



# Decision Document

## *Environmental Protection Act 1986, Part V*

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**Proponent:** City of Kalgoorlie-Boulder

**Licence:** L8560/2011/2

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**Registered office:** 577 Hannan Street  
KALGOORLIE WA 6430

**Premises address:** South Boulder Wastewater Treatment Plant  
Portion of Lot 221 DP217615 and Reserve 42000 Celebration Road, South  
Boulder as depicted in Schedule 1  
BOULDER WA 6432

**Issue date:** Monday, 20 June 2016

**Commencement date:** Thursday, 23 June 2016

**Expiry date:** Tuesday, 22 June 2036

### **Decision**

Based on the assessment detailed in this document a decision has been made to issue a Licence. It is considered that in reaching this decision, all relevant considerations have been taken into account..

Decision Document prepared by:

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Decision Document authorised by:

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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.



## 2 Administrative summary

Administrative details		
Application type	Works Approval <input type="checkbox"/> New Licence <input checked="" type="checkbox"/> Licence amendment <input type="checkbox"/> Works Approval amendment <input type="checkbox"/>	
Activities that cause the premises to become prescribed premises	<b>Category number(s)</b>	<b>Assessed design capacity</b>
	54	20,000 cubic metres per day
	61	15,000 tonnes per Annual Period
Application verified	Date: 26/04/2016	
Application fee paid	Date: 30/05/2016	
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	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</i> ?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Referral decision No: N/A 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: N/A EPA Report No: N/A
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 checked="" 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 <sub>2</sub> requirements of Kwinana EPP.		



### **3 Executive summary of proposal and assessment**

The South Boulder Wastewater Treatment Plant (SBWWTP) is located to the south of the City of Kalgoorlie-Boulder. The City of Kalgoorlie-Boulder is located approximately 560 kilometres to the north-east of Perth.

#### Environmental receptors:

The closest residential receptor to the premises is the town-site of South Boulder, located approximately 1.4 kilometres to the north.

The nearest commercial receptor is Total Waste Management located immediately to the north of the premises. The BP Kalgoorlie truck stop is located approximately 500 metres to the north-west of the premises.

The nearest major water natural water body is Hannan's Lake, which is a normally-dry ephemeral-lake located immediately to the east of the premises. Hannan's Lake is known to be used for recreational uses such as 4WD and pedestrian recreational purposes and may potentially be accessed by stock and/or wildlife.

Based on the 1:100,000 topographic map series, a drainage line (i.e. a blue line on the map sheet) is mapped as occurring in the southern third of the premises within the footprint of SBWWTP. This feature was altered by the construction of the SBWWTP. The drainage line drains to Hannan's Lake.

The premises is not located within a Public Drinking Water Supply Area (PDWSA). Hannan's Lake is not a scheduled PDWSA.

Groundwater monitoring results presented in the Licensee's 2015 Annual Environmental Report indicate that the depth to groundwater is approximately 0.5 to 2.6 metres below the ground surface.

Based on the 1:100,000 Kalgoorlie map series, the geology under the SBWWTP is mapped as predominantly Colluvium (map unit: Czc) with Quaternary Alluvium (map unit: Qa) occurring in the southern third and the north-eastern corner of the SBWWTP. Czc consists of extensive sheets of gravel, sand, silt and clay derived by weathering, erosion and transport of a number of rock types. Qa is confined to present day and recent (i.e. paleo-channels) drainage systems. The Qa unit consists of unconsolidated clay, silt, sand and gravel.

There are no registered Aboriginal sites within the premises boundary and Hannan's Lake is not a registered Aboriginal site (Aboriginal Inquiry System accessed on 31 May 2016).

There are no registered heritage sites within the premises boundary and Hannan's Lake is not a registered heritage site (State Heritage Register accessed on 31 May 2016).

#### Wastes received at the premises:

The SBWWTP receives the following waste types:

- Sewerage from the township of Kalgoorlie-Boulder via a reticulated sewerage system;
- Controlled Waste categories K130 (Sewage waste from the reticulated sewerage system) and K210 (Septage Wastes) by road transport. These wastes are received at a designated drop-off pit; and
- Condensate from adjacent premises, Total Waste Management (TWM), currently regulated by DER under licence L8572/2011/1.

#### Waste treatment processes:

Sewerage waste received via the reticulated sewerage system during normal operations is treated on the premises via an Intermittent Decant Extended Aeration (IDEA) activated sludge plant.



