Application for Works Approval

Part V Division 3 of the Environmental Protection Act 1986

Works Approval Number W6928/2024/1

Applicant Pilbara Iron Company (Services) Pty Ltd

ACN 107 210 248

File number DER2024/000136

Premises Dampier Wastewater Treatment Plant

21 The Esplanade Dampier WA 6713

Legal description -

Lot 362 on Deposited Plan 14280

As defined by the premises map attached to the issued works

approval

Date of report 29 July 2024

Decision Works approval granted

Abbie Crawford

MANAGER, WASTE INDUSTRIES

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 W6928/2024/1 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

Pilbara Iron Company (Services) Pty Ltd (the applicant) holds licence L6755/1996/9 for the Dampier Wastewater Treatment Plant (WWTP) located within the townsite of Dampier, which has an approved design capacity for the treatment of 900 m³ per day of sewage. The WWTP is located adjacent to the beach and treated wastewater is reused for irrigation within the grounds of the WWTP, at Dampier Oval in the north and Hampton Oval in the south, with excess being discharged to the marine environment via an ocean outfall.

The system consists of Imhoff tanks, trickling bed filters, a humus tank and a chlorination pit. Following chlorination, treated effluent is sent to a final holding tank prior to being used for irrigation. Sludge removed from the plant is stored temporarily onsite within a lined sludge drying bed prior to being transported to the 7 Mile Rail Yard operating under Licence L6950/1997/12, for disposal at the bioremediation facility. If necessary, sludge will be disposed of to an appropriately licensed landfill. Stormwater accumulated in bunded areas within the facility is redirected into the wastewater treatment system.

On 26 March 2024, the applicant submitted an application for a works approval to the department under section 54 of the *Environmental Protection Act 1986* (EP Act) to undertake construction works and time limited operations to add a second 300 kL tank at the WWTP for the storage of treated wastewater plus add Hardey Reserve, Fitzroy Park and The Esplanade to the existing irrigation reuse scheme (Figure 1). These areas are currently irrigated with potable water, however this will become a backup supply with treated wastewater being the main source for irrigation.

The applicant has also requested the premises boundary be amended and restricted to the extent of the WWTP cadastral lot, thereby excluding the ovals and parks that form the irrigation network.

The total proposed recycled water storage capacity of 520 kL is based on the storage of recycled water throughout the day for distribution from 9 pm (except for the WWTP lawns) and will cease at such time to provide a withholding period of nominally 4 hours or until the irrigated area is dry.

Each of the irrigation areas will have new infrastructure installed to enable conversion from recycled water to potable water once maximum allowable daily recycled water irrigation volume is reached. This will include a flow metre at each irrigation location. This infrastructure is outside the new premises boundary so is not subject to this assessment.

The duration of the installation of the additional storage tank and irrigation infrastructure will be approximately 10-12 weeks. The proposed additional infrastructure will be operated in accordance with the requirements of Licence L6755/1996/9.

This works approval is limited only to the addition of the second storage tank and irrigation areas. There are no proposed changes to Category 54 activities from the previously assessed Existing Licence L6755/1996/9, under Schedule 1 of the *Environmental Protection Regulations* 1987 (EP Regulations) which are defined in works approval W6928/2024/1 and Table 1 below. 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 W6928/2024/1.

Table 1: Assessed production capacity in the Existing Licence L6755/1996/9.

Prescribed Premises category description (Schedule 1, <i>Environmental Protection Regulations 1987</i>)	Assessed production capacity
Category 54 Sewage facility: premises –	
(a) on which sewage is treated (excluding septic tanks); or	900 m ³ per day
(b) from which treated sewage is discharged onto land or into waters.	oce iii per day

3. Department of Health approval

The Department of Health (DoH) issued the Recycled Water Scheme Approval D48/0000 on 14 July 2022 to add the additional irrigation sites of Hardey Reserve, Fitzroy Park and The Esplanade. The full list of recycled water reuse sites are listed in Table 2 and Figure 1 below.

