Amendment Report

Application for Licence Amendment

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

Licence Number	L8807/2013/1
Licence Holder	Rottnest Island Authority
File Number	ILS2013/000004-1
Premises	Rottnest Island Wastewater Treatment Plant Kings Way, The Basin ROTTNEST ISLAND WA 6160 Legal description – Part of Lot 10976 on Plan 216860 Certificate of Title Volume 3096 Folio 976 As defined by the coordinates in Schedule 2 of the Revised Licence
Date of Report	15 December 2021
Decision	Revised licence granted

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MANAGER WASTE INDUSTRIES
REGULATORY SERVICES
an officer delegated under section 20 of the *Environmental Protection Act 1986* (WA)

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1. Decision summary

Licence L8807/2013/1 is held by the Rottnest Island Authority (Licence Holder) for the Rottnest Island Wastewater Treatment Plant (the Premises), located at The Basin, Rottnest Island.

This Amendment Report documents the assessment of potential risks to the environment and public health from proposed changes to the emissions and discharges during the construction of the proposed works and operation of the Premises. As a result of this assessment, Revised Licence L8807/2013/1 has been granted. The Revised Licence issued as a result of this amendment supersedes the existing Licence previously granted in relation to the Premises.

2. Scope of assessment

2.1 Regulatory framework

In completing the assessment documented in this Amendment Report, the department 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

On 20 August 2021, the Licence Holder submitted an application to the department to amend Licence L8807/2013/1 under section 59 and 59B of the *Environmental Protection Act 1986* (EP Act). The following amendments are being sought:

- Construction and operation of a standby flow balance system for the wastewater treatment plant's (WWTP) existing flow balance tank;
- Modify process requirements so that disposal of screenings and sludge can be to any appropriately licenced facility rather than only licensed landfills;
- Modify process and operational requirements to clarify that sludge storage bins are open while being filled;
- Remove monitoring bores MB004 – MB005 and replace with monitoring bores MB006 – MB010;
- Modify the surface monitoring table to clarify that standing water level monitoring for Garden Lake occurs at a different location to where samples are taken;
- Rename two incorrectly labelled sample locations for hyporheic zone monitoring; and
- Replace the groundwater and surface water monitoring figures to reflect the relevant changes proposed above.

The standby flow balance system is being installed to allow for maintenance on the existing flow balance tank to occur. The Licence Holder also considers the lack of an existing standby system to be a design flaw for the WWTP and as a result the system will be installed permanently, rather than a temporary measure to allow for maintenance. The system will provide permanent contingency for any potential failures of the flow balance tanks or when future maintenance is required.

The standby flow balance system's major components consist of two standby flow balance tanks (2 x 50 kL), a backup holding tank (50 kL) and diversion pipework connecting the tanks and existing odour scrubber system. All other elements of the WWTP remain consistent with the existing licence.

There is no change to the design capacity of the WWTP, management of downstream emissions and/or waste transport. The Premises footprint remains unchanged, and no clearing is required for the proposed works. A process flow diagram for the proposed works is shown in Figure 1 below and the holding times of the standby flow balance system for a number of flow scenarios is shown in Table 1 below.

Table 1: Standby flow balance system holding times

Parameter	Flow rate (kL/hr)	Holding time during continued plant operation (hours)	Holding time during complete WWTP shutdown (hours)
Maximum daily average	20.8 (500 m^3/day)	Flow rate within assimilative capacity	6.48
Winter typical average	22		6.12
Winter peak average	36	16.8	3.75
Summer typical average	34	22.5	3.97
Summer peak average	52	5.6	2.6

The change to sludge and screening disposal requirements is being requested to reflect current operational practices where the waste materials may be sent to other types of licenced facilities for reuse, rather than disposal by landfill. The existing requirement is considered a relic of previous licence versions and uses terminology that predates publication of the *Western Australian Guidelines for Biosolids Management* (DEC 2012).

A change to the sludge storage requirement is being requested due to the potential for the existing wording to result in the Licence Holder being non-compliant whenever the sludge storage bins are being actively filled. The sludge storage bins are fully enclosed once full, however due to their design the bins must be partially opened during filling. When being filled the bins are present above a concrete hardstand.

Changes to the monitoring bore network are occurring due to the decommissioning of MB004 and MB005 in 2019. These bores were located offsite from the Premises and had to be decommissioned due to disrepair. The Licence Holder provided a Monitoring Bore Completion Report (Rockwater 2019) that justifies the locations of the newly drilled bores and provides the bore installation logs.

Changes to the standing water level monitoring location for Garden Lake are requested as currently only the locations at which surface water samples are taken for laboratory analysis are shown on the licence. The licence does not specify the label and location used for the permanent water level gauge installed at Garden Lake. As the current formatting of the table lists only the sampling locations, it requires two standing water level readings to be taken at Garden Lake, while operationally only one reading is taken at the gauge.

Hyporheic zone monitoring specified in the licence currently mislabels locations GC5a and GC6a. These locations should be referred to as GC5s and GC6s to align with the labelling convention used at all other locations within the monitoring program. The 's' suffix refers to a shallow monitoring site.

