



## Application for Works Approval

### Part V Division 3 of the *Environmental Protection Act 1986*

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**Works Approval Number** W6775/2023/1

**Applicant** Department of Communities

**File number** DER2023/000068

**Premises** Yungngora Wastewater Treatment Plant  
Legal description –  
Part of Lot 255 on Deposited Plan 220190  
Crown Lease PL N-049848  
As defined by the coordinates in Schedule 2 of the works approval

**Date of report** 23 June 2023

**Decision** Works approval granted

**SENIOR ENVIRONMENTAL OFFICER  
WASTE INDUSTRIES  
REGULATORY SERVICES**

an officer delegated under section 20 of the *Environmental Protection Act 1986* (WA)

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## 1. Decision summary

This decision report documents the assessment of potential risks to the environment and public health from emissions and discharges during the construction and operation of the premises. As a result of this assessment, Works Approval W6775/2023/1 has been granted.

## 2. Scope of assessment

### 2.1 Regulatory framework

In completing the assessment documented in this decision report, the Department of Water and Environmental Regulation (the department; DWER) has considered and given due regard to its regulatory framework and relevant policy documents which are available at <https://dwer.wa.gov.au/regulatory-documents>.

### 2.2 Application summary and overview of premises

On 25 January 2023, the applicant submitted an application for a works approval to the department under section 54 of the *Environmental Protection Act 1986* (EP Act).

The application is to undertake construction works relating to a wastewater treatment plant (WWTP) at the premises. The premises is approximately 165 km southwest of Fitzroy Crossing.

The premises relates to a Category 54 sewage facility under Schedule 1 of the Environmental Protection Regulations 1987 (EP Regulations), with a maximum capacity of 150 m<sup>3</sup>/day which is defined in Works Approval W6775/2023/1. The infrastructure and equipment relating to the premises category and any associated activities which the department has considered in line with *Guideline: Risk Assessments* (DWER 2020) are outlined in Works Approval W6775/2023/1.

The applicant had previously been granted a works approval (W6106/2017/1) for the construction of a WWTP at the premises on 23 March 2018. This works approval expired on 29 December 2022 prior to commencement of the works.

An existing unlicensed WWTP with a design capacity of 108 m<sup>3</sup>/day is located on the premises, however the size of the plant is insufficient to treat current inflow volumes and overflow into the environment is a common occurrence. A condition assessment in 2017 also found the WWTP to be in very poor condition and requiring upgrade.

#### 2.2.1 Proposed works

The proposed works will replace the existing WWTP and increase the capacity of the premises to 150 m<sup>3</sup>/day. The capacity increase is to serve the expected population in 2030 of 465 persons and provide capability to contain a 1 in 10-year 72-hour duration annual recurrence internal (ARI) rainfall event where an operational freeboard height of 500 mm is maintained prior to the event. The works will involve the following:

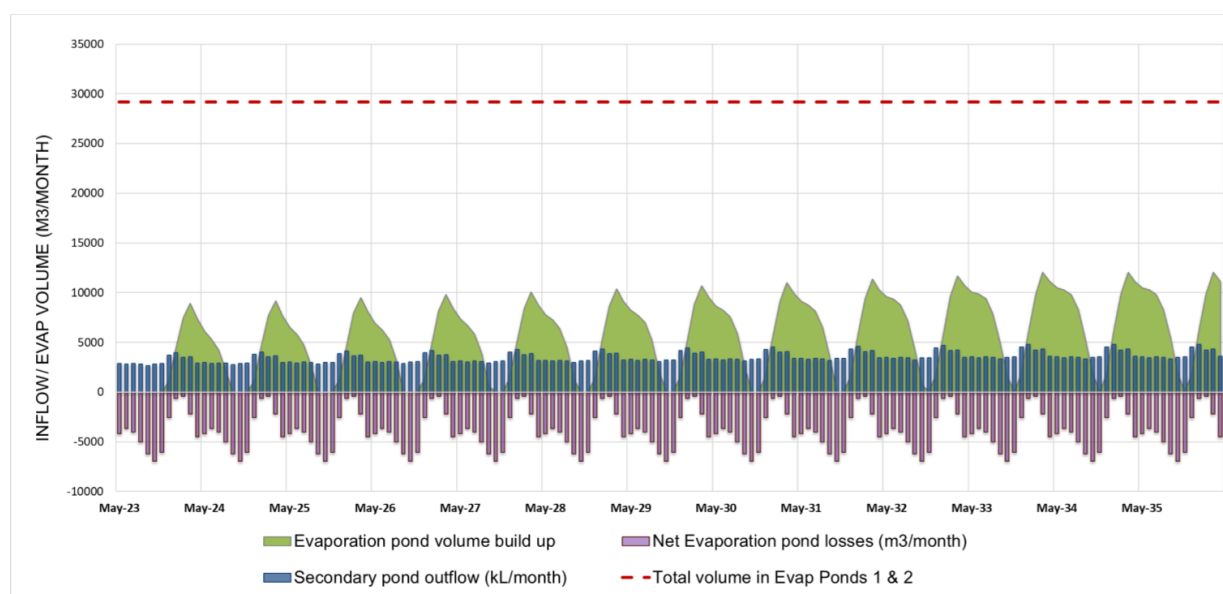
- Construction of two HDPE lined primary ponds with a 1.8 m depth, that will operate in parallel;
- Construction of one HDPE lined secondary pond with a 1.5 m depth;
- Construction of two evaporation ponds with a 1.0 m depth;
- Construction of a concrete overflow weir at evaporation pond 2 designed to contain rainfall up to a 1 in 10-year 72-hour ARI rainfall event. Discharge from the weir would flow towards the Fitzroy River and away from the community;
- Construction of a septage drying bed with underdrainage to the primary ponds; and
- Construction of an access track to the premises and perimeter fencing.