Treated sewerage waste is then either pumped from the balance tank offsite to the 'Old Boulder' holding ponds (located approximately 500 metres to the north of the premises) or treated further by Wastewater Ponding Lagoons 1, 2 and 3.

Controlled Waste categories K130 and K210 drain from the waste receival pit via pipework to Wastewater Ponding Lagoon 1. Reticulated sewerage received at the premises during a power failure or in excess of the hydraulic capacity of the IDEA plant (i.e. surge flows during storm events) are also directed to Wastewater Ponding Lagoon 1. Overflow from Wastewater Ponding Lagoon 1 is directed to Wastewater Ponding Lagoon 2 followed by Wastewater Ponding Lagoon 3. Effluent from Wastewater Ponding Lagoon 3 is either pumped offsite to the 'Old Boulder' holding ponds or is discharged via controlled release to Hannan's Lake.

Condensate from TWM is pumped via a pipeline to an evaporation pond and is disposed of via evaporation. This pond is hydraulically isolated from all other on-premises wastewater treatment processes and treatment ponds. Leachate from Sludge Lagoons 1, 2, 3 and 4 is also pumped to the TWM Storage Lagoon and disposed of via the process of evaporation.

Wastewater re-use and discharge:

Effluent from the 'Old Boulder' ponds (located off-site) is chlorinated and pumped to a number of holding ponds and tanks located within the City of Kalgoorlie-Boulder. Effluent stored within the city storage network is further chlorinated before use for the irrigation of lawns, parks and gardens. The treatment of effluent for the re-use for irrigation is regulated by the Department of Health under the *Health Act 1911* via a Recycled Water Scheme Approval (Approval Number: B28/0000).

There are two tanker filling stations within the City of Kalgoorlie-Boulder which are supplied by effluent derived from the SBWTTP. The re-use of effluent from these locations is required to be regulated by the Department of Health under an approval issued under the *Health Act 1911*.

Effluent may also be pumped from the outlet of the IDEA plant to an on-premises chlorination unit and made available for re-use by the mining industry for process water.

Treated wastewater in excess of demand discharges from Wastewater Ponding Lagoon 3 to Hannan's Lake. This discharge is not a routine method of wastewater disposal and is a disposal option of last resort.

Emissions:

The main emissions of concern from the premises were identified to be odours from the treatment and de-sludging processes, seepage of wastewater to groundwater from the base and sides of containment and treatment infrastructure and direct discharge of treated wastewater to the Hannan's Lake.

There is no recent history of odour complaints associated with the operation of this premises.

The premises has a history of shallow groundwater detected within the existing groundwater monitoring-bore network. There is a possibility that containment/treatment infrastructure may be leaking and influencing the local groundwater regime. This licence requires the Licensee to assess key site infrastructure to determine seepage rates. Depending upon the outcome of that assessment, onsite controls for seepage management may need to be reviewed.

Mining tenements, titles and leases:

The SBWWTP is located on Mining Leases M26/575 and M26/311 (Department of Mines and Petroleum database accessed on 31 May 2016).

Petroleum titles:



There are no Petroleum titles covering the footprint of the SBWWTP (Department of Mines and Petroleum database accessed on 31 May 2016).

This Licence is the successor to licence L8560/2011/2 and includes changes as required to reflect current template and licensing processes.



## 4 Decision table

All applications are assessed in line with the *Environmental Protection Act 1986*, the *Environmental Protection Regulations 1987* 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	Justification (including risk description & decision methodology where relevant)	Reference documents
Category	N/A	As per current licensing protocols, Category 61 was added to licence. This activity was permitted by Licence L8560/2011/1.	Licence template V2.9.
General conditions	L1.1.1 - L1.1.4	Standard conditions in Version 2.9 licence template. These conditions replace condition W4, W5 and W11 in Licence L8560/2011/1.	Licence template V2.9.
Premises operation	L1.2.1 L1.2.2	<p><u>Emission Description</u>  <i>Emission:</i> Wastewater  <i>Impact:</i> Potential spread of infectious agents or contaminants as a result of either overloading wastewater treatment infrastructure or receipt of unsuitable waste types.            Potential contamination of land that receives wastewater due to receipt of unsuitable waste types.            Potential contamination of surface water drainage systems as a result of loss of containment due to overloading of the wastewater treatment plant.  <i>Controls:</i> Onsite acceptance protocols. Offsite controls and audit protocols. Controlled Waste tracking legislation.</p> <p><u>Risk Assessment</u>  <i>Consequence:</i> Major  <i>Likelihood:</i> Likely  <i>Risk Rating:</i> High</p> <p><u>Regulatory Controls</u></p>	<p>Licence application documentation.</p> <p>Historic AERs.</p> <p><i>Environmental Protection (Controlled Waste) Regulations 2004</i></p>