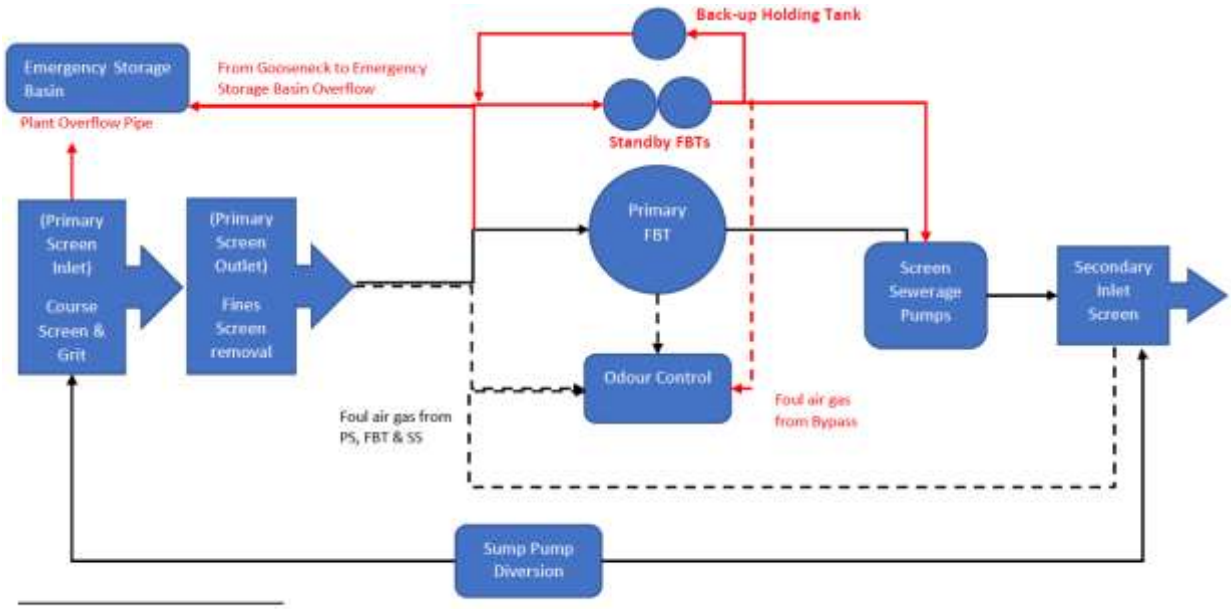

Figure 1: Standby flow balance system and WWTP process flow

2.3 Part IV of the EP Act

The Premises forms part of a larger proposal previously referred to and assessed by the Environmental Protection Authority (EPA). The *Integrated water supply and waste treatment system – Rottnest Island* was referred to the EPA as a significant proposal under section 38 of the EP Act and the EPA determined to assess the proposal at the level of Public Environmental Review on 23 February 1990.

EPA Report No. 598 was prepared in relation to the proposal and subsequently Ministerial Statement (MS) 324 was issued by the Minister for Environment. Implementation condition 4 of MS 324 required the Rottnest Island Authority to not dispose of effluent from the WWTP within the surface or groundwater catchment of the salt lakes of Rottnest Island.

On 12 October 2017 post-assessment changes to MS 324 were implemented under section 46A of the EP Act. The s46A notice states that it is to have effect instead of implementation condition 4 of MS 324 and allows for the disposal of effluent from the WWTP within the surface or groundwater catchment of the salt lakes of Rottnest Island in accordance with conditions specified in the notice. Disposal of treated effluent is to be in accordance with an approved Nutrient Irrigation Management Plan and not cause adverse impacts to the salt lakes.

The Delegated Officer has reviewed the details of the Application and notes the following:

1. The proposed works do not modify the existing design capacity of the WWTP, final effluent quality or the manner in which effluent disposal occurs at the Premises. Accordingly, they do not include or result in the need for modifications to the existing Nutrient Irrigation Management Plan; and
2. The Delegated Officer considers that implementation of the Application would not be contrary to the requirements of MS 324.

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.

The Delegated Officer considers that the scope of the Application only requires a risk assessment for the construction, commissioning and operation of the standby flow balance system. Other amendments proposed in the application are administrative in nature or do not alter the existing risk profile for the Premises and have not been subject to a risk assessment.

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 Amendment Report are detailed in Table 2 below.

Table 2 also details the proposed control measures the Licence Holder has proposed to assist in controlling these emissions, where necessary.

Table 2: Licence Holder controls

Emission	Sources	Potential pathways	Proposed controls
Construction			
Dust	Placement and installation of tanks and associated pipework	Air/windborne pathway	Dust suppression as required.
Noise	General construction activities and vehicle/machinery movements		Construction works undertaken according to the *Environmental Protection (Noise) Regulations 1997* (Noise Regulations).
Sewage	Tie-in of new pipework to the existing Coarse Screen outlet	Overland flow and runoff	Isolation of pipework prior to tie-in.
		Subsurface seepage	
Commissioning			
Commissioning of the standby flow balance system	Odour	Air/windborne pathway	Standby flow balance system to be connected to the existing odour scrubber system. Pre-commissioning checks to be undertaken that include pressure testing and visual inspection of pipework, hydrostatic testing of tanks, pipe and tank
	Sewage	Overland flow and runoff	

Emission	Sources	Potential pathways	Proposed controls
		Subsurface seepage	flushing, confirming valves are operable and testing of control systems. 5-day commissioning period under representative operational conditions.
Operation			
Operation of the standby flow balance system	Odour	Air/windborne pathway	Standby flow balance system to be connected to the existing odour scrubber system.
Containment loss or overflow from standby tanks and associated pipework	Sewage	Overland flow and runoff	The Standby FBT will be fitted with a hydrostatic level transducer. All tanks will be fitted with backup level float switches. Tank outlet pipework fitted with anti-vortex devices and shaped to allow for maximum drainage. Diversion pipework to have a manual isolation and non-return valve installed. Discharge from the existing sump pump will be diverted directly to the fines (secondary) screen inlet during operation of the standby flow balance system. Standby flow balance system to be connected via an automated inlet valve that will shut off in the event of high level and allow overflow to the Emergency Storage Basin. Polyethylene tanks to be designed and manufactured according to *AS 4766 Rotationally moulded buried, partially buried and non-buried storage tanks for water and chemicals*. Isolation devices and emergency stop buttons will be located in a prominent location and clearly labelled with the equipment description / tag number. Standby flow balance system provides an additional 150 kL of containment before the emergency storage basin requires use. Existing groundwater monitoring network.
		Subsurface seepage	

3.1.2 Receptors

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

Table 3 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 3: Sensitive human and environmental receptors and distance from prescribed activity

Receptors	Distance from prescribed activity
Human receptors	
Nearest sensitive receptor – Temporary holiday accommodation	Approximately 5 m north, south and east of the WWTP boundary.
Environmental receptors	
Rottnest Island Nature Reserve – A Class nature reserve as described in the *Rottnest Island Authority Act 1987*	The Premises is located in the reserve.
Priority Ecological Communities (PEC) – Microbialites and microbial mats of coastal hypersaline lakes (Rottnest Island) – Garden Lake, Lake Baghdad, Herschel Lake and Government House Lake	The nearest occurrence of the PEC is located approximately 575 m south of the WWTP. The Premises irrigation area is within the mapped extent of the PEC buffer.
Threatened Ecological Communities (TEC) – *Callitris preissii* (or *Melaleuca lanceolata*) forest and woodlands (Swan Coastal Plain community type 30A –Gibson *et al*. 1994)	The nearest occurrence of the TEC is located approximately 800 m south of the WWTP. The Premises irrigation area is within the mapped extent of the TEC buffer.
Surface water – The Basin	Approximately 75 m northwest of the WWTP.
Surface water – Pinky's Beach	Approximately 110 m northeast of the WWTP.
Surface water – Garden Lake	Approximately 575 m south of the WWTP and 10m southeast of the irrigation area boundary.
Surface water – Herschel Lake	Approximately 720 m southwest of the WWTP and 50m south of the irrigation area boundary.