The new ponds will be constructed to wrap around the existing WWTP, which will remain in operation during the works until the new WWTP has been completed. The application does not propose decommissioning the existing WWTP but states a separate works approval will be completed when the existing pond are decommissioned. The intent is to convert the existing ponds into the final evaporation pond.

## 2.2.2 Water balance

A monthly long-term water balance was completed for the new WWTP that accounted for current inflow volumes and projected population increases. The water balance considered a total pond volume of 32,020 m<sup>3</sup> with an evaporation area of 33,415 m<sup>2</sup>.

The long-term water balance determined that an evaporation area of 31,128 m<sup>2</sup> was required to evaporate annual inflow volumes and that it was highly unlikely that the full storage volume of the new WWTP will be utilised. A summary of the model is contained in Figure 1 below.



**Figure 1: Long-term water balance model for the new WWTP**

## 3. Risk assessment

The department assesses the risks of emissions from prescribed premises and identifies the potential source, pathway and impact to receptors in accordance with the *Guideline: Risk Assessments* (DWER 2020).

To establish a risk event there must be an emission, a receptor which may be exposed to that emission through an identified actual or likely pathway, and a potential adverse effect to the receptor from exposure to that emission.

### 3.1 Source-pathways and receptors

#### 3.1.1 Emissions and controls

The key emissions and associated actual or likely pathway during premises construction and operation which have been considered in this decision report are detailed in Table 1 below. Table 1 also details the control measures the applicant has proposed to assist in controlling these emissions, where necessary.

**Table 1: Proposed applicant controls**

Emission	Sources	Potential pathways	Proposed controls
<b>Construction</b>			
Dust	Vehicle movement on unsealed surfaces. Earth moving and stockpiling.	Air / windborne pathway	None provided
Noise	Vehicle movement on unsealed surfaces. Machinery movement and operation.	Air / windborne pathway	None provided
<b>Operation</b>			
Dust	Vehicle movement on unsealed surfaces	Air / windborne pathway	None provided
Noise	Vehicle movement on unsealed surfaces		None provided
Sewage and partially treated sewage containing contaminants (nutrients, metals, pathogens, PoPs)  Leachate from sewage sludge	Acceptance and treatment of sewage	Direct discharge to land and water causing impacts to terrestrial and aquatic ecosystems	<ul style="list-style-type: none"> <li>• WWTP design includes evaporation ponds and no discharge to land or water under normal operating conditions.</li> <li>• WWTP design caters for the projected population growth.</li> <li>• WWTP designed to contain up to 1:10 72 hr duration ARI rainfall event.</li> <li>• Overflow weir at evaporation pond 2 to direct wastewater away from the local community.</li> <li>• Ponds designed to be operated at a 500 mm freeboard.</li> </ul>
		Seepage through soil to groundwater causing impacts to groundwater quality	<ul style="list-style-type: none"> <li>• The primary and secondary ponds will be lined with a HDPE liner.</li> <li>• Evaporation ponds will be lined on internal slopes.</li> <li>• Geotechnical testing of soils at the WWTP have shown average permeabilities of <math>5.41 \times 10^{-11}</math> m/s (2016, 3 sites) and <math>2.16 \times 10^{-9}</math> m/s (2018, 3 sites).</li> </ul>
Odour	Normal and abnormal operations of the WWTP	Air/windborne pathway	<ul style="list-style-type: none"> <li>• WWTP located over 500 m from residences.</li> </ul>

### 3.1.2 Receptors

In accordance with the *Guideline: Risk Assessment* (DWER 2020), the Delegated Officer has excluded the applicant's employees, visitors, and contractors from its assessment. Protection of these parties often involves different exposure risks and prevention strategies, and is provided for under other state legislation.

