



Decision Document

Environmental Protection Act 1986, Part V

Licensee: Jetstar Enterprises Pty Ltd

Licence: L5982/1994/11

Registered office: Level 2, 35-37 Havelock Street
WEST PERTH WA 6005

ACN: 098 804 436

Premises address: Permapole
394 Robertson Road
CARDUP WA 6122
Being Part of Lot 60 on Diagram 59263 as depicted in Schedule 1.

Issue date: Thursday, 25 September 2014

Commencement date: Monday, 29 September 2014

Expiry date: Saturday, 28 September 2019

Decision

Based on the assessment detailed in this document the Department of Environment Regulation (DER), has decided to issue a licence. DER considers that in reaching this decision, it has taken into account all relevant considerations.

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Licensing Officer

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Manager Licensing



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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*. 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.

Works approval and licence conditions

DER has three types of conditions that may be imposed on works approvals and licences. They are as follows;

Standard conditions (SC)

DER has standard conditions that are imposed on all works approvals and licences regardless of the activities undertaken on the Premises and the information provided in the application. These are included as the following conditions on works approvals and licences:

Works approval conditions: 1.1.1-1.1.4, 1.2.1, 1.2.2, 5.1.1 and 5.1.2.

Licence conditions: 1.1.1-1.1.4, 1.2.1-1.2.4, 5.1.1-5.1.4 and 5.2.1.

For such conditions, justification within the Decision Document is not provided.

Optional standard conditions (OSC)

In the interests of regulatory consistency DER has a set of optional standard conditions that can be imposed on works approvals and licences. DER will include optional standard conditions as necessary, and are likely to constitute the majority of conditions in any licence. The inclusion of any optional standard conditions is justified in Section 4 of this document.

Non standard conditions (NSC)

Where the proposed activities require conditions outside the standard conditions suite DER will impose one or more non-standard conditions. These include both premises and sector specific conditions, and are likely to occur within few licences. Where used, justification for the application of these conditions will be included in Section 4.



2 Administrative summary

Administrative details		
Application type	Works Approval <input type="checkbox"/> New Licence (re-issue) <input checked="" type="checkbox"/> Licence amendment <input type="checkbox"/> Works Approval amendment <input type="checkbox"/>	
Activities that cause the premises to become prescribed premises	Category number(s)	Assessed design capacity
	29	15 000 tonnes per year
Application verified	Date: 15/7/2014	
Application fee paid	Date: 17/7/2014	
Works Approval has been complied with	Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input checked="" type="checkbox"/>	
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		
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</i> ?	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?	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</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 Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> If Yes include details of which EPP(s) here.		
Is the Premises subject to any EPP requirements? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> If Yes, include details here, eg Site is subject to SO ₂ requirements of Kwinana EPP.		



3 Executive summary of proposal and assessment

Jetstar Enterprises Pty Ltd is the licensee for the Permapole timber preservation plant located at 394 Robertson Rd Cardup, within the Urban Development Zone of the Shire of Serpentine-Jarrahdale. South of the prescribed premises (but within the same lot) is a Bushforever site. The north-western portion of the premises is a multiple use geomorphic wetland and approximately 70 meters to the north (downstream) is a conservation category wetland due to the presence of a Threatened Ecological Community of *Corymbia calophylla*, which forms part of the railway reserve. The closest residential receptor is a house on a rural property is located 130m to the west of the premises. According to EPA Guidance Statement No. 3, the recommended separation distance between a timber preservation plant and a sensitive receptor is 300-500 metres, with the main impacts of concern being noise, dust and odour.

The plant was established in 1978 by Bunnings. Jetstar Enterprises Pty Ltd purchased the business in 2003 and has been the licence holder since then.

Permapole receives raw pine logs from pine plantations. The raw pine logs are stored on a "log wetting" area where they are kept damp via irrigation to ensure that the timber does not splinter during debarking. The run-off from the log wetting is discharged from the premises into the Shire's stormwater system via an open drainage line connected to a sediment basin. The run-off has been a source of contention for the premises as it is discoloured and has the potential to be odorous. The irrigation system is connected to a timer system which is set so that minimal run-off is produced. Furthermore a procedure for preventing water run-off will be developed by the end of November 2014 and a drainage intercept and water return for water re-use and preventing run-off will be constructed by the end of January 2015.