Receptors	Distance from prescribed activity
Groundwater – Perth – Superficial Rottnest	Depth to groundwater at the WWTP ranges from approximately 3.55 – 4.75 mBGL. Depth to groundwater at the irrigation area ranges from approximately 0.7 – 3.5 mBGL. Superficial groundwater occurs in the Tamala Limestone forming a shallow, unconfined aquifer. The aquifer possesses a thin freshwater lens resting on saline water. Groundwater flows radially from the centre of the island, discharging to the salt lakes and the ocean. A groundwater mound from historical infiltration is centered at the WWTP, resulting in radial groundwater flow both south towards the salt lakes and north towards the ocean.
Public Drinking Water Source Area – Rottnest Island Water Reserve – Priority 3 Wellhead Protection Zone	Approximately 290 m west of the WWTP. The Premises' irrigation and treated wastewater storage area is within the mapped extent of the PDWSA. The Rottnest Island Water Reserve includes a salt water bore field and reverse osmosis desalination and water treatment infrastructure. The treatment, storage and irrigation of treated wastewater is a compatible landuse, subject to conditions, within a priority 3 area (DoW 2016).

Figure 2: Distance to sensitive receptors

3.1.3 Pathways

Table 4 below provides a summary of the environmental siting and characteristics of potential pathways that are considered relevant to emissions and discharges from the Premises (*Guideline: Risk Assessments* (DWER 2020b)).

Table 4: Pathways and site characteristics at the Premises

Aspect	Details
Geology	Regional interpretation suggests that the WWTP is underlain by the Tamala Limestone, a unit of eolian sand and calcarenite, composed of wind-blown shell fragments with variable quantities of quartz sand. The Tamala Limestone is approximately 70 m thick at Rottnest. The Monitoring Bore Completion Report (Rockwater 2019) summarised that the Tamala Limestone is mostly weathered at the Premises to form unconsolidated calcareous quartz sand to about 2.0 - 6.5 mbgl. Weakly consolidated shelly limestone, calcarenite and shell beds occur beneath the surficial sand. The weakly cemented beds are often inserted with unconsolidated silt and sand.
Meteorology	The nearest Bureau of Meteorology weather station (No. 009193 Rottnest Island) provided the following information: • The majority of rainfall occurs between May and September with an average annual rainfall of 561 mm (1991 to 2020). • Prevailing wind directions are predominately east to southerly in the morning and southerly in the afternoon (1987 to 2021).

3.2 Risk ratings

Risk ratings have been assessed in accordance with the *Guideline: Risk Assessments* (DWER 2020) for those emission sources which are proposed to change 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 Licence Holder 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 Licence Holder's proposed controls to be critical to maintaining an acceptable level of risk, these will be incorporated into the licence as regulatory controls.

Additional regulatory controls may be imposed where the Licence Holder's controls are not deemed sufficient. Where this is the case the need for additional controls will be documented and justified in Table 5.

The Revised Licence L8807/2013/1 that accompanies this Amendment Report authorises emissions associated with the operation of the Premises i.e. category 54 activities.

The conditions in the Revised Licence have been determined in accordance with *Guidance Statement: Setting Conditions* (DER 2015).

Table 5. Risk assessment of potential emissions and discharges from the Premises during construction, commissioning and operation of the proposed amendment

Risk Event Source/Activities	Potential emission	Potential pathways and impact	Receptors	Licence Holder's controls	Risk rating[1] C = consequence L = likelihood	Licence Holder's controls sufficient?	Conditions[2] of licence	Justification for additional regulatory controls
Construction								
Placement and installation of standby tanks and associated pipework. General construction activities and vehicle/machinery movements.	Dust	Air/windborne pathway causing impact to amenity	Nearest sensitive receptor (5 m north, south and east)	Dust suppression as needed	C = Slight L = Possible **Low Risk**	Y	N/A – The general provisions of the EP Act apply	N/A
	Noise			Construction works undertaken according to the Noise Regulations	C = Moderate L = Likely **High Risk**	Y	N/A – The Noise Regulations apply	The Delegated Officer considers that mid-level impact to amenity will probably occur as a result of noise emissions during construction of the proposed works. Although the risk event has a high risk rating, the Delegated Officer does not consider that additional regulatory controls are required. This is due to the source activity being limited to a single occurrence for a relatively short duration and the Licence Holder being required to comply with the Noise Regulations. Regulation 13 of the Noise Regulations specifies requirements for construction work and construction sites.
Tie-in of new pipework to the existing Coarse Screen outlet.	Sewage	Direct contact with overland flow and runoff causing impact to human health		Isolation of pipework prior to tie-in	C = Moderate L = Rare **Medium Risk**	Y	N/A	The Delegated Officer considers that the controls proposed by the Licence Holder will be sufficient to manage the risk associated with connecting pipework to the existing coarse screen outlet during construction of the proposed works.
		Overland flow causing impacts to terrestrial and aquatic ecosystems	Rottnest Island Nature Reserve Underlying groundwater (3.55 – 4.75 mBGL) The Basin (75 m northwest) Pinky's Beach (110 m northeast) Microbialites and microbial mats of coastal hypersaline lakes (Rottnest Island) PEC *Callitris preissii* (or *Melaleuca lanceolata*) forest and woodlands TEC		C = Moderate L = Rare **Medium Risk**	Y	N/A	
		Subsurface seepage causing contamination of soil, degradation of groundwater quality and impacts to downgradient receptors			C = Moderate L = Rare **Medium Risk**	Y	N/A	
Commissioning								
Commissioning of the standby flow balance system	Odour	Air/windborne pathway causing impact to amenity	Nearest sensitive receptor (5 m north, south and east)	Standby flow balance system to be connected to the existing odour scrubber system. Pre-commissioning checks to be undertaken that include pressure testing and visual inspection of pipework, hydrostatic testing of tanks, pipe and tank flushing, confirming valves are operable and testing of control systems.	C = Moderate L = Possible **Medium Risk**	Y	21 – Table 9: Row 1(h) and Row 2(e); and **23**; and **24**	The Delegated Officer considers that pre-commissioning checks relating to leak detection and connection of the standby flow balance system to the existing odour scrubber will be sufficient to manage the risk associated with odour emissions during commissioning.
	Sewage	Direct contact with overland flow and runoff causing impact to human health			C = Moderate L = Possible **Medium Risk**	Y	21 – Table 9; 22; and **23**; and **24**	The Delegated Officer considers that pre-commissioning checks relating to leak detection will be sufficient to manage the risk associated with sewage emissions and discharge during commissioning.
		Overland flow causing impacts to terrestrial and aquatic ecosystems	Rottnest Island Nature Reserve Underlying groundwater (3.55 – 4.75 mBGL) The Basin (75 m northwest) Pinky's Beach (110 m northeast) Microbialites and microbial mats of coastal hypersaline lakes (Rottnest Island) PEC		C = Moderate L = Possible **Medium Risk**	Y		
		Subsurface seepage causing contamination of soil, degradation of groundwater quality and impacts to downgradient receptors			C = Moderate L = Possible **Medium Risk**	Y		