Table 2 and Figure 2 below provides a summary of potential human and environmental receptors that may be impacted as a result of activities upon or emission and discharges from the prescribed premises (*Guideline: Environmental Siting* (DWER 2020)).

**Table 2: Sensitive human and environmental receptors and distance from prescribed activity**

Receptors	Distance from prescribed activity
<b>Human receptors</b>	
Residential premises	600 m southwest from the premises boundary
School	500 m southwest from the premises boundary
<b>Environmental receptors</b>	
<b>Major watercourses non perennial –</b> Fitzroy River	1.36 km south from the premises boundary and 1.46 km west from the premises boundary
<b>Area subject to Inundation –</b> Fitzroy floodplain	1.4 km west from the premises boundary
<b>Underlying groundwater –</b> Surficial alluvial aquifer Noonkanbah Formation aquifer Poole Sandstone aquifer	<p>Seasonal groundwater levels within the alluvial aquifer underlying the premises are not available.</p> <p>Two potable drinking water bores used by the community are located approximately 900 m southwest of the premises. These bores are screened between approximately 398-497 mbgl within the Poole Sandstone aquifer (GG 2019).</p> <p>The Pool Sandstone is confined by the overlying Noonkanbah Formation which acts as an aquitard (DoM 1992). The Noonkanbah Formation is approximately 380 m thick in the area, lying between 20-400 mbgl (GG 2019). The Noonkanbah Formation is overlain by approximately 20 m of quaternary alluvial material (GG 2019, Harrington <i>et al.</i> 2011, Harrington and Harrington 2015, Lindsay and Commander 2005).</p> <p>The direction of groundwater flow has not been determined but is likely to be similar to surface topography with flows directing to the south and southwest towards the Fitzroy River (Harrington <i>et al.</i> 2011, Harrington and Harrington 2015, Lindsay and Commander 2005).</p>





**Figure 2: Premises siting**

## 3.2 Risk ratings

Risk ratings have been assessed in accordance with the *Guideline: Risk Assessments* (DWER 2020) for each identified emission source and takes into account potential source-pathway and receptor linkages as identified in Section 3.1. Where linkages are in-complete they have not been considered further in the risk assessment.

Where the applicant has proposed mitigation measures/controls (as detailed in Section 3.1), these have been considered when determining the final risk rating. Where the Delegated Officer considers the applicant's proposed controls to be critical to maintaining an acceptable level of risk, these will be incorporated into the works approval as regulatory controls.

Additional regulatory controls may be imposed where the applicant's controls are not deemed sufficient. Where this is the case the need for additional controls will be documented and justified in Table 3.

Works Approval W6775/2023/1 that accompanies this decision report authorises construction and time-limited operations. The conditions in the issued works approval, as outlined in Table 3 have been determined in accordance with *Guidance Statement: Setting Conditions* (DER 2015).

A licence is required following the time-limited operational phase authorised under the works approval to authorise emissions associated with the ongoing operation of the premises i.e. sewage treatment activities. A risk assessment for the operational phase has been included in this decision report, however licence conditions will not be finalised until the department assesses the licence application.

**Table 3: Risk assessment of potential emissions and discharges from the premises during construction and operation**

Risk events					Risk rating <sup>1</sup> C = consequence L = likelihood	Applicant controls sufficient?	Conditions <sup>2</sup> of works approval	Justification for additional regulatory controls
Sources / activities	Potential emission	Potential pathways and impact	Receptors	Applicant controls				
Construction								
Construction of WWTP	Dust	Air / windborne pathway causing impacts to health and amenity	Residences 600 m southeast	Refer to Section 3.1.1	C = Minor L = Rare <b>Low Risk</b>	Y	Nil	The Delegated Officer has considered the scale of the works and the separation distance between the source and receptors as indicating that the risk of dust emission impacts is not foreseeable.
	Noise			Refer to Section 3.1.1	C = Minor L = Rare <b>Low Risk</b>	Y	Nil	Noise emissions are adequately regulated under the Environmental Protection (Noise) Regulations 1997.
Operation (including time-limited-operations operations)								
Operation of WWTP  Pond desludging and sludge drying	Dust	Air/windborne pathway causing impacts to health and amenity	Residences 600 m southeast	Refer to Section 3.1.1	C = Minor L = Rare <b>Low Risk</b>	Y	Nil	The Delegated Officer considers the separation distance between the source and receptors as adequate to inform the risk of dust emissions as not foreseeable.
	Noise	Air / windborne pathway causing impacts to health and amenity	Residences 600 m southeast	Refer to Section 3.1.1	C = Minor L = Rare <b>Low Risk</b>	Y	Nil	There will only be very limited access to the WWTP so vehicle movement will be restricted and infrequent. The WWTP is a pond system with minimal mechanical components.  Noise emissions are adequately regulated under the Environmental Protection (Noise) Regulations 1997.