The logs are then debarked by debarking machinery. The saw dust and pine bark is sold off for various uses such as garden products and animal bedding.

The debarked logs are sent to a pressure cylinder for copper chrome arsenate (CCA) treatment. The CCA concentrate is stored in a 29 000 litre double skinned tank within a 32 000 litre concrete bund which is licenced by the Department of Mines and Petroleum. The concentrate is diluted with recycled water from the sites dam and bore water as required and stored in a separate tank. The diluted solution is pumped into the pressure cylinder containing the logs and CCA enters the cells of the wood. The process takes about 10 minutes. Once the treatment is complete, excess solution is pumped out of the cylinder and into a tank. Following treatment, the CCA-impregnated logs are transferred to a covered curing area for CCA fixation. During curing, CCA-solution drips from the logs onto the curing area's concrete apron and bund, which reports back to the blind sump of the storage tanks and treatment cylinders. The curing time is variable with a minimum fixation time of 7 days during ideal conditions or longer in winter.

The cured timber is stored in the yard. During rainfall events, there is a potential for run-off to become contaminated with CCA, therefore the storage yard contains drainage lines to ensure that any potentially contaminated run-off enters the sites lined secondary containment pond. The pond is lined with a synthetic material and it has a 2,000,000 litre holding capacity. The level of the pond water is checked daily and when it appears to be reaching the high water mark (which marks the 1 in 10 year ARI event), its contents are treated with lime and ferrous sulphate hedta which adjusts the pH and drops the metals out of the water column. The water quality is then tested by a NATA accredited laboratory and if it meets the discharge criteria set in the DER licence, its full contents are discharged offsite into the councils open drainage line.

This Licence is the successor to licence L5982/1994/10 and includes changes to the conditions, so that the licence conforms to DER's new licensing format and it includes additional conditions in relation to the implementation of the sites Environmental Action Plan dated 4 August 2014.



4 Decision table

All applications are assessed in line with the *Environmental Protection Act 1986*, the *Environmental Protection Regulations 1987*, DEC's Policy Statement - Limits and targets for prescribed premises (2006), 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

Works Approval / Licence section	Condition number W = Works Approval L = Licence	OSC or NSC	Justification (including risk description & decision methodology where relevant)	Reference documents
General conditions	L1.2.3, L1.2.5, L1.2.6, L4.1.2-IR4	OSC	<p>Operation</p> <p><u>Emission Description</u> <i>Emission:</i> The licensee undertook an environmental risk assessment of the premises and identified minor issues with the storage of chemicals – namely hydrocarbons and Copper Chrome Arsenate (CCA). <i>Impact:</i> Potential contamination of surrounding soil, groundwater and surface water in the case of an emergency situation such as a failure of a containment system.</p> <p><i>Controls:</i> CCA concentrate is stored in a double-skinned tank that is licenced by the Department of Mines and Petroleum. All chemicals and hydrocarbons are stored within a concrete bunded hardstand that is designed to capture any spills. The freshly treated timber is stored on a concrete drip pad until it has cured. The drippings and any spills or rainfall that enters the hardstand and bunded areas is re-used in the timber treatment process.</p> <p>The Licensee will implement procedures for the inspection and maintenance of all containment systems as per the sites Environmental Action Plan.</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> OSC 1.2.3 has been added to the licence to require the operator to undertake</p>	Permapole (Jetstar Enterprises Pty Ltd) Environmental Risk Assessment Report, Sustainability Pty Ltd, July 2014 Permapole (Jetstar Enterprises Pty Ltd) Environmental Action Plan, Sustainability Pty Ltd, 4 August 2014 <i>Environmental Protection (Unauthorised Discharges) Regulations, 2004</i>