Risk Event					Risk rating[1] C = consequence L = likelihood	Licence Holder's controls sufficient?	Conditions[2] of licence	Justification for additional regulatory controls
Source/Activities	**Potential emission**	**Potential pathways and impact**	**Receptors**	**Licence Holder's controls**				
			Callitris preissii (or *Melaleuca lanceolata*) forest and woodlands TEC					
Operation								
Operation of the standby flow balance system	Odour	Air/windborne pathway causing impact to amenity	Nearest sensitive receptor (5 m north, south and east)	Standby flow balance system to be connected to the existing odour scrubber system	C = Moderate L = Unlikely **Medium Risk**	Y	21 – Table 9: Row 1(h) and Row 2(e); **23**; and **24**	The Delegated Officer considers that connection of the standby flow balance system to the existing odour scrubber will be sufficient to manage the risk associated with odour emissions during operations. There are no known complaints relating to odour emissions from the Premises since installation of the odour scrubber.
Containment loss or overflow from standby tanks and associated pipework	Sewage	Direct contact with overland flow and runoff causing impact to human health		Refer to Section 3.1.1	C = Moderate L = Unlikely **Medium Risk**	Y	4 – Table 3: Row 3; 21 – Table 9; 22; **23**; and **24**	The Delegated Officer considers that the Licence Holder's proposed controls will be sufficient to manage the risk associated with containment loss or overflows during operations. Tank design, level sensors and automatically activated equipment will reduce the potential for containment loss to occur from the standby system. Potential overflow events can be detected through the telemetry system and discharge can be automatically diverted to the existing emergency storage basin for containment.
		Overland flow causing impacts to terrestrial and aquatic ecosystems	Rottnest Island Nature Reserve Underlying groundwater (3.55 – 4.75 mBGL) The Basin (75 m northwest) Pinky's Beach (110 m northeast) Microbialites and microbial mats of coastal hypersaline lakes (Rottnest Island) PEC *Callitris preissii* (or *Melaleuca lanceolata*) forest and woodlands TEC		C = Major L = Unlikely **Medium Risk**	Y		
		Subsurface seepage causing contamination of soil, degradation of groundwater quality and impacts to downgradient receptors			C = Major L = Unlikely **Medium Risk**	Y		

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

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

4. Consultation

Table 6 provides a summary of the consultation undertaken by the department.

Table 6: Consultation

Consultation method	Comments received	Department response
Discovery Parks advised of proposal (21 September 2021)	None received.	N/A
Parks and Wildlife Service of the Department of Biodiversity, Conservation and Attractions (DBCA) advised of proposal (21 September 2021)	The Parks and Wildlife Service of DBCA responded on 5 October 2021 stating that they had reviewed the Application and had no comments to provide.	N/A
Department of Health (DoH) advised of proposal (21 September 2021)	None received.	N/A
Licence Holder was provided with draft amendment on (8 November 2021)	Refer to Appendix 1	Refer to Appendix 1

5. Conclusion

5.1 Summary of application decision

Based on the assessment in this Amendment Report, the Delegated Officer has determined that a Revised Licence will be granted, subject to conditions commensurate with the determined controls and necessary for administration and reporting requirements.

The Delegated Officer considers that the controls proposed by the Licence Holder will be sufficient to manage the potential risk events associated with construction and operation of the proposed works.

The key Licence Holder controls include connection to the existing odour scrubber unit; telemetry, alarms and level sensors within newly installed tanks; automatic inlet valves with overflow pipework connected to the existing emergency storage basin; and leak and functional testing of new infrastructure prior to operation. These controls have been included in the Revised Licence as regulatory controls. The *Environmental Protection (Noise) Regulations 1997* specifies the regulatory requirements for noise emissions at construction sites and during construction work.

5.2 Other matters

In completing this assessment, the Delegated Officer has reviewed the groundwater monitoring information within the Bore Completion Report (Rockwater 2019) and within the Licence Holder's annual environmental reports. The monitoring shows that a groundwater mound is present at the Premises, located at the site of decommissioned infrastructure previously used for the disposal of treated wastewater via infiltration. Radial groundwater flow occurs from the mound and may potentially discharge to the Indian Ocean and impact environmental receptors at Pinky's Beach and The Basin.

Nutrient concentrations within groundwater surrounding the WWTP are elevated above background concentrations and physical and chemical stressors for inshore marine waters. The concentration of other potential contaminants (such as heavy metals) is limited, as ongoing metals analysis is only undertaken for groundwater sampled from the golf course irrigation bores. To address this information gap, the Delegated Officer has determined to amend the existing groundwater analysis suite to include six-monthly monitoring for selected dissolved metal species within the WWTP bores.

The Licence Holder should consider whether they have any reporting obligations under the *Contaminated Sites Act 2003* (CS Act). Further guidance and prescribed forms related to the CS Act can be accessed via the following link to the DWER website: https://www.der.wa.gov.au/your-environment/contaminated-sites.

5.3 Summary of amendments

Table 7 provides a summary of the proposed amendments and will act as record of implemented changes. All proposed changes have been incorporated into the Revised Licence as part of the amendment process.