Table 2: Department of Health approved recycled water sites

Name	Location				
WWTP lawns	Part of Crown Lease L3116/3468 and Lot 362 on Plan 14280				
Dampier Oval (Windy Ridge Oval)	Lot 247 on Plan 217466 The Esplanade				
Hampton Oval	Lot 166 on Plan 215598 The Esplanade				
Hardy Reserve	Lot 402 on Plan 17819 held under Reserve 48600				
Fitzroy Park	Drain Reserve 42159				
Shark Cage Beach Foreshore	Part of Crown Lease N104743 and Lot 23 on Plan 14280				
The Esplanade	Part of Crown Lease N104743				

The applicant has advised Shark Cage Beach Foreshore is no longer a required irrigation location for the reuse scheme, so was not included in the works approval application.

The applicant originally applied for Lots 53 and 54 on Deposited Plan 17812 to be included in the application for irrigation at Fitzroy Park with the Drain Reserve 42159 under this works approval. It was noted Lots 53 and 54 are not included in the above DoH approval and that they are zoned residential. As such, on 21 May 2024 the applicant withdrew Lots 53 and 54 on Deposited Plan 17812 from the works approval application. These premises will continue to be irrigated with scheme water. Drainage Reserve 42159 within Fitzroy Park that is between the road reserve and Lots 53 and 54 remains subject to this works approval application.

The DoH approval provides limits for the quality of recycled water used in the irrigation scheme, as shown in Table 3 below. These limits have previously been applied as conditions on the existing licence L6755/1996/9.

Table 3: Department of Health recycled water limits

Parameter	Compliance value	Monitoring frequency		
E. coli	< 1000 cfu or MPN/100 mL	Monthly		
Suspended Solids	< 30 mg/L	Monthly		
рН	6.5 – 8.5	Daily or continuous online		
Disinfection (chlorine)	0.2 – 2.0 mg/L	Daily or continuous online		

4. Irrigation reuse network

To support the additional irrigation areas into the reuse network the applicant conducted representative soil sampling of the two main parks to determine the eutrophication risk (Table 4), determining that the irrigation areas are categorised eutrophication risk D low, based on:

- Lack of any permanent or ephemeral surface water bodies in Dampier. The risk of eutrophication is negligible.
- Annual rainfall is low and evaporation rates are high which prevents ponding risk.
- Fined grained soils of Hardey Reserve tested with Phosphorus Buffering Index (PBI) >100.
- Fitzroy Park with lower PBI averaging 38.8, is directly adjacent to Hardey Reserve. It is unclear why the soil testing is different but potentially it is from landscaping modifications to the soils.
- High PBI clays are typical native soils in Dampier. Due to lack of potential receiving surface waters, the eutrophication risk remains evaluated as low, despite PBI <100.

The soil sampling results indicate irrigation of the additional parks will be compliant with conditions on the existing licence L6755/1996/9 which limit discharges to 480 kg/ha/year of Total Nitrogen and 120 kg/ha/year of Total Phosphorus.

Table 4: Soil sampling summary

Location Test No.		Sample depth (mbgl)	Infiltration rate (mm/hr)	Soil type	РВІ
	HR-A	0.6	30.8	Loamy sand	159.0
Hardey Reserve	HR-B	0.3	25.0	Sandy loam	132.6
	HR-C	0.3	31.6	Sand	111.8
	FP-A	0.3	33.1	Sand	41.7
Fitzroy Park	FP-B	0.8	33.0	Sand	38.0
	FP-C	0.7	29.7	Loamy sand	36.8