DECISION TABLE			
Works Approval / Licence section	Condition number W = Works Approval L= Licence	Justification (including risk description & decision methodology where relevant)	Reference documents
		<p>Licence condition 1.2.2 outlines the waste types and maximum quantities permitted to be accepted at the premises. Managing waste types and quantities will mitigate risks associated with overloading of the system and acceptance of unsuitable waste types.</p> <p>Licence condition 1.2.1 requires an investigation into the cause of the exceedance any of the above limits. This will assist in identifying root causes of exceedances so that the potential for reoccurrences is limited.</p> <p><u>Residual Risk</u>  <i>Consequence:</i> Major  <i>Likelihood:</i> Unlikely  <i>Risk Rating:</i> Moderate</p>	
Premises operation	L1.2.3	<p><u>Emission Description</u>  <i>Emission:</i> Treated wastewater  <i>Impact:</i> Potential spread of disease as a result of unsuitable wastewater treatment processes.  <i>Controls:</i> Microbial treatment, settlement and pond treatment. Evaporation of TWM waste.</p> <p><u>Risk Assessment</u>  <i>Consequence:</i> Major  <i>Likelihood:</i> Likely  <i>Risk Rating:</i> High</p> <p><u>Regulatory Controls</u>            Licence condition 1.2.3 outlines the treatment processes required to be undertaken on each waste stream. Treatment is limited to the assessed wastewater treatment processes which are considered adequate to mitigate risks associated with unsuitable treatment processes. Stormwater surges in excess of the hydraulic capacity of the</p>	<p>Licence application documentation.</p> <p>Historic AERs.</p>





DECISION TABLE			
Works Approval / Licence section	Condition number W = Works Approval L= Licence	Justification (including risk description & decision methodology where relevant)	Reference documents
		<p>IDEA plant are required to be diverted to Wastewater Holding Pond 1 to ensure that the IDEA plant is not over-loaded.</p> <p><u>Residual Risk</u>  <i>Consequence:</i> Major  <i>Likelihood:</i> Unlikely  <i>Risk Rating:</i> Moderate</p>	
Premises operation	L1.2.4 L 4.1.1	<p><u>Emission Description</u>  <i>Emission:</i> Wastewater seepage to groundwater.  <i>Impact:</i> Death of vegetation due to rising groundwater. Contamination of groundwater.  <i>Controls:</i> Containment controls.</p> <p><u>Risk Assessment</u>  <i>Consequence:</i> Moderate  <i>Likelihood:</i> Likely  <i>Risk Rating:</i> High</p> <p><u>Regulatory Controls</u>            Licence condition 1.2.4 specifies the currently approved containment controls onsite.</p> <p>Licence condition 4.1.1 also requires the Licensee to undertake an assessment of the rate of leakage to groundwater to inform an assessment of the efficacy of the existing controls. Depending upon the outcome of the assessment additional containment controls may be required.</p> <p><u>Risk Assessment</u>  <i>Consequence:</i> Moderate  <i>Likelihood:</i> Likely  <i>Risk Rating:</i> High</p>	<p>Licence application documentation.</p> <p>Historic AERs.</p> <p><i>Environmental Protection (Controlled Waste) Regulations 2004</i></p>