Table 7: Summary of licence amendments

Condition no.	Proposed amendments
3 - Table 2 Process limits and specifications for sewage and septage	The corresponding requirements have been amended from: *(a) Screenings must be discharged to enclosed screening bins and disposed to a licensed landfill;* to: *(a) Screenings must be discharged to screening bins located above a concrete hardstand and enclosed once full;* *(b) Screenings must be disposed to an appropriately licensed waste facility;*
3 - Table 2 Process limits and specifications for sludge and waste activated sludge	The corresponding requirements have been amended from: *(a) Sludge must be discharged to enclosed sludge storage bins; and* *(b) Sludge must be disposed from the premises to a licensed landfill using a Controlled Waste Carrier.* to: *(a) Sludge must be discharged to sludge storage bins located above a concrete hardstand and enclosed once full; and* *(b) Sludge must be disposed from the premises to an appropriately licensed waste facility using a Controlled Waste Carrier.*
4 – Table 3 Site infrastructure and equipment	To improve the clarity of linked conditions and the referencing of items of infrastructure and equipment within the licence, the site infrastructure and equipment names have been amended to a shorter form. The column now only lists the name for the relevant item, with additional descriptive information being removed. Information considered relevant to the operation of that item of

Condition no.	Proposed amendments
	infrastructure and equipment has been moved to the corresponding operational requirement column.
4 – Table 3 (Row 3) Standby Flow Balance System	The Standby Flow Balance System being constructed as a result of the works has been inserted as Row 3 of Table 3. The Standby Flow Balance System will have the following corresponding operational requirements: *(a) Must have a capacity of at least 150 kL;* *(b) Must be connected to the Odour Scrubbing Unit;* *(c) In the event of an overflow, wastewater must be directed to the Emergency Storage Basin; and* *(d) Plant Sump outputs must be diverted to the Secondary Screens during operation of the Standby Flow Balance System.*
4 – Table 3 (Row 15) Sludge Dewatering Facility	The corresponding requirements have been amended from: *(c) Sludge must be discharged to enclosed sludge storage bins located above a concrete hardstand with a 600mm wide x 50mm high roll over bund and drain to the Plant Sump.* to: *(c) Sludge must be discharged to sludge storage bins located above a concrete hardstand with a 600mm wide x 50mm high roll over bund and drain to the Plant Sump.*
4 – Table 3 (Row 21) WWTP Groundwater monitoring bores	The site infrastructure and equipment name has been amended from: *WWTP Groundwater monitoring bores* *MB001, MB002, MB003, MB004 and MB005* to: *WWTP groundwater monitoring bores (MB001, MB002, MB003, MB006, MB007, MB008, MB009, MB010)*
4 – Table 3 (Row 22) Golf Course and Oval irrigation monitoring sites	The site infrastructure and equipment name has been amended from: *Golf Course and Oval irrigation areas groundwater monitoring boreholes* *OV1, GC1, GC2, GC3, GC4, REF28-90, GC5a, GC5i, GC5d, GC6a, GC6i, GC6d, GC7s, GC57i, GC7d, GC8s, GC8i and GC8d* to: *Golf course and oval irrigation monitoring sites (OV1, GC1, GC2, GC3, GC4, REF28-90, GC5s, GC5i, GC5d, GC6s, GC6i, GC6d, GC7s, GC7i, GC7d, GC8s, GC8i and GC8d)*
9 Sludge disposal	The following condition has been deleted from the licence: *The licence holder must keep accurate and auditable records relating to the disposal of sludge from the premises including the Controlled Waste Carrier and registration number of the vehicle transporting the sludge and the details of the landfill at which the sludge are disposed.* The condition is considered partially redundant as the Licence Holder may dispose of sludge to other types of licensed waste facilities that are not landfills. Existing condition 16 (now 15), which requires the maintenance of accurate and auditable records for other matters, has been amended to include the carrier details for sludge transportation.
16 (now 15) Records and reporting	The specific records that require maintenance in an accurate and auditable state has been amended from: *(a) the calculation of fees payable in respect of this licence;* *(b) any maintenance of infrastructure that is performed in the course of complying with*

Condition no.	Proposed amendments
	condition 4 of this licence; *(c) monitoring programs undertaken in accordance with conditions 10, 11 and 13 of this licence; and* *(d) complaints received under condition 18 of this licence.* to: *(a) the calculation of fees payable in respect of this licence;* *(b) the Controlled Waste Carrier, registration number of the transport vehicle and details of the waste facility used for the disposal of sludge in the course of complying with condition 3 of this licence;* *(c) any maintenance of infrastructure that is performed in the course of complying with condition 4 of this licence;* *(d) monitoring programs undertaken in accordance with conditions 10, 11 and 13 of this licence; and* *(e) complaints received under condition 18 of this licence.*
21	A condition allowing for the construction of the proposed works has been included. The condition contains the proposed infrastructure items for the Standby Flow Balance System and the equipment design and construction/installation requirements considered to be key controls in the risk assessment.
21 – Table 9 (Row 1) Standby Flow Balance Tanks	The Standby Flow Balance Tanks being constructed as part of the overall Standby Flow Balance System works have been listed as an item of infrastructure for construction in Table 9. The Standby Flow Balance Tanks will have the following design and construction/installation requirements: *(a) Must provide a minimum total capacity of at least 100 kL;* *(b) All tanks must be designed and manufactured according to AS 4766;* *(c) All tanks must be fitted with level sensors and a high level alarm connected to the existing telemetry system;* *(d) Offtake pipework from the existing WWTP infrastructure must be connected downstream of the coarse screen and grit removal system;* *(e) Offtake pipework from the existing WWTP infrastructure must be designed and installed to accommodate a maximum instantaneous flow of 100 m^3/hr;* *(f) Offtake pipework from the existing WWTP infrastructure must be fitted with an automatically actuated inlet valve configured to a fail closed state. The Telemetry and Control System must be configured to automatically close the inlet valve when a high level alarm is triggered in the Backup Holding Tank;* *(g) Offtake pipework from the existing WWTP infrastructure must be capable of automatically diverting flows to the Emergency Storage Basin when a high level alarm is triggered in the Backup Holding Tank;* *(h) Must be connected to the Odour Scrubbing Unit;* *(i) Tank outlets must be designed and installed in a manner that allows maximum drainage from the tank floor; and* *(j) Isolation devices and emergency stop buttons must be located in a clearly visible location and clearly labelled with the equipment description or tag number.*
21 – Table 9 (Row 2) Backup Holding Tank	The Backup Holding Tank being constructed as part of the overall Standby Flow Balance System works has been listed as an item of infrastructure for construction in Table 9. The Backup Holding Tank will have the following design and construction/installation requirements: *(a) Must provide a minimum total capacity of at least 50 kL;* *(b) Must be designed and manufactured according to AS 4766;* *(c) Must be fitted with level sensors and a high level alarm connected to the Telemetry*