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			<p>improvements to chemical storage areas that were identified in the sites Environmental Risk Assessment Report and Environmental Action Plan. OSC 1.2.5 has been included to ensure that potentially contaminated stormwater is diverted away from uncontaminated stormwater.</p> <p><u>Residual Risk</u> Consequence: Minor Likelihood: Rare Risk Rating: Low</p> <p>OSC 1.2.6 and improvement condition IR4 has been added to the licence to install boundary markers because the premises boundary has changed since the issue of the previous licence. The abnormal shape of the premises boundary makes it difficult to identify the southern boundary from the ground. A fence marks the north, west and eastern boundaries.</p>	
Premises operation	1.3.1-1.3.3	OSC	<p>Site specific management of the operations is discussed in the point source emissions to surface water section of this document. Specific requirements in relation to the liner requirements of the secondary containment pond and the management of the volume of its contents are included in conditions 1.3.1 and 1.3.2. Condition 1.3.3 has been carried over from condition 5 of the previous licence L5982/1994/10, and contains a specific requirement for wastewater from the log wetting area to be retained on-site as this is not an authorised discharge for the premises.</p>	Environmental Protection Act 1986 Licence L5982/1994/10
Emissions general	L2.1.1	OSC	Limits will be set through section 2 of the licence. OSC regarding recording and investigation of exceedances of limits or targets has been included.	
Point source emissions to air including monitoring	N/A	N/A	There are no point source emissions to air from this premises that require regulation through this section. Standard conditions 1.2.1 and 1.2.2 applies to the extraction systems in the bark stripping and shaving area.	N/A



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Point source emissions to surface water including monitoring	L2.3.1, L2.3.2, L3.3.1	NSC	Operation DER's assessment and decision making are detailed in Appendix A.	Appendix A
Point source emissions to groundwater including monitoring	N/A	N/A	There are no point source emissions to groundwater from this premises therefore no specified conditions are required in this section of the licence.	N/A
Emissions to land including monitoring	N/A	N/A	There are no point source emissions to land from this premises therefore no specified conditions are required in this section of the licence.	N/A



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Fugitive emissions	L2.6.1	OSC	<p>Operation</p> <p><u>Emission Description</u> <i>Emission:</i> Dust from bark stripping and log shaping. <i>Impact:</i> Potential nuisance for neighbouring premises. <i>Controls:</i> The dust sensitive premises is a house located within the Special Rural Zone of Cardup, approximately 130m to the west of the premises. Bark stripping and log shaping is undertaken in an enclosed shed. Pine shavings and bark are stored in three-sided bins. A dust extraction system is fitted to the shed. Fines are collected in a hopper. The hopper is emptied weekly.</p> <p><u>Risk Assessment</u> <i>Consequence:</i> Insignificant <i>Likelihood:</i> Unlikely <i>Risk Rating:</i> Low</p> <p><u>Regulatory Controls</u> The optional standard dust condition L2.6.1 has been included in the licence to ensure that the licensee undertakes all reasonable and practicable measures to prevent dust emissions from the premises.</p> <p><u>Residual Risk</u> <i>Consequence:</i> Insignificant <i>Likelihood:</i> Unlikely <i>Risk Rating:</i> Low</p>	Permapole (Jetstar Enterprises Pty Ltd) Environmental Risk Assessment Report, Sustainability Pty Ltd, July 2014



DECISION TABLE

Works Approval / Licence section	Condition number W = Works Approval L = Licence	OSC or NSC	Justification (including risk description & decision methodology where relevant)	Reference documents
Odour	L2.7.1	OSC	<p><u>Operation</u></p> <p><u>Emission Description</u> <i>Emission:</i> Odour generated from the tannin stained water at the log wetting. <i>Impact:</i> Potential nuisance for neighbouring premises. <i>Controls:</i> The irrigation system used to keep logs damp has a timing system that is set to ensure that excessive runoff is not produced. The licensee will develop and implement a procedure for preventing run-off by the end of November 2014. The drainage system will be redesigned and the run-off will be re-used on the premises by January 2015. Controlling the amount of wastewater produced will minimise odour production.</p> <p><u>Risk Assessment</u> <i>Consequence:</i> Insignificant <i>Likelihood:</i> Possible <i>Risk Rating:</i> Low</p> <p><u>Regulatory Controls</u> The licensee has committed to undertaking upgrades to the premises, therefore the actions in the sites Environmental Action Plan have been included in the Improvements section of this licence. The optional standard odour condition has also been included in this licence to ensure that the premises does not emit unreasonable odour.</p> <p><u>Residual Risk</u> <i>Consequence:</i> Insignificant <i>Likelihood:</i> Unlikely <i>Risk Rating:</i> Low</p>	Permapole (Jetstar Enterprises Pty Ltd) Environmental Action Plan, Sustainability Pty Ltd, 4 August 2014 <i>Environmental Protection Act 1986</i>