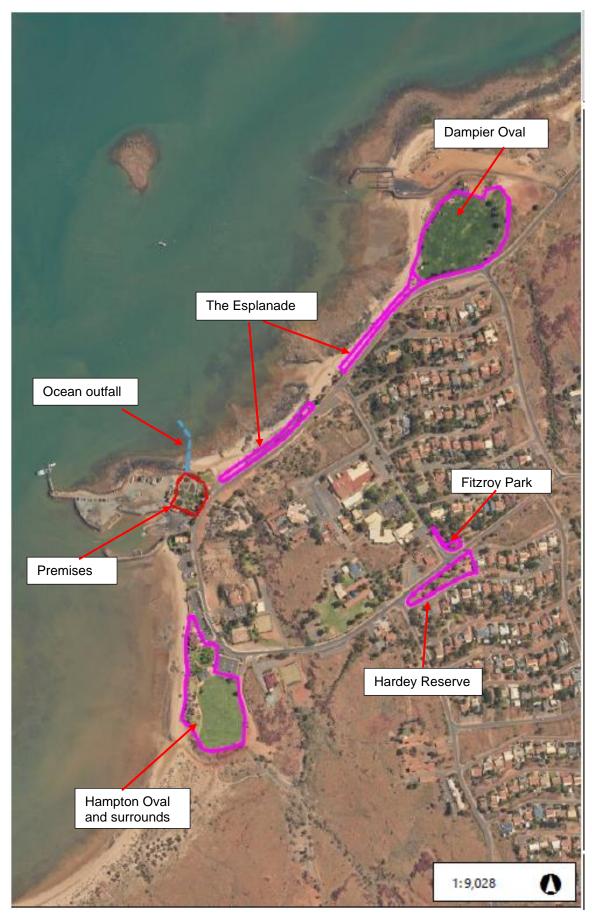


Figure 1: City of Karratha irrigation network and ocean outfall location

5. Applicant request to exclude the irrigation network and ocean outfall from the premises boundary

The applicant has requested the premises boundary be amended to be restricted to the extent of the WWTP cadastral lot, thereby excluding the ovals and parks that form the irrigation network.

The Delegated Officer has given consideration to the *Guideline: Industry Regulation Guide to Licensing (2019)* which describes the requirements of a prescribed premises boundary:

- encompass the whole area on which the relevant activity on the prescribed premises takes place and from which emissions and discharges from that activity would occur;
- · define an area under the control of the applicant;
- be clearly and unambiguously described; and
- encompass a continuous area, except for where the area is bisected by a road, rail or waterway reserve.

The relevant activity, being Category 54 sewage facility, occurs wholly within Lot 362 on Deposited Plan 14280. This activity generates emissions which are discharged from Lot 362.

The area under the control of the applicant is limited to Lot 362 on Deposited Plan 14280. The area where the irrigation occurs, being the ovals and parks within the Dampier townsite, are under the control of the City of Karratha. The marine environment is not subject to any management order so is considered unmanaged waters, thereby not under the control of the applicant.

The Delegated Officer has determined that the premises boundary will be amended to be restricted to Lot 362 on Deposited Plan 14280 only. Emissions of treated wastewater discharged from this premises are managed via the existing licence L6755/1996/9 for suitability as irrigation water and disposal to the marine environment.

Given the lawns within the WWTP, Dampier Oval and Hampton Oval have previously been assessed as suitable for receiving treated wastewater via irrigation, these ovals will not be reassessed as part of this risk assessment.

This Decision Report will focus on the quality of treated wastewater discharged from the premises for the purpose of irrigation at Hardey Reserve, Fitzroy Park (Drainage Reserve 42159) and The Esplanade.

The marine environment has previously been assessed as suitable for receiving treated wastewater for disposal via the ocean outfall. The amendment subject to this assessment does not propose to modify discharges to the marine environment so it will not be reassessed as part of this risk assessment.

6. 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.

6.1 Source-pathways and receptors

6.1.1 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 5 below. Table 5 also details the control measures the applicant has proposed to assist in controlling these emissions, where necessary.

Table 5: Proposed applicant controls

Sources	Emission	Potential pathways	Proposed controls	
Construction				
	Dust		Water application for dust suppression.	
	Noise		Short construction duration of 3 months and during daylight hours only.	
Construction of second	110.00	Air / wind dispersion	Abide by the Environmental Protection (Noise) Regulations 1997.	
treated wastewater storage tank	Odour		Infrastructure to be installed is for post- treatment storage, no disturbance to pre- treatment infrastructure.	
	Spills of treated wastewater	Overland flow, subsurface seepage	Infrastructure to be installed is for post- treatment storage, no disturbance to pre- treatment infrastructure.	
Operation (in	cluding time limi	ted operations)		
Operation of	Noise		Infrastructure to be installed is non-noise generating and will complement the currently operating WWTP.	
second treated wastewater		Air / wind dispersion	Infrastructure to be installed is for post- treatment storage, no modifications to pre- treatment infrastructure.	
storage tank			Standard maintenance procedures are expected to effectively mitigate the risk of odour emissions.	
			Surface water management bunding to contain any spills. Overflow pipework will direct overflow to the ocean outfall pit	
Operation of second	Spills of treated wastewater	Overland flow,	Standard maintenance procedures to be implemented.	
treated wastewater		subsurface seepage	Spill response kits available.	
storage tank			Compliance with DoH approval including:	
			 spill response to be in accordance with the Wastewater Overflow Notification and Response Procedures (DoH 2021). 	