Condition no.	Proposed amendments
	and Control System; *(d) Must be configured to receive flow from the Standby Flow Balance Tanks in the event of high-level conditions in the Standby Flow Balance Tanks; and* *(e) Must be connected to the Odour Scrubbing Unit.*
21 – Table 9 (Row 3) Sump Pump Diversion	The Sump Pump Diversion being constructed as part of the overall Standby Flow Balance System works has been listed as an item of infrastructure for construction in Table 9. The Sump Pump Diversion will have the following design and construction/installation requirements: *(a) Must be designed and installed to divert Plant Sump water directly to the Secondary Screens during operation of the Standby Flow Balance System;* *(b) Connecting pipework must be designed and installed to convey the maximum instantaneous flow rate from the sump pumps; and* *(c) Must be fitted with an isolation valve and non-return valve.*
22	A condition requiring leak and functional testing of constructed infrastructure prior to operation has been included. The condition contains the testing requirements considered to be key controls in the risk assessment and will require the following: *Prior to operation of the Standby Flow Balance System, the licence holder must undertake the following environmental commissioning activities for the items of infrastructure required by condition 21:* *(a) hydrostatic testing of tanks;* *(b) pressure testing and visual inspection of pipelines;* *(c) functional testing of manual and automated valves; and* *(d) testing of level sensors, alarms, telemetry and control systems.*
23	A condition requiring the submission of an Environmental Compliance and Commissioning Report for the works conducted under condition 21 and commissioning conducted under condition 22 has been included. The Delegated Officer has determined to combine the reporting requirements for environmental compliance and environmental commissioning in this instance. This is due to the small scope and duration of environmental commissioning activities, whereby performance validation is limited to confirming that infrastructure is operable and does not leak. There is no treatment process proving period or optimisation of emission and discharge controls that is required as a result of the works.
24	A condition listing the specific requirements of the Environmental Compliance and Commissioning Report required by condition 23 has been included. The condition contains the reporting requirements considered to be key indicators that the infrastructure has been constructed and commissioned according to the requirements of the licence and outcomes determined in the risk assessment. The condition will require the following: *The Environmental Compliance and Commissioning Report required by condition 23, must include as a minimum the following:* *(a) certification by a suitably qualified civil engineer that the items of infrastructure and equipment, as specified in condition 21, have been constructed in accordance with the relevant requirements specified in condition 21;* *(b) as constructed plans and a detailed site plan for each item of infrastructure and equipment specified in condition 21;* *(c) labelled photographic evidence of the installation of the infrastructure and equipment specified in condition 21;* *(d) a summary of the environmental performance of each item of infrastructure and equipment as constructed or installed, which at minimum includes a summary of results detailing the:*

Condition no.	Proposed amendments
	(i) leak and functional testing of tanks, pipelines and fittings; and *(ii) testing of any installed high-level alarms, automatically activated equipment and associated telemetry and control systems.* *(e) a review of the licence holder's performance and compliance against the requirements of condition 21 and 22; and* *(f) be signed by a person authorised to represent the licence holder and contains the printed name and position of that person.*
Definitions AS/NZS 4766	The following definition for AS/NZS 4766 has been added: *means the Australian Standard AS/NZS 4766 Rotationally moulded buried, partially buried and non-buried storage tanks for water and chemicals*
Definitions environmental commissioning	The following definition for environmental commissioning has been added: *means the sequence of activities to be undertaken to test equipment integrity and operation, or to determine the environmental performance, of equipment and infrastructure to establish or test a steady state operation and confirm design specifications*
Definitions Environmental Compliance and Commissioning Report	The following definition for Environmental Compliance and Commissioning Report has been added: *means a report to satisfy the CEO that:* *(a) the conditioned infrastructure has been constructed and/or installed in accordance with the licence; and* *(b) environmental commissioning activities have demonstrated that the environmental performance of the constructed and/or installed infrastructure meets the design specifications for waste containment and the control of emissions and discharges.*
Definitions suitably qualified civil engineer	The following definition for suitably qualified civil engineer has been added: *means a person who:* *(a) holds a Bachelor of Engineering recognised by Engineers Australia;* *(b) has a minimum of five years of experience working in a supervisory area of civil engineering; and* *(c) is an independent third party external to the works approval holder;* *or* *(d) is otherwise approved in writing by the CEO to act in this capacity.*
Schedule 1 Figure 5	Figure 5 showing the groundwater monitoring locations for the WWTP was replaced with an updated version containing the new groundwater monitoring bores.
Schedule 1 Figure 6	Figure 6 showing the locations for surface and groundwater monitoring at the golf course and salt lakes was replaced with an updated version containing the location and label for the surface water gauge at Garden Lake.
Schedule 1 Figure 9	Figure 9 was added that shows the locations and layout of the standby flow balance system components to be constructed through the upgrade works.
Schedule 2: 1 - Table 11 (now Table 12) WWTP groundwater bores	The monitoring location has been amended from: *MB001, MB002, MB003, MB004 and MB005 as depicted in Schedule 1: Figure 5* to: *MB001, MB002, MB003, MB006, MB007, MB008, MB009 and MB010 as depicted in Schedule 1: Figure 5*

<table>
<tr><th>Condition no.</th><th>Proposed amendments</th></tr>
<tr><td>Schedule 2: 1 - Table 11 (now Table 12)

WWTP groundwater monitoring parameters</td><td>A new row was added to Table 12 that corresponds with the WWTP groundwater bores only. The new row requires six-monthly analysis for a suite of dissolved metals in groundwater sampled from the WWTP bores. The addition to the groundwater monitoring program has the following requirements:
<table>
<tr><th>Monitoring location</th><th>Parameter</th><th>Unit</th><th>Averaging period</th><th>Frequency</th><th>Method</th></tr>
<tr><td>MB001, MB002, MB003, MB006, MB007, MB008, MB009 and MB010 as depicted in Schedule 1: Figure 5</td><td>Dissolved metals (aluminium, copper, lead, nickel, zinc)</td><td>mg/L</td><td>Spot sample</td><td>Six monthly</td><td>AS/NZS 5667.1

AS/NZS 5667.11</td></tr>
</table></td></tr>
<tr><td>Schedule 2: 2 - Table 12 (now Table 13)

Surface water monitoring</td><td>A new row was added to the monitoring location column of Table 13. The monitoring location corresponds to the standing water level parameter only. The monitoring location for standing water level has been amended from:

LL1, H1, GL1, GL2 and GH1 as depicted in Schedule 1: Figure 6

to:

LL1, H1, GL and GH1 as depicted in Schedule 1: Figure 6</td></tr>
<tr><td>Schedule 2: 3 - Table 13 (now Table 14)

Fresh groundwater lens/hyporheic zone monitoring</td><td>The monitoring location has been amended from:

GC5a, GC5i, GC5d, GC6a, GC6i, GC6d, GC7s, GC57i, GC7d, GC8s, GC8i and GC8d as depicted in Schedule 1: Figure 7

to:

GC5s, GC5i, GC5d, GC6s, GC6i, GC6d, GC7s, GC7i, GC7d, GC8s, GC8i and GC8d as depicted in Schedule 1: Figure 7</td></tr>
</table>

References

1. Australian and New Zealand Governments and Australian state and territory governments (ANZG) 2018, *Australian and New Zealand Guidelines for Fresh and Marine Water Quality*, Canberra ACT, Australia, available at www.waterquality.gov.au/anz-guidelines.
2. Department of Environment Regulation (DER) 2015, *Guidance Statement: Setting Conditions*, 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. DWER 2021, *Guideline: Assessment and management of contaminated sites*, Perth, Western Australia.
6. Environmental Protection Authority (EPA) 2016, *Technical Guidance: Protecting the Quality of Western Australia's Marine Environment*, Perth, Western Australia.
7. Rockwater 2019, *Rottnest Island WWTP Monitoring Bore Completion Report*, Unpublished report.