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Risk events					Risk rating <sup>1</sup> C = consequence L = likelihood	Applicant controls sufficient?	Conditions <sup>2</sup> of works approval	Justification for additional regulatory controls
Sources / activities	Potential emission	Potential pathways and impact	Receptors	Applicant controls				
	Sewage and partially treated sewage containing contaminants (nutrients, metals, pathogens, PoPs) Leachate from sewage sludge	Direct discharge to land and water causing impacts to terrestrial and aquatic ecosystems	Vegetation adjacent to discharge area Fitzroy River	Refer to Section 3.1.1	C = Moderate L = Unlikely <b>Medium Risk</b>	Y	Table 1: Row 1(a)(b)(g)(h)(i)(j), 2(b)(c), 3(b), 4(b) Table 2: Row 1, 2(b)(c), 3(b), 4(b), 5(b)	The proposed WWTP design with no operational discharge to land or water and water balance results demonstrate that the applicant's controls are sufficient. These key design controls have been specified in the works approval as regulatory requirements.
		Seepage through soil to groundwater causing impacts to groundwater quality and areas of potential groundwater discharge	Groundwater dependent ecosystems Subterranean fauna Fitzroy River	Refer to Section 3.1.1	C = Moderate L = Unlikely <b>Medium Risk</b>	N	Table 1: Row 1(c)(d) Table 2: Row 1, 2(b)(c), 3(b), 4(b), 5(b) <b><u>Table 1: Row 1(e)(f), 2(a), 3(a), 4(a), 5(a)</u></b> <b><u>Table 2: Row 2(a), 3(a), 4(a), 5(a)</u></b> <b><u>Condition 2, 3, 5</u></b> <b><u>Schedule 3</u></b> <b><u>Schedule 4</u></b>	The Delegated Officer considers that the applicant's proposed controls are generally sufficient, however additional regulatory controls are required due to the applicant not providing detailed liner technical specifications and a Construction Quality Assurance Plan for the works.  The Delegated Officer has determined to specify the minimum requirements and quality assurance that must be undertaken for the works as regulatory conditions.
	Odour	Air / windborne pathway causing impacts to amenity	Residential premises 600 m southwest School 500 m southeast	Refer to Section 3.1.1	C = Minor L = Unlikely <b>Medium Risk</b>	Y	Nil	Based on the design of the plant and separation distance between receptors, the Delegated Officer considers that odour emission impacts will probably not occur in most circumstances.

Note 1: Consequence ratings, likelihood ratings and risk descriptions are detailed in the *Guideline: Risk Assessments* (DWER 2020).

Note 2: Proposed applicant controls are depicted by standard text. **Bold and underline text** depicts additional regulatory controls imposed by department.

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IR-T13 Decision report template (short) v3.0 (May 2021)

## 4. Consultation

Table 4 provides a summary of the consultation undertaken by the department.