Sources	Emission	Potential pathways	Proposed controls		
			 all holding tanks and treatment systems should be bunded and drained to a dedicated sump that can be pumped to ensure that any tank failure, spillage or operational spill and overflow is contained within the premises boundary 		
			 Calculated application of recycled water to prevent pooling and increased contaminant loading. 		
	Treated		 The sprinkler system is designed to reduce overlap and maximise evaporation. 		
	wastewater containing nutrients at concentrations not fit for purpose	Contamination of soil, impact to vegetation health, subsurface seepage	 Loading rates will not exceed Total Nitrogen 480 kg/ha/yr and Total Phosphorus 120 kg/ha/yr, as per current licence L6755/1996/9 conditions. 		
			 Once the loading limit has been reached, any further irrigation necessary will be with potable water. 		
Addition of Hardey Reserve,			 Ongoing monitoring, inspection and maintenance controls will be undertaken in accordance with L6755/1996/9. 		
Fitzroy Park (Drainage Reserve 42159) and			 Approval from DoH for the additional irrigation locations with conditions to mitigate exposure risk to the general public. 		
The Esplanade to the existing irrigation reuse		Direct contact or ingestion of pooling	 Irrigation of public open spaces commences from 9:00 pm, and will cease at such a time to provide a withholding period of nominally 4 hours or until the irrigation area is dry. 		
network	Treated wastewater containing		 Treated wastewater is disinfected with chlorine prior to discharge from the WWTP and monitored online. 		
	pathogens at concentrations not fit for	surface waters or irrigation	 Sampling and inspection regime for ponding and runoff, and annual reporting to DoH. 		
	purpose	mist	 Signage for irrigated areas and above ground water fittings. 		
			 Spray drift is to be minimised by the selection of large droplet sprays and choice of spray height. 		
			 Ongoing monitoring, inspection and maintenance controls will be undertaken in accordance with L6755/1996/9. 		

6.1.2 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 6 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 6: Sensitive human and environmental receptors and distance from prescribed activity

Human receptors	Distance from prescribed activity				
Residential receptors	 Residential strata unit development is located 280 m east of the premises boundary; Residential house 415 m east of the premises boundary; and Residential house 550 m south east of the premises boundary. 				
Other human receptors	 Mermaid Hotel is located 150 m east of the premises boundary; and Dampier Primary School is located 350 m south east of the premises boundary. 				
Environmental receptors	Distance from prescribed activity				
Marine environment	 The beach is located immediately adjacent to the premises to the north. The ovals and irrigation areas are located adjacent to and along the beachfront. 				
DBCA Legislated lands	Murujuga National Park is located 3.3 km east of the premises boundary.				
Threatened and Priority Fauna	Two vulnerable bird species, 11 specially protected migratory bird species, one Priority 4 bird species and two Priority 4 mammal species have been identified in the local vicinity of the premises boundary.				
Threatened and Priority Flora	 One Priority 3 flora is located 4.3 km north east of the premises boundary; and One Priority 3 flora is located 4.9 km south east of the premises boundary. 				
Aboriginal sites and heritage places	Two sites are located within the premises boundary, DP-285 and Realignment Site 1 (NB: Not located in WWTP area, 300 m south and 300 m east)				

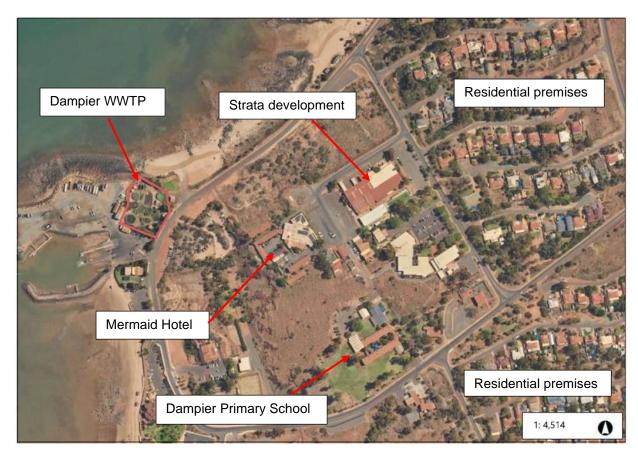


Figure 2: Distance to sensitive receptors

6.2 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 6.1. 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 6.1), 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 7.