DECISION TABLE			
Works Approval / Licence section	Condition number W = Works Approval L= Licence	Justification (including risk description & decision methodology where relevant)	Reference documents
Premises operation	L1.2.5 L1.2.6 L1.2.7	<p><u>Emission Description</u>  <i>Emission:</i> Wastewater  <i>Impact:</i> Contamination of surface water and land where spills occur. Potential impacts to human and animal health if contact with untreated wastewater occurs. Potential impacts to vegetation due to rising groundwater if treated wastewater discharges in an uncontrolled manner to Hannan's Lake (i.e. if wastewater continuously discharges).  <i>Controls:</i> Containment controls. Waste recovery protocols. Freeboard protocols. Discharge controls.</p> <p><u>Risk Assessment</u>  <i>Consequence:</i> Moderate  <i>Likelihood:</i> Likely  <i>Risk Rating:</i> High</p> <p><u>Regulatory Controls</u>            Licence condition 1.2.5 specifies the required pond management controls. This condition replaces condition W1 in Licence L8560/2011/1.             Licence condition 1.2.6 specifies spill recovery requirements.             Licence condition 1.2.7 specifies discharge requirements for the management of discharge to Hannan's Lake.             Condition W6 in Licence L8560/2011/1 was removed to reduce regulatory duplication because offsite management of irrigated wastewater is also regulated by the Department of Health under the <i>Health Act 1911</i> via a Recycled Water Scheme Approval (Approval Number: B28/0000) and the provisions of the Environmental Protection Act 1986.</p>	<p>Licence application documentation.</p> <p>Historic AERs.</p> <p><i>Health Act 1911</i></p> <p><i>Environmental Protection Act 1986</i></p>



DECISION TABLE			
Works Approval / Licence section	Condition number W = Works Approval L= Licence	Justification (including risk description & decision methodology where relevant)	Reference documents
		<p><u>Risk Assessment</u>  <i>Consequence:</i> Moderate  <i>Likelihood:</i> Unlikely  <i>Risk Rating:</i> Moderate</p>	
Premises operation	L1.2.8	<p><u>Emission Description</u>  <i>Emission:</i> Uncontrolled waste acceptance  <i>Impact:</i> Human health impacts from exposure to contaminated wastewater.  <i>Controls:</i> Site access controls.</p> <p><u>Risk Assessment</u>  <i>Consequence:</i> Extreme  <i>Likelihood:</i> Almost certain  <i>Risk Rating:</i> Extreme</p> <p><u>Regulatory Controls</u>            Licence condition 1.2.8 specifies site access protocols to prevent uncontrolled waste acceptance.</p> <p><u>Risk Assessment</u>  <i>Consequence:</i> Moderate  <i>Likelihood:</i> Possible  <i>Risk Rating:</i> Moderate</p>	<p>Licence application documentation.</p> <p>Historic AERs.</p> <p><i>Environmental Protection (Controlled Waste) Regulations 2004</i></p>
Premises operation	Conditions S1 and S2 of previous Licence (8560/2011/1)	<p><u>Emission Description</u>  <i>Emission:</i> Sludge. Odour  <i>Impact:</i> Human and animal health impacts from inappropriate disposal of sludge. Amenity impacts from emission of odour.  <i>Controls:</i> Sludge containment infrastructure. Separation distance to sensitive receptors. Regulation of sludge disposal by Department of Health.</p>	<p>Environmental Protection Act 1986.</p>



DECISION TABLE			
Works Approval / Licence section	Condition number W = Works Approval L= Licence	Justification (including risk description & decision methodology where relevant)	Reference documents
		<p><u>Risk Assessment</u> Consequence: Minor Likelihood: Rare Risk Rating: Low</p> <p><u>Regulatory Controls</u> Conditions S1 and S2 of the previous licence have not been carried over because disposal or reuse of sludge and biosolids is regulated under the general provisions of the <i>Environmental Protection Act 1986</i>, the <i>Environmental Protection (Unauthorised Discharges) Regulations 2004</i>, contaminated sites legislation and individual landfill licenses. These conditions are considered to be redundant for the purpose of this premises</p> <p><u>Risk Assessment</u> Consequence: Minor Likelihood: Rare Risk Rating: Low</p>	
<b>Emissions</b>	L2.1.1 L2.2.1 L2.2.2	<p><u>Emission Description</u> Emission: Treated wastewater to Hannan's Lake Impact: Human and animal health impacts from exposure to contaminated wastewater. Controls: Wastewater treatment. Wastewater monitoring.</p> <p><u>Risk Assessment</u> Consequence: Moderate Likelihood: Possible Risk Rating: Moderate</p> <p><u>Regulatory Controls</u></p>	<p>Licence application documentation.</p> <p>Historic AERs</p> <p>ANZECC 2000 guidelines</p>