**Table 4: Consultation**

Consultation method	Comments received	Department response
Application advertised on the department's website on 10 February 2023	None received	N/A
Shire of Derby West Kimberly advised of proposal on 10 February 2023	None received	N/A
Department of Health (DoH) advised of proposal on 10 February 2023	DoH provided the following comments on 28 February 2023:  1. The ponds are required to be engineer certified for structural integrity, detailing materials used for banks, linings, gradients and designed for peak loadings with adequate freeboard for storm events where effluent overflow into the environment is minimised as per industry practice and certification;	It is noted that the application has been signed by a certified engineer.  Conditions 1 and 3 of the works approval set out the design and construction standards required.  Conditions in the works approval will also require the completed works to be engineer certified through the submission of compliance and construction quality assurance reports.
	2. The pond/s design needs to accommodate storm events to prevent ingress of stormwater into the ponds and prevent stormwater damage to the structure of the ponds. As extreme global weather events become increasingly frequent, the department would like the standard build design of a 1:10 ARI rainfall event to be reconsidered to a higher classification to accommodate such events;	The ponds are designed to accommodate a 1 in 10-year 72-hour duration ARI event.
	3. The sizing of the ponds need to be based on the prescribed volumes as per <i>Health (Treatment of Sewage and Disposal of Effluent and Liquid Wastes) Regulations, 1974</i> , and Supplement to Regulation 29 and Schedule 9 - Wastewater system loading rates (health.wa.gov.au);	The application documents indicate that the primary and secondary ponds meet the dimensions for a waste stabilisation pond listed in r.50(1)(f) of the Health (Treatment of Sewage and Disposal of Effluent and Liquid Wastes) Regulations 1974. Other volume measurements do not seem to apply to this system.  A long-term water balance was provided that shows the WWTP ponds are adequately sized to accommodate the wastewater from the townsite.

Consultation method	Comments received	Department response
	4. The ponds should be located a distance away from sensitive land users and accommodation areas where they do not pose a public health nuisance. It is recommended these are located a minimum of 500 metres away;	The WWTP is located 500 m away from the closest residence in the Yungngora aboriginal community.
	5. The perimeter of the ponds requires a 1.8 metre fence with lockable gates to prevent unauthorised access;	It is noted that a fence is detailed in the application documents. Specifications of the fence have been included as condition requirements.
	6. Ensure disposal areas including ponds are a minimum of 100 metres away from natural waterways or areas that are prone to seasonal and/or peak stormwater runoff;	The Fitzroy River is located 1.36 km to the west.
	7. Ensure adequate maintenance is performed for the life of the ponds.	Maintenance for the full life of the ponds is not within the scope of a works approval. Relevant conditions will be included in the licence issued after the completion of the works.
Yungngora Aboriginal Community advised of proposal on 10 February 2023	None received	N/A
Applicant was provided with draft documents on 9 May 2023	The department received comments from the applicant on 23 May 2023. Refer to Appendix 1.	Refer to Appendix 1.
Applicant was provided with second draft documents on 13 June 2023	The applicant replied on 19 June 2023 advising they had no comments and waiving the remainder of the comment period.	N/A

## 5. Conclusion

Based on the assessment in this decision report, the delegated officer has determined that a be granted, subject to conditions commensurate with the determined controls and necessary for administration and reporting requirements.

## References

1. Department of Environment Regulation (DER) 2015, *Guidance Statement: Setting Conditions*, Perth, Western Australia.
2. Department of Mines (DoM) 1992, *Explanatory notes on the Derby 1:250 000 hydrogeological sheet*, Perth, Western Australia.
3. Department of Water and Environmental Regulation (DWER) 2020, *Guideline: Environmental Siting*, Perth, Western Australia.
4. DWER 2020, *Guideline: Risk Assessments*, Perth, Western Australia.
5. Global Groundwater (GG) 2019, *Yungngora 2018 drilling bore completion report*, unpublished report for the Department of Communities.
6. Harrington G.A., Stelfox L., Gardner W.P., Davies P., Doble, R. and Cook, P.G. 2011. *Surface water – groundwater interactions in the lower Fitzroy River, Western Australia*, CSIRO: Water for a Healthy Country National Research Flagship.
7. Harrington G.A. and Harrington N.M. 2015, *Lower Fitzroy River Groundwater Review*. report prepared by Innovative Groundwater Solutions for Department of Water, Perth, Western Australia.
8. Lindsay R.P and Commander D.P. 2005, *Hydrogeological assessment of the Fitzroy alluvium*, Department of Water Hydrogeological Record Series HG 16, Perth, Western Australia.