Works approval W6928/2024/1 that accompanies this decision report authorises construction and time-limited operations. The conditions in the issued works approval, as outlined in Table 7 have been determined in accordance with *Guidance Statement: Setting Conditions* (DER 2015).

A licence amendment is required following the time-limited operational phase authorised under the works approval to authorise emissions associated with the ongoing operation of the premises. 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 7: Risk assessment of potential emissions and discharges from the premises during construction, commissioning and operation

Risk events					Risk rating ¹ Applicant	2 1111 2 1		
Sources / activities	Potential emission	Potential pathways and impact	Receptors	Applicant controls	C = consequence L = likelihood	controls sufficient?	Conditions ² of works approval	Justification for additional regulatory controls
Construction								
	Dust			Refer to Section 6.1	C = Minor L = Rare Low Risk	Yes	Condition 20	The Delegated Officer has included a condition for the recording of complaints, and any action taken to investigate and respond to the complaint.
Construction of	Noise	Air / wind dispersion. Impacts to amenity.	Residential and other human receptors	Refer to Section 6.1	C = Minor L = Rare Low Risk	Yes	Condition 20	Adequately managed by the Environmental Protection (Noise) Regulations 1997. The Delegated Officer has included a condition for the recording of complaints, and any action taken to investigate and respond to the complaint.
second treated wastewater storage tank	Odour			Refer to Section 6.1	C = Minor L = Rare Low Risk	Yes	Condition 20	The Delegated Officer has included a condition for the recording of complaints and any action taken to investigate and respond to the complaint.
	Spills of treated wastewater	Overland flow, subsurface seepage. Impacts to marine flora and fauna.	Marine environment	Refer to Section 6.1	C = Minor L = Unlikely Medium Risk	Yes	Conditions 1, 9, 10.	The Delegated Officer considers the controls proposed by the applicant are sufficient to mitigate spills of treated wastewater in most circumstances. As this risk is mitigated by adequate implementation of these applicant controls, the Delegated Officer shall enforce these controls via operational conditions on the Works Approval.
Operation (Including	time-limited operation	s)						
	Noise	Air / wind dispersion. Impacts to amenity.	Residential and other human receptors	Refer to Section 6.1	C = Minor L = Rare Low Risk	Yes	Condition 20	Adequately managed by the <i>Environmental Protection (Noise) Regulations 1997</i> . The Delegated Officer has included a condition for the recording of complaints and any action taken to investigate and respond to the complaint.
Operation of second treated wastewater storage tank	Odour	Air / wind dispersion. Impacts to amenity.	Residential and other human receptors	Refer to Section 6.1	C = Minor L = Rare Low Risk	Yes	Condition 11 Condition 20	The Delegated Officer considers the controls proposed by the applicant are sufficient to mitigate emissions of odours from treated wastewater on the rare occasion they may occur. As this risk is mitigated by adequate implementation of these applicant controls, the Delegated Officer shall enforce these controls via operational conditions on the Works Approval and subsequent Licence. The Delegated Officer has included a condition for the recording of complaints and any action taken to investigate and respond to the complaint.

Risk events	Risk events						Conditions ² of	
Sources / activities	Potential emission	Potential pathways and impact	Receptors	Applicant controls	C = consequence L = likelihood	controls sufficient?	works approval	Justification for additional regulatory controls
	Spills of treated wastewater	Overland flow, subsurface seepage. Impacts to marine flora and fauna.	Marine environment	Refer to Section 6.1	C = Minor L = Unlikely Medium Risk	Yes	Conditions 1, 9, 10.	The Delegated Officer considers the controls proposed by the applicant are sufficient to mitigate spills of treated wastewater in most circumstances. As this risk is mitigated by adequate implementation of the applicant's controls, the Delegated Officer shall enforce these controls via operational conditions on the Works Approval and subsequent Licence.
Addition of Hardey Reserve, Fitzroy Park (Drainage Reserve 42159) and The Esplanade to the existing irrigation reuse network	Treated wastewater containing nutrients at concentrations not fit for purpose	Direct discharge to land. Impacts causing contamination of soil.	Soils and vegetation of public open spaces.	Refer to Section 6.1	C = Minor L = Unlikely Medium Risk	Yes	Conditions 12, 13, 14, 15, 16, 17, 18, 19, 21, 22, 23, 24.	The Delegated Officer considers the controls proposed by the applicant are sufficient to mitigate emissions of treated wastewater containing nutrients at concentrations not fit for purpose. As this risk is mitigated by adequate implementation of the applicant's controls, the Delegated Officer shall enforce these controls via operational conditions on the Works Approval and subsequent Licence.
	Treated wastewater containing pathogens at concentrations not fit for purpose	Direct contact with pooling water or ingestion of irrigation mist. Impacts to health of recreational users of public open spaces, contamination of soil, impacts to vegetation health.	Recreational users of public open space.	Refer to Section 6.1	C = Major L = Unlikely Medium Risk	Yes	Conditions 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24.	The Delegated Officer considers the controls proposed by the applicant are sufficient to mitigate emissions of treated wastewater containing pathogens at concentrations not fit for purpose. As this risk is mitigated by adequate implementation of the applicant's controls, the Delegated Officer shall enforce these controls via operational conditions on the Works Approval and subsequent Licence.

