp; decision methodology where relevant)</b>	<b>Reference documents</b>
<b>Monitoring general</b>	L2.1	General monitoring has not been reassessed through this amendment process. Administrative changes have been undertaken to the numbering structure within the section only, in accordance with current DER latest Licence template, through the amendment process.	
<b>Monitoring of inputs and outputs</b>	L2.2.1	Administrative changes have been made to the format of this section in accordance with current DER latest Licence template, through the amendment process.	
<b>Ambient environment quality monitoring</b>	L2.3.1	<p><b>Operation</b></p> <p>Condition 2.3.1, Table 2.3.1 has had the 'lead' parameter removed. Monitoring bore 'BH10' (the only monitoring bore on site) had a lead sinker accidentally dropped into it which has contaminated the bore. Monitoring results for lead are therefore inaccurate. A submission for closure of the site and relocation of operations has been made to the Commonwealth and lead monitoring will need to be considered in post-closure management requirement for the site.</p> <p>Administrative changes have been made to the format of this section in accordance with current DER latest Licence template, through the amendment process.</p>	
<b>Improvements</b>	L 3.1.1	<p>Improvement condition 'IR1' has been removed from the Licence. The hydrogeological survey ('Christmas Island Hydrogeological assessment report in relation to current landfill site, February 2015' conducted by Tony Faulkland) was received by DER on 4 February 2015.</p> <p>As a result, the Shire of Christmas Island has made application to the Commonwealth of Australia to relocate the landfill to a more appropriate location so as to protect against any potential contamination of groundwater resources.</p> <p>Improvement conditions 'IR2' and 'IR3' have been removed as a site inspection on 17 June 2015 confirmed that measures had been put in place to complete these issues. In addition, the proponent submitted photographic evidence to confirm that these had been completed satisfactorily (July 2015).</p>	'Christmas Island Hydrogeological assessment report in relation to current landfill site', February 2015.





<b>DECISION TABLE</b>			
<b>Licence section</b>	<b>Condition number L= Licence</b>	<b>Justification (including risk description &amp; decision methodology where relevant)</b>	<b>Reference documents</b>
<b>Information</b>	L4.1.1-4.1.4 L4.2.1 L4.3.1	Administrative changes have been made to the format of this section in accordance with current DER latest Licence template, through the amendment process.  Section 4, 'Information' has been updated to Section 3, 'Information'.	
<b>Licence Duration</b>	N/A	DER is not aware of any issues or changes to the premises which would impact Licence duration. The Licence expires on 7 December 2017.	



## 5 Advertisement and consultation table

Date	Event	Comments received/Notes	How comments were taken into consideration
6/11/2015	Proponent sent a copy of draft instrument	A signed waiver form was emailed from Colin Wheadon to DER on 20/11/2015.	Nil comments received.



## 6. Risk Assessment

Note: This matrix is taken from the DER Corporate Policy Statement No. 07 - Operational Risk Management

**Table 1: Emissions Risk Matrix**

Likelihood	Consequence				
	Insignificant	Minor	Moderate	Major	Severe
Almost Certain	Moderate	High	High	Extreme	Extreme
Likely	Moderate	Moderate	High	High	Extreme
Possible	Low	Moderate	Moderate	High	Extreme
Unlikely	Low	Moderate	Moderate	Moderate	High
Rare	Low	Low	Moderate	Moderate	High