## Appendix 1: Summary of applicant's comments on risk assessment and draft conditions

Condition	Summary of applicant's comment	Department's response
Decision Report, Table 2 – Environmental receptor, surficial alluvium aquifer	Decision Report, Table 1 accurately details bullet 1 lining of treatment ponds, and bullet 3 geotechnical testing of local impermeable soils (no surficial aquifer encountered). Decision Report, Table 1 refers to submitted drinking water bore log and details 20m quaternary alluvial material; assumption was made that a surficial aquifer flows in alignment with topography to the Fitzroy River. Refer above clay testing.  (noted for below comments)	Noted.  Supporting information suggests that geotechnical testing was only completed to a depth of 1.5 mBGL, which does not preclude a surficial aquifer being present in the alluvium.
Decision Report, Table 3 – Operation (p7) Sewage emission  Definitions for ASTM and GRI standards	<i>... due to the applicant not providing the detailed liner technical specifications and a Construction Quality Assurance Plan.</i> <i>The Delegated Officer has determined to specify the minimum specifications and quality assurance...</i>  Draft Works Approval conditions 2 and 3 detail submission of Construction Quality Assurance Plan prior to construction. It is pre-emptive for Delegated Officer to write specifications in lieu of future Plan submission. <b>Request deletion of specifications and refer to Works Approval condition 2 &amp; 3.</b>  <b>Is DWER mandating use of ASTM and GRI standards via the Works Approval?</b>	No change.  A technical specification and CQA plan were not provided with the application, resulting in the department being unable to determine if proposed measures were adequate or to seek explanation for departures from common practice.  As a technical speciation and CQA plan were not provided, the Delegated Officer has provided ASTM and GRI standards to set a minimum requirements in the absence of project specific information.  If an alternative construction standard is proposed, please submit further detail for assessment.
DRAFT W6755 Table 1	1 (c) embankment slope is a civil engineering design function dependent on the material of construction. <b>The embankment slope does not effect water containment and is not relevant to the W6775.</b>	No change.  The condition reflects details provided by the applicant in supporting documentation.  Embankment slope indirectly effects water containment, as the degree of embankment slope impacts the stability and likelihood of slippage for the installed liner material.
	1 (d) <b>delete surficial aquifer</b> (not relevant); clearance to groundwater accepted.	Wording revised to <i>the maximum wet season water table in the alluvial aquifer.</i>  As previously noted, the geotechnical testing undertaken does not preclude a surficial aquifer being present in the alluvium as geotechnical testing appears to have only been completed to a depth of 1.5 mBGL. Existing regional information suggests that an alluvial aquifer may be present in the area.  A 2 m separation distance allows the attenuation of nutrients prior to any seepage to potential groundwater. The separation distance also provides protection to the integrity of the liner from upward groundwater pressure.
	1 (e) Lining of treatment ponds according to DWER WQPN 26 <i>Liners for containing pollutants using synthetic membranes</i> has been applied for minimum permeability $k < 1 \times 10^{-9}$ m/s. <b>Should W6755 detail GRI specifications?</b>	This requirement has been moved to Rows 2 and 3 so that it only applies to the HDPE liner installed in the primary and secondary ponds.  The current condition uses GRI specifications as it is considered the most up to date set of minimum standards for manufactured HDPE material. References to GRI standards is common practice in contemporary works approvals.
	1 (f) subgrade preparation is a function of DWER WQPN 26 minimum permeability $K < 1 \times 10^{-9}$ m/s. <b>Should W6775 detail subgrade specifications?</b>	This requirement has been moved to Rows 2 and 3 so that it only applies to the HDPE liner installed in the primary and secondary ponds.  WQPN 26 requires <i>Clean soil fill, well-graded and compacted to provide a firm unyielding foundation sufficient to permit the movement of vehicles and welding equipment without causing rutting or other deleterious effects.</i> In the absence of any associated methodology with the application, the moisture condition and compaction are considered equivalent to the details listed in the WQPN 26.
	1 (j) all pipework in the treatment plant is gravity flow and not pressure flow – <b>hydraulic pressure testing of pipes is not applicable.</b>	Condition partially amended to <i>must be tested and visually inspected to confirm they are free from leaks and defects prior to use.</i>