DECISION TABLE			
Works Approval / Licence section	Condition number W = Works Approval L= Licence	Justification (including risk description & decision methodology where relevant)	Reference documents
		<p>Licence condition 2.1.1 requires any limit exceedances to be investigated. This condition replaces condition G1 in Licence L8560/2011/1. This will assist in identifying root causes of exceedances so that the potential for reoccurrences is limited.</p> <p>Licence conditions 2.2.1 and 2.2.2 specify discharge limits. Faecal Coliform, pH, BOD and TSS values are based on the ANZECC 2000 guidelines for a secondary contact exposure scenario.</p> <p>Discharge limits should be further reviewed after two years when sufficient discharge monitoring data is available at this location.</p> <p><u>Risk Assessment</u>  <i>Consequence:</i> Moderate  <i>Likelihood:</i> Unlikely  <i>Risk Rating:</i> Moderate</p>	
<b>Monitoring</b>	L3.1.1 L3.1.2 L3.1.3 L3.2.1 L3.3.1 L3.3.2 L3.4.1 L3.4.2 L3.5.1	<p>Licence conditions 3.1.1, 3.1.2, 3.1.3, 3.2.1, 3.3.1, 3.3.2, 3.4.2 and 3.5.1 outline the environmental monitoring requirements.</p> <p><u>Emission Description</u>  <i>Emission:</i> Wastewater (treated and untreated)  <i>Impact:</i> Human and animal health impacts from exposure to contaminated wastewater.  <i>Controls:</i> Wastewater monitoring. Groundwater monitoring.</p> <p><u>Risk Assessment</u>  <i>Consequence:</i> Major  <i>Likelihood:</i> Possible  <i>Risk Rating:</i> Moderate</p> <p><u>Regulatory Controls</u></p>	<p>Licence application documentation.</p> <p>Historic AERs</p>



DECISION TABLE			
Works Approval / Licence section	Condition number W = Works Approval L= Licence	Justification (including risk description & decision methodology where relevant)	Reference documents
		<p>Licence conditions 3.1.1, 3.1.2 and 3.1.3 specify the required monitoring standards to ensure a standardised approach to monitoring.</p> <p>Licence condition 3.2.1 requires the monitoring of a number of parameters for discharge to surface water. Results should be reviewed annually.</p> <p>Licence conditions 3.3.1 and 3.3.2 requires the monitoring of inputs and outputs. Results should be reviewed at least annually and compared to the capacity of the facility. This condition replaces condition W2 in Licence L8560/2011/1.</p> <p>Licence conditions 3.4.1 and 3.4.2 require that the process of wastewater treatment is monitored. Results should be reviewed at least annually with the view to identify potential inefficiencies. The BOD/COD ratio should be reviewed to detect potential toxic inflows into the wastewater treatment process. If toxic inflows are identified they should be investigated. These conditions replace conditions W3, W6 and W9 in Licence L8560/2011/1.</p> <p>Licence condition 3.5.1 requires the monitoring of ambient groundwater conditions. This condition replaces condition W10 in Licence L8560/2011/1.</p> <p><u>Risk Assessment</u>  <i>Consequence:</i> Moderate  <i>Likelihood:</i> Possible  <i>Risk Rating:</i> Moderate</p>	
Improvements	L4.1.1 (IR1) L4.1.1 (IR2)	<p>Licence conditions 4.1.1 (IR1) and 4.1.1 (IR2) require the Licensee to undertake an assessment of the rate of seepage from the main wastewater containment infrastructure on the premises.</p> <p><u>Emission Description</u>  <i>Emission:</i> Wastewater (treated and untreated)</p>	<p>Licence application documentation.</p> <p>Historic AERs.</p>



DECISION TABLE			
Works Approval / Licence section	Condition number W = Works Approval L= Licence	Justification (including risk description & decision methodology where relevant)	Reference documents
		<p><i>Impact:</i> Potential contamination of surface water and land if infiltrated wastewater re-surfaces. Potential impacts to vegetation due to rising groundwater. Potential contamination of groundwater potentially affecting the resource value and/or potential uses.</p> <p><i>Controls:</i> Groundwater monitoring. Clay lining to selected wastewater treatment infrastructure.</p> <p><u>Risk Assessment</u>  <i>Consequence:</i> Moderate  <i>Likelihood:</i> Almost certain  <i>Risk Rating:</i> High</p> <p><u>Regulatory Controls</u>            The premises has a history of shallow groundwater detected within the existing groundwater monitoring-bore network. There is a possibility that containment/treatment infrastructure may be leaking and influencing the local groundwater regime. Licence conditions 4.1.1 (IR1) and 4.1.1 (IR2) require the Licensee to undertake an assessment of the rate of seepage from the main wastewater containment infrastructure on the premises. Depending upon the outcome of that assessment, onsite controls for seepage management may need to be reviewed and potentially be upgraded. This condition replaces condition W8, W12 and W13 in Licence L8560/2011/1.</p> <p>Once the outcome of the seepage assessment is provided to DER, DER will require a review of onsite controls for seepage management to determine if controls are required to be upgraded.</p> <p><u>Risk Assessment</u>  <i>Consequence:</i> Moderate  <i>Likelihood:</i> Likely</p>	