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.

7. Consultation

Table 8 provides a summary of the consultation undertaken by the department.

Table 8: Consultation

Consultation method	Comments received	Department response
Application advertised on the department's website (15/05/2024) and in the West Australian (20/05/2024)	None	N/A
City of Karratha advised of proposal (16/05/2024)	The City of Karratha provided the following comments on 18/06/2024: As per the <i>Guideline for Non-potable uses of Recycled Water in Western Australia</i> , the new infrastructure and water quality is subject to a validation and verification process. We understand the verification process may include weekly recycled water sampling over a six-week period, with all consecutive samples having to comply with the water quality criteria included in the DoH approval. The City would like clarity on who will be responsible for this sampling process, given the applicant manages the reserve. Once the verification process has been completed, and the DoH is satisfied with the Recycled Water Quality Management Plan and Commissioning and Validation and Verification Report, it will issue an approval to use. The amended scheme must be operated in compliance with all conditions set out in the DoH approval. Ongoing monitoring of the recycled water quality to be continued as per the existing requirements under license L6755/1996/9 and DoH approval number D48/00000.	There are no proposed changes to the existing treatment process. The application is limited to adding a second tank to store treated water, plus irrigate the additional areas. As the treatment process is not being altered, DWER does not consider it necessary for the applicant to conduct commissioning testing on the post-treatment water. This Works Approval does not negate compliance with other approvals, including the DoH Recycled Water Scheme Approval D48/0000. Licence L6755/1996/9 remains in force and the applicant has a legislative responsibility to comply with the requirements of this licence.
Department of Health advised of proposal (16/05/2024)	The DoH provided the following comments on 07/06/2024: The DoH approval, D48/00000, granted on 14 July 2022, is consistent with the DWER application.	The applicant did not include Shark Cage Beach Foreshore within this application for irrigation, and confirmed on 11/06/2024 that they do not want to include it. The Delegated Officer notes DoH considers the RWMP contains adequate control measures to

Consultation method	Comments received	Department response
	For Hardey Reserve and Fitzroy Park, recycled water will be used for irrigation of the grassed areas and garden beds in each park. For Esplanade and Shark Cage beach, recycled water will be used for verge garden bed reticulation (sub surface irrigation). As per the recycled water management plan (RWMP) submitted by the applicant, adequate control measures are in place to reduce the risk of exposure to the residential properties near Fitzroy Crescent.	reduce the risk of exposure to the residential properties near Fitzroy Crescent. However, the DoH approval D48/00000 does not list Lot 53 and Lot 54 on Deposited Plan 17812 as an approved recycled water site. On 21/05/2024 the applicant withdrew Lots 53 and 54 on Deposited Plan 17812 from the works approval application, advising these premises will continue to be irrigated with scheme water. Drainage Reserve 42159 within Fitzroy Park that is between the road reserve and Lots 53 and 54 remains subject to this works approval application
Applicant provided with draft documents (03/07/2024)	On 25/07/2024 the Applicant advised they accept the Draft Works Approval and request minor updates to the Decision Report (see Appendix 1).	See Appendix 1

8. Conclusion

Based on the assessment in this decision report, the Delegated Officer has determined that a works approval will 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 Water and Environmental Regulation (DWER) 2020, *Guideline: Environmental Siting*, Perth, Western Australia.
- 3. DWER, 2019, Guideline: Industry Regulation Guide to Licensing, Perth, Western Australia.
- 4. DWER 2020, Guideline: Risk Assessments, Perth, Western Australia.