Condition	Summary of applicant's comment	Department's response
	2 (a), 3 (a) DWER WQPN 26 <i>Liners for containing pollutants using synthetic membranes</i> has been applied for minimum permeability $k < 1 \times 10^{-9}$ m/s. <b>Should the regulator be specifying liner thickness or permeability only?</b>  2 (a), 3 (a) DWER WQPN 26 specifies minimum permeability $k < 1 \times 10^{-9}$ m/s. Draft W6775 specifies $k < 1 \times 10^{-11}$ m/s which may have been inadvertently mixed up with in situ soil permeability testing and $10^{-11}$ m/s is not applicable. <b>Please detail minimum permeability <math>k &lt; 1 \times 10^{-9}</math> m/s according to WQPN 26.</b>	Noted and amended.  Conditions have been changed to reflect the minimum liner thickness of 1.5 mm as stated in the application supporting documentation and the minimum permeability stated in WQPN 26. The minimum permeability stated in WQPN 26 is less than $2 \times 10^{-10}$ m/s.  Liner thickness and permeability are key requirements to be listed together as they effect the rate of seepage that will occur through the liner.
	4 (a) the internal evaporation pond liner on the embankments is to prevent vegetation growth to protect embankment condition. <b>The permeability requirement and liner thickness are not relevant to evaporation ponds</b> for the treated effluent which meets ANZECC 1997 guideline treated effluent quality for discharge to land.	Condition amended.  Table 1 and Table 2 have has been amended to remove reference to thickness and permeability.
	4 (b) elevation or depth of balancing pipework is not low as operators have requested sequential operation of the evaporation ponds and low installation risks blockage. <b>Please check condition relevance / requirement.</b>	Condition amended.  The condition reflected details of the application documents which proposed simultaneously operating the ponds.
DRAFT W6755 Table 1	5. Septage drying bed lining to be <b>geosynthetic clay liner (GCL) with minimum permeability <math>k &lt; 1 \times 10^{-9}</math> m/s</b> in accordance with WQPN 26. <b>Liner thickness is not applicable to GCL.</b>	Condition updated to reflect WQPN 26.  The minimum permeability stated in WQPN 26 of less than $2 \times 10^{-10}$ m/s has been listed.
DRAFT W6755 condition 5	If above terms are amended, condition 5 will amend to match.	Some terms in condition 5 amended.  For clarity, the Delegated Officer has changed reference throughout the works approval from <i>specifications</i> to <i>minimum requirement(s)</i> .
DRAFT W6755 conditions 6, 7, 8, Table 2, 9, 10, 11	Time Limited Operations were removed from the new application.  The WWTP has been redesigned to enable continued operation of the existing WWTP until the new ponds are operational with the purpose of avoiding need for TLO.  DWER may have included conditions in lieu of License at completion of Works Approval (not determined for Aboriginal Communities / Dept of Communities, Housing).  <b>Request deletion of TLO.</b>	Noted.  A licence will be required to authorise emissions and discharges during operation of the new WWTP.  Time limited operational conditions allows operation of the new WWTP to occur while the licence is being applied for and granted for the new WWTP. If the conditions are removed as requested, the new WWTP should not be operated until a licence has been granted, as there will be no authorisation for emissions and discharges from the new WWTP.  The TLO conditions have been retained in the second draft but can be removed if confirmed as not being required.
Schedule 3, including Table 6  Schedule 4, including Table 7	The table is excerpt from the technical specifications for the project. (actually these specifications are from a different project in the region).  Is the regulator authorised to write technical specifications in Works Approval conditions? This could make DWER legally liable (professional indemnity) for the specifications?  <b>Request removal of Schedule 3 and Schedule 4, and refer to regulators WQPN 26 for containment specifications.</b>	Schedules retained and updated to apply only to the primary and secondary ponds. HDPE panel overlaps changed to minimum 100 mm.  These requirements are not derived from the technical specifications for the project as one was not provided with the application. The requirements have been derived from the GRI GM13, conditions used in other works approvals for Category 54 WWTPs and in the absence of other suitable guidance, HDPE liner requirements for leachate ponds in the <i>Victoria EPA Best practice environmental management: Siting, design, operation and rehabilitation of landfills</i> . WQPN 26 does not contain sufficient detail regarding installation and CQA requirements for a liner and was not written as specific guidance for applications under Part V of the <i>Environmental Protection Act 1986</i> .  The general power to execute conditions on a works approval or licence is set out in Section 62 of the EP Act, which provides:  <i>A works approval or licence may be granted subject to such conditions as the CEO considers to be necessary or convenient for the purposes of this Act relating to the prevention, control, abatement or mitigation of pollution or environmental harm.</i>  Schedule 3 and 4 are considered necessary by the CEO, through delegation, for the prevention of pollution or environmental harm caused by the seepage of sewage through an inadequately installed liner.  The conditions and schedules of the works approval set a framework of minimum requirements that must be met or demonstrated to ensure that the ponds have been appropriately constructed and lined. They have been

Condition	Summary of applicant's comment	Department's response
		<p>included in the absence of any similar information being provided by the applicant for assessment. The conditions and schedules should not be considered a comprehensive technical specification.</p> <p>If the applicant considers schedules 3 and 4 are not considered to apply or be necessary, please provide detailed reasoning as to why and include the Technical Specification and CQA Plan for assessment. The works approval can then be aligned with the key aspects of the project specific technical specification and CQA Plan.</p> <p>If the intent it to create the Technical Specification and CQA Plan following granting of the Works Approval, the applicant can apply for an amendment to remove or change the minimum requirements by providing justification for the removal or alternative measures, along with the Technical Specification and CQA Plan for the works.</p>