Appendix 1: Summary of Licence Holder's comments on risk assessment and draft conditions

Condition or Section	Summary of Licence Holder's comment	Department's response
Draft amended licence		
12 and Schedule 2: Table 12 Groundwater Monitoring	Rottnest Island Authority objected to the addition of six-monthly dissolved metals analysis for aluminium, arsenic, cadmium, chromium, copper, lead, nickel, selenium and zinc from groundwater bores surrounding the WWTP. To support the objection Rottnest Island Authority conducted a groundwater sampling event on November 16 2021 within monitoring bores MB001, MB002, MB003, MB006, MB007, MB008, MB009 and MB010. The samples were analysed for dissolved antimony, cadmium, copper, lead, nickel and zinc. The results were compared against screening criteria from the following guidelines: • DWER Guideline *Assessment and management of contaminated sites* (December 2014) • Australian Drinking Water Guidelines • 95% species protection ANZECC (freshwater) guidelines • 95% species protection ANZECC (marine) guidelines • NEPC GIL (marine); and • NEPC GIL (freshwater). It was noted that copper concentrations in MB006 exceeded the 95% species protection ANZECC marine guideline value and zinc concentrations exceeded the 95% species protection ANZECC marine guideline value in all WWTP bores except MB009. Rottnest Island Authority considered that the ANZECC freshwater freshwater guideline values or the values within the DWER Assessment and management of contaminated sites guideline should be utilised due to the low groundwater salinity in the area. Rottnest Island Authority considered that the results do not suggest levels that are potentially contaminating or require ongoing monitoring.	In consideration of the provided comments, the Delegated Officer has determined to revise the proposed requirement to undertake six-monthly monitoring of groundwater around the WWTP for metal concentrations. The required metals suite will be reduced to include aluminium, copper, lead, nickel and zinc only. As referred to in Section 5.2, groundwater level monitoring from the bores surrounding the WWTP indicates that a groundwater mound is present at the site of the decommissioned infiltration pond. Groundwater flowing radially from the mound has the potential to discharge to the marine environment at Pinky's Beach and The Basin which are located a relatively short distance from the Premises. Historical groundwater monitoring results in the vicinity of the WWTP do not provide an indication of trends in metal contaminant concentrations associated with the treatment of sewage. Considering that groundwater has the potential to discharge to marine receptors, the Delegated Officer disagrees with the assertion that 95% species protection values for toxicants in freshwater are the relevant assessment criteria. Assessment levels for toxicants in marine aquatic ecosystems would be the relevant criteria and should be applied at the 99% level of species protection, as referred to in Section 11.7 of the *Guideline: Assessment and management of contaminated sites* (DWER 2021). Rottnest Island waters within the boundary of the Rottnest Island Marine Reserve are given a high level of ecological protection, meaning that 99% species protection values for toxicants in water (excluding cobalt) should apply in the absence of a detailed assessment (EPA 2016). The Delegated Officer also notes the following: • The sampling event conducted on 16 November 2021 is only a 'point in time' assessment and as a result does not establish any trends in

Condition or Section	Summary of Licence Holder's comment	Department's response
Draft amended licence		
		groundwater metal concentrations; • The sampling event did not include the full suite of metal species proposed for inclusion in the amended Licence; • Zinc exceeds both the 95% and 99% species protection values for marine ecosystems in all samples taken from monitoring bores surrounding the WWTP. Noting that the ANZECC & ARMCANZ Guideline has been superseded by the Australian and New Zealand Guidelines for Fresh and Marine Water Quality (ANZG 2018). In particular the default values for zinc in marine waters were reduced from 0.015 mg/L to 0.008 mg/L and 0.007 mg/L to 0.0033 mg/L for 95% and 99% species protection respectively; and • Analysis of copper was not undertaken at a limit of reporting sufficient for comparison against 99% protection criteria for marine species. The results from the 'point in time' groundwater sampling event do not currently provide certainty to address the potential risk of emissions and discharges from Premises activities potentially impacting marine receptors. The Delegated Officer considers the requirement to monitor groundwater for metal species commonly found in sewage and treated sewage is appropriate, due to the high environmental value placed on the surrounding area.
Draft Amendment Report		
Section 5.2 Other Matters	Rottnest Island Authority does not consider that the phosphorus plume as described in the Rockwater 2019 report is present at levels which could be considered contaminating. There are not set guidelines for Phosphorus or Nitrogen for groundwater, as ecological impacts vary with other site conditions. Rottnest Island Authority has been monitoring groundwater beneath the WWTP since 2017 with data showing that: • Groundwater levels vary seasonally in all bores and downward trends since 2019 indicate that the groundwater mound is dissipating; • MB001, MB002 and MB008 show the highest total phosphorus levels out of all bores and significantly reduced in the last 24 months at a rate of >1 mg/L;	It has not been suggested that the area is known to be contaminated based on concentrations of total nitrogen and phosphorus in groundwater. Information in Section 5.2 had been included due to the limitations of the available groundwater monitoring data when considering flow directions and the high environmental value of receptors where groundwater may discharge. The Delegated Officer considered that the information available at the time may potentially show indicators of possible contamination, in reference to Section 5 of the *Guideline: Identification, reporting and classification of contaminated sites in Western Australia*. Wording within Section 5.2 has been revised in consideration of the monitoring results provided as comments.

Condition or Section	Summary of Licence Holder's comment	Department's response
Draft amended licence		
	• Total phosphorus at all other monitoring bores is generally stable with levels between 0-2 mg/L; and • Total phosphorus levels at MB001 and MB008 are generally greater than the reference bore condition with MB002 trending lower towards levels on par with the reference bore and other monitoring bores in the past 24 months. Considering the potentially dissipating groundwater mound, seasonal variations, reducing phosphorus levels and the lack of evidence of impacts from current nutrient levels, Rottnest Island Authority believe that the area is not considered contaminated and referral is not required.	