DECISION TABLE

Works Approval / Licence section	Condition number W = Works Approval L = Licence	OSC or NSC	Justification (including risk description & decision methodology where relevant)	Reference documents
Noise	N/A	N/A	The <i>Environmental Protection (Noise) Regulations 1997</i> are sufficient in regulating noise emissions from this premises therefore no specified conditions were included in this section of the licence.	<i>Environmental Protection (Noise) Regulations 1997</i>
Monitoring general	L3.1.1, L3.1.2	OSC	Descriptive limits will be set through condition 2.6.2 of the licence and therefore OSC regarding recording and investigation of exceedances of limits or targets has been included.	Regulatory monitoring requirements for prescribed premises, Department of Environment, 2006 Australian Standard AS/NZS 5667.1 – Water Quality – Sampling – Guidance on the Design of sampling programs, sampling techniques and the preservation and handling of samples Australian Standard AS/NZS 5667.4 – Water Quality – Sampling part 4 – Guidance on sampling from lakes, natural and man-made
Monitoring of inputs and outputs	L3.3.1	NSC	Treated water from the containment pond is discharged into the environment. Monitoring of the quantity of water discharged off-site is required in condition 3.3.1 in the licence.	N/A
Process monitoring	N/A	N/A	There are no processes undertaken at the premises that require monitoring therefore no specified conditions are included in this section of the licence.	N/A



DECISION TABLE

Works Approval / Licence section	Condition number W = Works Approval L = Licence	OSC or NSC	Justification (including risk description & decision methodology where relevant)	Reference documents
Ambient quality monitoring	N/A	N/A	<p>The discharges to surface water require monitoring and the water quality must meet the discharge criteria, specified as limits in the licence, prior to being discharged from the premises. The discharge criteria ensures sufficient protection of the environmental and health values of the receiving environment therefore ambient surface water quality monitoring conditions are not required in this licence.</p> <p>There was a concern from the public that the organic build up from the log wetting area could affect groundwater. The site is located on ironstone, which is described as limonite gravel cemented in a quartz sand/ limonite/ silt matrix. The permeability of the ironstone is classified as variable with low shrink-swell potential and high bearing load capacity.</p> <p>The proponent will be undertaking an investigation of the groundwater in the area surrounding the lined pond as per the sites Environmental Action Plan. The reason behind this is because the integrity of the pond is unknown and it is unknown if seepage has occurred. Should groundwater contamination be identified as an issue of concern for this premises, the licence will require another review and groundwater monitoring would be required.</p>	<p>Permapole (Jetstar Enterprises Pty Ltd) Environmental Risk Assessment Report, Sustainability Pty Ltd, July 2014</p> <p>Permapole (Jetstar Enterprises Pty Ltd) Environmental Action Plan, Sustainability Pty Ltd, 4 August 2014</p> <p>N/A</p>
Meteorological monitoring	N/A	N/A	<p>This premises does not contain a meteorological monitoring station. Daily checks are undertaken of the pond and of on-line weather forecasts to ensure that the pond contains enough capacity to contain rainfall. Licence conditions relating to meteorological monitoring are not required in this licence.</p>	N/A