DECISION TABLE			
Works Approval / Licence section	Condition number W = Works Approval L= Licence	Justification (including risk description & decision methodology where relevant)	Reference documents
		<i>Risk Rating: High</i>	
Improvements	L4.1.1 (IR3)	<p>Licence condition 4.1.1 (IR3) requires the Licensee to remove sludge stored outside of the designated containment infrastructure.</p> <p><u>Emission Description</u>  <i>Emission:</i> Leachate from sludge  <i>Impact:</i> Potential contamination of groundwater potentially affecting the resource value and/or potential uses. Potential impacts to vegetation due to contact with contaminated groundwater.  <i>Controls:</i> Groundwater monitoring. Designated sludge storage area.</p> <p><u>Risk Assessment</u>  <i>Consequence:</i> Moderate  <i>Likelihood:</i> Almost certain  <i>Risk Rating:</i> High</p> <p><u>Regulatory Controls</u>            The 2015 Annual Environmental Report identified an increasing trend in total nitrogen in a groundwater bore adjacent to an area utilised for the temporary storage of sludge outside of the designated sludge storage area. It is suspected that the increase in total nitrogen is a result of leachate from the stored sludge waste. Licence condition 4.1.1 (IR3) requires the Licensee to remove sludge stored outside of the designated containment infrastructure.</p> <p><u>Risk Assessment</u>  <i>Consequence:</i> Moderate  <i>Likelihood:</i> Unlikely  <i>Risk Rating:</i> Moderate</p>	<p>Licence application documentation.</p> <p>Historic AERs.</p>
Information	L5.1.1	Licence conditions L5.1.1 and L5.1.2 are standard information licence conditions to	Licence template





<b>DECISION TABLE</b>			
<b>Works Approval / Licence section</b>	<b>Condition number W = Works Approval L= Licence</b>	<b>Justification (including risk description &amp; decision methodology where relevant)</b>	<b>Reference documents</b>
	L5.1.2 L5.1.3 L5.2.1 L5.2.2 L5.3.1	<p>ensure that accurate information is recorded and an Annual Audit Compliance report is provided to DER. These conditions replace conditions G3 and G4 in Licence L8560/2011/1.</p> <p>Licence condition L5.1.3 requires the Licensee to implement a complaints management system to ensure that complaints are recorded and appropriately managed.</p> <p>Licence conditions L5.2.1, L5.2.2 and L5.3.1 outline the information that is required to be provided to DER to ensure that DER is appropriately informed in relation to onsite activities and assessment of associated environmental risks. Condition 5.3.1 replaces conditions G2(a), G2(b) and G2(c) in Licence L8560/2011/1.</p>	V2.9.
<b>Licence Duration</b>	N/A	The licence has been issued for 20 years in accordance with DER's Guidance Statement: Licence Duration, November 2014.	DER Guidance statement: Licence duration.



## 5 Advertisement and consultation table

Date	Event	Comments received/Notes	How comments were taken into consideration
30/05/2016	Application advertised in West Australian (or other relevant newspaper)	No comments received	N/A
17/06/2016	Draft sent to proponent	<p>Comments received 20/06/2016 as follows:</p> <p>Minor typographical changes.</p> <p>It was noted that stormwater surges to the wastewater treatment plant and wastewater received during power failure are accommodated by diverting excess hydraulic capacity to Ponding Lagoon 1.</p> <p>Clarification was required as to whether or not containment condition 1.2.4 applied to sludge covered by improvement condition 4.1.1</p>	<p>Typographical changes adopted.</p> <p>Licence was amended to accommodate stormwater surge by-pass and wastewater received during power failure to Ponding Lagoon 1.</p> <p>Sludge covered by condition 4.1.1 is not intended to be covered by condition 1.2.4. Clarification included in the revised licence.</p>



## 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