Appendix 2: Application validation summary

SECTION 1: APPLICATION SUMMARY (as updated from validation checklist)					
Application type					
Works approval	☐				
Licence	☐	Relevant works approval number:		None	☐
		Has the works approval been complied with?		Yes ☐ No ☐	
		Has time limited operations under the works approval demonstrated acceptable operations?		Yes ☐ No ☐ N/A ☐	
		Environmental Compliance Report / Critical Containment Infrastructure Report submitted?		Yes ☐ No ☐	
		Date Report received:			
Renewal	☐	Current licence number:			
Amendment to works approval	☐	Current works approval number:			
Amendment to licence	☒	Current licence number:	L8807/2013/1		
		Relevant works approval number:		N/A	☐
Registration	☐	Current works approval number:		None	☐
Date application received		20 August 2021			
Applicant and Premises details					
Applicant name/s (full legal name/s)		Rottnest Island Authority			
Premises name		Rottnest Island Waste Water Treatment Plant			
Premises location		Part Lot 10976 on Plan 216860 The Basin, Rottnest Island WA 6161			
Local Government Authority		City of Cockburn			
Application documents					
HPCM file reference number:		DWERDT493669			
Key application documents (additional to application form):		N/A			
Scope of application/assessment					
Summary of proposed activities or changes to existing operations.		<u>Licence amendment</u> Construction and operation of a standby system for the WWTP's flow balance tank. The system is being installed to allow for maintenance on the existing flow balance tank to occur. The Licence Holder also considers the lack of an existing standby to be a design flaw for the WWTP so the system will be installed permanently to provide contingency for any potential failures of the flow balance tanks or when future maintenance is required. The system's major components consist of two standby tanks (2 x 50 kL), a backup holding tank (50 kL), a sump pump and diversion			

	pipework connecting the tanks and existing odour scrubber system. All other elements of the WWTP remain consistent with the existing licence. There is no change to the design capacity, management of downstream emissions and waste transport. The premise footprint remains unchanged and no clearing is required for the proposed works. Other minor amendments to clarify inconsistencies and update maps and figures are also requested. This includes an update to the groundwater monitoring network commissioned in 2019. The amendments will require modifications to following conditions of L8807/2013/1: • Condition 4: Table 3 - Inclusion of the standby system in the infrastructure and equipment table; • Inclusion of works related conditions with associated design/construction and reporting requirements; • Condition 3: Table 2 - Replace the word “landfill” with “licenced waste facility”; • Condition 3: Table 2 - Replace statement; “sludge must be discharged to enclosed sludge storage bins” with “sludge must be discharged to sludge storage bins located above a concrete hardstand”; • Condition 4: Table 3 - Replace statement; “sludge must be discharged to enclosed sludge storage bins located above a concrete hardstand with a 600mm wide x 50mm high rollover bund and drain to the Plant Sump”, with “sludge must be discharged to sludge storage bins located above a concrete hardstand with a 600mm wide x 50mm high roll over bund and drain to the Plant Sump”; • Condition 4: Table 3 and Schedule 2: Table 11 - Delete monitoring bores MB004, MB005 and replace with monitoring bores MB006, MB007, MB008, MB009, MB010 as per Attachment 8B; • Schedule 2: Table 12 – Revised wording for standing water level monitoring for Garden Lake. The table currently has the sample locations listed but the water level marker is at a different location. • Schedule 2: Table 13 - Delete sample locations 'GC5a' & 'GC6a' and insert 'GC5s' & 'GC6s'. These are incorrect location ID's. • Schedule 1 – replace groundwater and surface water monitoring figures with the updated figures provided with the application.

Category number/s (activities that cause the premises to become prescribed premises)

Table 1: Prescribed premises categories

Prescribed premises category and description	Assessed production or design capacity	Proposed changes to the production or design capacity (amendments only)
Category 54: sewage facility	500 m^3/day	N/A

Legislative context and other approvals

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 ☐ No ☒	Referral decision No: Managed under Part V ☐ Assessed under Part IV ☐

Does the applicant hold any existing Part IV Ministerial Statements relevant to the application?	Yes ☒ No ☐	Ministerial statement No: 324 EPA Report No: 598
Has the proposal been referred and/or assessed under the EPBC Act?	Yes ☐ No ☒	Reference No:
Has the applicant demonstrated occupancy (proof of occupier status)?	Yes ☒ No ☐	Certificate of title ☐ General lease ☐ Expiry: Mining lease / tenement ☐ Expiry: Other evidence ☒ Section 11 and 13 of the *Rottnest Island Authority Act 1987*
Has the applicant obtained all relevant planning approvals?	Yes ☐ No ☐ N/A ☒	Approval: Expiry date: If N/A explain why? Section 13 of the *Rottnest Island Authority Act 1987*
Has the applicant applied for, or have an existing EP Act clearing permit in relation to this proposal?	Yes ☐ No ☒	CPS No: N/A No clearing is proposed.
Has the applicant applied for, or have an existing CAWS Act clearing licence in relation to this proposal?	Yes ☐ No ☒	Application reference No: N/A Licence/permit No: N/A No clearing is proposed and not a CAWS Act catchment.
Has the applicant applied for, or have an existing RIWI Act licence or permit in relation to this proposal?	Yes ☐ No ☒	Application reference No: Licence/permit No: Licence / permit not required.
Does the proposal involve a discharge of waste into a designated area (as defined in section 57 of the EP Act)?	Yes ☐ No ☒	Name: Rottnest Island Groundwater Area Type: Groundwater Area Has Regulatory Services (Water) been consulted? Yes ☐ No ☐ N/A ☒ Regional office: Swan-Avon
Is the Premises situated in a Public Drinking Water Source Area (PDWSA)?	Yes ☐ No ☒	Name: N/A Priority: N/A Are the proposed activities/ landuse compatible with the PDWSA (refer to WQPN 25)? Yes ☐ No ☐ N/A ☒

Is the Premises subject to any other Acts or subsidiary regulations (e.g. *Dangerous Goods Safety Act 2004, Environmental Protection (Controlled Waste) Regulations 2004, State Agreement Act xxxx*)	Yes ☒ No ☐	*Environmental Protection (Controlled Waste) Regulations 2004* *Rottnest Island Authority Act 1987* *Conservation and Land Management Act 1984*
Is the Premises within an Environmental Protection Policy (EPP) Area?	Yes ☐ No ☒	N/A
Is the Premises subject to any EPP requirements?	Yes ☐ No ☒	N/A
Is the Premises a known or suspected contaminated site under the *Contaminated Sites Act 2003*?	Yes ☐ No ☒	Classification: N/A Date of classification: N/A