DECISION TABLE

Works Approval / Licence section	Condition number W = Works Approval L = Licence	OSC or NSC	Justification (including risk description & decision methodology where relevant)	Reference documents
Improvements	L4.1.1, L4.1.2	NSC	<p>The licensee employed an Environmental Consultant to undertake an Environmental Risk Assessment for the premises. This report was reviewed and accepted by DER. A timeline was prepared in an Environmental Action Plan with appropriate timeframes to develop procedures and undertake improvements to various aspects of the premises such as chemical and hydrocarbon storage, site drainage and runoff management and general site matters. A condition has been included in the licence to ensure the licensee undertakes the actions specified in the Plan.</p> <p>The premises is located on a part Lot was an unusual shape so IR2 is included in the licence for the licensee to install permanent markers along the boundary of the premises so it can be identified on the ground. The existing fence on the north, west and eastern boundaries will be used as a marker, and alternative markers such as pegs will be used on the southern boundary.</p>	Permapole (Jetstar Enterprises Pty Ltd) Environmental Risk Assessment Report, Sustainability Pty Ltd, July 2014 Permapole (Jetstar Enterprises Pty Ltd) Environmental Action Plan, Sustainability Pty Ltd, 4 August 2014
Information	L5.3.1	OSC	<p>The licence includes emission limits, therefore OSC 5.3.1 has been included in the licence, requiring the licensee to notify the CEO as soon as practicable in the case of a breach of a limit specified in the licence.</p>	N/A
Licence Duration	N/A	N/A	<p>The premises currently has an overall priority rating of medium due to the recent public interest in the premises operations.</p> <p>There are no factors that restrict the duration of this licence. The licence will be issued for the standard 5 year period.</p>	N/A



5 Advertisement and consultation table

Date	Event	Comments received/Notes	How comments were taken into consideration
04/08/2014	Application advertised in West Australian	Nil	N/A
30/07/2014	Application referred to interested parties listed: The Jarrahdale-Serpentine Ratepayers and Residents Association	Via telephone – potential build-up of odour and organics from the log wetting area from the re-use of run-off.	The Environmental Action Plan addresses improvements to the log wetting area and has been included as an improvement condition on the licence. Included the optional standard odour condition.
09/09/2014	Proponent sent a copy of draft instrument	17/9/2014 via email: 1.2.6 and 4.1.2 – boundary markers should only be required for southern portion of premises. 1.3.1 – The permeability of the pond is unknown so the permeability standard should be removed. 1.3.3 – prevention of run-off should come into effect after the agreed timeframe in the action plan. 2.3.2 and 3.3.1 – The limits for TDS and TSS are not justified, question about the suitability of the arsenic and copper discharge limit. 5.2.1 – Clarification of what is meant by “annual period”. DD – Southern portion of site is not Bushforever due to the change in premises boundary. Redescribe the curing/fixation process.	1.2.6 and 4.1.2 – clarified the requirement in the decision document. 1.3.1 – removed permeability standard as the action plan will ensure the pond is sufficiently constructed. 1.3.3 – reworded condition so that it comes into effect after 31/1/15. 2.3.2 and 3.3.1 – limits for TDS and TSS removed, however monitoring of those parameters will remain and will be compared to relevant guidelines by DER annually. 5.2.1 – clarified with proponent and reported to the Delegated Officer. DD – redescribed the location of the Bushforever site and the curing process.



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



Appendix A

Point source emissions to surface water including monitoring

Operations

Emission: During emergency situations, such as extreme rainfall (greater than 1 in 10 year ARI), stormwater and runoff potentially contaminated with copper, chrome, arsenic and sediment collected from the treated timber storage area, overflowing from the pond and entering the local drainage system.

Impact: Contamination of surrounding surface water drainage systems. The local drainage system includes a conservation category wetland and a multiple use geomorphic wetland. The water may be used for rural purposes which could include irrigation and livestock water. Potential impacts on ecology of surface water from the addition of sediment and heavy metals.

Controls: The licensee currently directs potentially contaminated stormwater to a synthetic lined pond of unknown condition. The condition of the pond requires integrity testing. The freeboard is inspected daily and maintained by staff to prevent overflow during extreme weather events (1 in 10 year storm). The contents of the pond are treated with lime and ferrous sulphate hepta which adjusts the pH and drops the metals out of the water column. The water quality is then tested by a NATA accredited laboratory and if it meets the discharge criteria set in the DER licence, it is discharged offsite into the councils open drainage line. The discharge occurs in wet periods when the pond is nearing capacity. The discharge occurs approximately 7 times a year which equates to approximately 14 megalitres of water.