## Appendix 2: Application validation summary

SECTION 1: APPLICATION SUMMARY					
<b>Application type</b>					
Works approval	<input checked="" type="checkbox"/>				
Licence	<input type="checkbox"/>	Relevant works approval number:		None	<input type="checkbox"/>
		Has the works approval been complied with?		Yes <input type="checkbox"/>	No <input type="checkbox"/>
		Has time limited operations under the works approval demonstrated acceptable operations?		Yes <input type="checkbox"/>	No <input type="checkbox"/> N/A <input type="checkbox"/>
		Environmental Compliance Report / Critical Containment Infrastructure Report submitted?		Yes <input type="checkbox"/>	No <input type="checkbox"/>
		Date Report received:			
Renewal	<input type="checkbox"/>	Current licence number:			
Amendment to works approval	<input type="checkbox"/>	Current works approval number:			
Amendment to licence	<input type="checkbox"/>	Current licence number:			
		Relevant works approval number:		N/A	<input type="checkbox"/>
Registration	<input type="checkbox"/>	Current works approval number:		None	<input type="checkbox"/>
Date application received		25 January 2022			
<b>Applicant and Premises details</b>					
Applicant name/s (full legal name/s)		Department of Communities			
Premises name		Yungngora WWTP			
Premises location		Lot 255 on Deposited Plan 220190 Yungngora Aboriginal Community			
Local Government Authority		Shire of Derby West Kimberley			
<b>Application documents</b>					
HPCM file reference number:		DER2023/000068			
Key application documents (additional to application form):		Application Form Supporting Documents			
<b>Scope of application/assessment</b>					
Summary of proposed activities or changes to existing operations.		Works approval Construction of WWTP – WWTP was proposed to be constructed under W6106/2017/1 but W6106 Expired prior to commencement. This is a new Works Approval Application with a different WWTP configuration to W6106 – back to 1 Secondary pond.			
<b>Category number/s (activities that cause the premises to become prescribed premises)</b>					
<b>Table 1: Prescribed premises categories</b>					
<b>Prescribed premises category and description</b>	<b>Assessed production or design capacity</b>	<b>Proposed changes to the production or design capacity (amendments only)</b>			
Category 54: Sewage facility	150 m <sup>3</sup> /day				

Has the applicant referred, or do they intend to refer, their proposal to the EPA under Part IV of the EP Act as a significant proposal?	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"/>
Does the applicant hold any existing Part IV Ministerial Statements relevant to the application?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Ministerial statement No: EPA Report No:
Has the proposal been referred and/or assessed under the EPBC Act?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Reference No:
Has the applicant demonstrated occupancy (proof of occupier status)?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Certificate of title <input type="checkbox"/> General lease <input type="checkbox"/> Expiry: Mining lease / tenement <input type="checkbox"/> Expiry: Other evidence <input type="checkbox"/> Expiry:
Has the applicant obtained all relevant planning approvals?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/>	Approval: Expiry date: If N/A explain why?
Has the applicant applied for, or have an existing EP Act clearing permit in relation to this proposal?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	CPS No: Applied for an Exemption under s4.14. W6106 had been granted an exemption under Sch 6 c2 as per emails (A1577175 and A1577097).
Has the applicant applied for, or have an existing CAWS Act clearing licence in relation to this proposal?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Application reference No: Licence/permit No:
Has the applicant applied for, or have an existing RIWI Act licence or permit in relation to this proposal?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Application reference No: Licence/permit No: Not required
Does the proposal involve a discharge of waste into a designated area (as defined in section 57 of the EP Act)?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Name: N/A Type: Proclaimed Groundwater Area/Surface Water Area Has Regulatory Services (Water) been consulted? Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/> Regional office: Swan Avon / Mid-West Gascoyne / Kwinana Peel / North West / South West / Goldfields / South Coast
Is the Premises situated in a Public Drinking Water Source Area (PDWSA)?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Name: N/A Priority: P1 / P2 / P3 / N/A Are the proposed activities/ landuse compatible with the PDWSA (refer to <a href="#">WQPN 25</a> )? Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/>

Is the Premises subject to any other Acts or subsidiary regulations (e.g. <i>Dangerous Goods Safety Act 2004</i> , <i>Environmental Protection (Controlled Waste) Regulations 2004</i> , <i>State Agreement Act xxxx</i> )	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	If Yes include details here.
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, e.g. Site is subject to SO <sub>2</sub> requirements of Kwinana EPP.
Is the Premises a known or suspected contaminated site under the <i>Contaminated Sites Act 2003</i> ?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	If Yes include details here. Classification: N/A Date of classification: N/A