The licensee reuses pond water in the timber treatment process, and has proposed to increase the pumping capacity to increase the re-use of water on-site.

Risk Assessment

Consequence: Minor

Likelihood: Unlikely

Risk Rating: Moderate

Regulatory Controls

OSC L2.3.1, L2.3.2 and L3.3.1 have been included in this licence requiring the licensee to undertake monitoring of the water quality to ensure it meets the discharge criteria, prior to being discharged from the premises. The previous licence contained a discharge criteria, however the discharge criteria has been re-assessed to ensure that the discharge does not cause a negative impact to the environment. DER has identified that the environmental values of the surrounding area that could potentially be impacted from the discharge relate to a conservation category wetland containing a threatened ecological community of *Corymbia calophylla* located 70 metres downstream, livestock health, human health and amenity, and by the time the discharge reaches the Cardup Brook (which is located approximately 1.8 km to the north), the ecology of freshwater systems.

The parameters of concern were identified as pH, copper, arsenic and chromium. Potential parameters of concern are total dissolved solids (TDS) and total suspended solids (TSS) as the runoff generated on the site has the potential to gather material from the unsealed storage areas. TDS is a measure of combined organic and inorganic substances. TSS is a measure of turbidity. Both parameters were previously not required to be monitored and have been included in condition 3.3.1 so it can be determined if these are issues for the premises.

Each parameter was compared against relevant guideline figures when determining the most appropriate discharge limit. The discharge criteria is based upon the Australian and New Zealand guidelines for fresh water quality (95% species protection) for arsenic and pH. Copper is based upon the ANZECC long term irrigation guidelines. The discharge criteria from the previous licence for total chromium was sufficient as it fell below relevant guideline criteria. Hexavalent chromium is a known



carcinogen and its levels are monitored, however no limit is imposed because the chemical treatment undertaken to meet the discharge criteria, also converts hexavalent chrome into the less toxic trivalent chrome. Previous monitoring results show that hexavalent chrome is not detected in the water column.

Parameter	Old limit	New limit
pH	6-9	6.5-8.5
Copper	0.5 mg/L	0.2 mg/L
Arsenic	0.05 mg/L	0.013 mg/L
Chromium	0.01 mg/L	0.01 mg/L

Residual Risk

Consequence: Insignificant

Likelihood: Unlikely

Residual Risk Rating: Low

The more stringent discharge criteria ensures better protection of the environmental values of the receiving environment.

Reference Documents

Australian and New Zealand guidelines for fresh and marine water quality, ANZECC, 2000.

Assessment levels for Soil, Sediment and Water, Department of Environment and Conservation, February 2010.

Emission: Discoloured and potentially odourous water from the log wetting area to the local drainage system.

Impact: Contamination of surrounding surface water drainage systems. Potential impacts on ecology of surface water from the addition of sediment and total organic carbon. Potential impacts to the local amenity such as nuisance odour and discoloured waterways.

Controls: The irrigation system of the log wetting is fitted with a timer that minimises the generation of runoff. The licensee will develop and implement a procedure for preventing run-off and pooling by the end of November 2014. The drainage system will be redesigned and the run-off will be re-used on the premises by January 2015, preventing further off-site discharges.

Risk Assessment

Consequence: Minor

Likelihood: Possible

Risk Rating: Moderate

Regulatory Controls

The discharge from the log wetting area was not an authorised discharge in the previous licence and will not be authorised in the new licence. Improvement conditions 4.1.1 and 4.1.2 have been included in the licence requiring the licensee to undertake the actions of the sites Environmental Action Plan, which has been accepted by DER. The improvements to the premises will ensure that all runoff from the log wetting is captured and re-used on-site, ceasing the off-site discharge.

Residual Risk

Consequence: Minor

Likelihood: Rare

Residual Risk Rating: Low



Government of **Western Australia**
Department of **Environment Regulation**

Reference Documents

Permapole (Jetstar Enterprises Pty Ltd) Environmental Risk Assessment Report, Sustainability Pty Ltd, July 2014

Permapole (Jetstar Enterprises Pty Ltd) Environmental Action Plan, Sustainability Pty Ltd, 4 August 2014