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

Decision Report	Summary of applicant's comment				Department's response
Section 2.2	The Department of Health requires that irrigation is not to commence before 9 pm (except for the WWTP lawns) and is to cease at such a time that provides a withholding period of nominally 4 hours or until the irrigated area is dry.				Report amended.
Section 3.1.1 Table 5	Sources	Emission	Potential pathways	Proposed controls	Report amended.
	Operation (include				
	Operation of second treated wastewater storage tank	Noise	Air / wind dispersion	Infrastructure to be installed is non-noise generating and will complement the currently operating WWTP.	
		Odour		Infrastructure to be installed is for post-treatment storage, no modifications to pre-treatment infrastructure. Standard maintenance procedures are expected to effectively mitigate the risk of odour emissions.	
		Spills of treated wastewater	Overland flow, subsurface seepage	Surface water management bunding to contain any spills. Overflow pipework will direct overflow to the ocean outfall pit Standard maintenance procedures are expected to effectively mitigate the risk of overflow spills	
				Spill response kits available.	
				Compliance with DoH approval including: spill response to be in accordance with the Wastewater Overflow Notification and Response Procedures (DoH 2021).	
				 all holding tanks and treatment systems will should be bunded and drained to a dedicated sump that can be pumped to ensure that any tank failure, spillage or operational spill and overflow is contained within the premises boundary. 	

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Decision Report	Summary of applicant's comment				Department's response
Section 3.1.1 Table 5 Section 3.1.1 Table 5	Sources Addition of Hardey Reserve, Fitzroy Park (Drainage Reserve 42159) and The Esplanade to the existing irrigation reuse network	Emission Treated wastewater containing pathogens at concentrations not fit for purpose	Potential pathways Direct contact or ingestion of pooling surface waters or irrigation mist	Proposed controls Approval from DoH for the additional irrigation locations with conditions to mitigate exposure risk to the general public. Irrigation of public open spaces commences at from 9:00 pm, for a 4 hour duration only and will cease at such time to provide a withholding period of nominally 4 hours or until the irrigated area is dry Treated wastewater is disinfected with chlorine prior to discharge from the WWTP and monitored online. Sampling and inspection regime for ponding and runoff, and annual reporting to DoH. Signage for irrigated areas and above ground water fittings. Spray drift is to be minimised by the selection of large droplet sprays and choice of spray height. Ongoing monitoring, inspection and maintenance controls will be undertaken in accordance with L6755/1996/9.	Report amended.

Appendix 2: Application validation summary

SECTION 1: APPLICATION SUMMARY							
Application type							
Works approval	\boxtimes						
		Relevant works approval number:		None			
		Has the works approval been complied with?		Yes □ No □			
Licence		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:					
Amendment to licence		Relevant works approval number:		N/A			
Registration		Current works approval number:		None			
Date application received		26 March 2024					
Applicant and Premises details							
Applicant name/s (full legal	name/s)	Pilbara Iron Company (Services) Pty Ltd					
Premises name		Dampier Wastewater Treatment Plant					
Premises location		Dampier					
Local Government Authorit	у	City of Karratha					
Application documents							
HPCM file reference number	er:	DER2024/000136					
Key application documents (additional to application fo		Supporting documentation					
Scope of application/assessment							
Summary of proposed active changes to existing operation		Works approval: Construction of a second treated wastewater storage tank at the existing licensed premises and addition of another oval to the existing reuse scheme.					

Prescribed premises category and description	Assessed production or	Proposed changes to the production or design	
•	design capacity	capacity (amendments only)	
Category 54 Sewage facility: premises – (a) On which sewage is treated (excluding septic tanks); or (b) From which treated sewage is discharged onto land or into waters.	900 m³ per 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 ⊠		
Does the applicant hold any existing Part IV Ministerial Statements relevant to the application?	Yes □ No ⊠		
Has the proposal been referred and/or assessed under the EPBC Act?	Yes □ No ⊠		
Has the applicant demonstrated occupancy (proof of occupier status)?	Yes ⊠ No □		
Has the applicant obtained all relevant planning approvals?	Yes □ No □ N/A ⊠		
Has the applicant applied for, or have an existing EP Act clearing permit in relation to this proposal?	Yes □ No ⊠	No clearing is proposed.	
Has the applicant applied for, or have an existing CAWS Act clearing licence in relation to this proposal?	Yes □ No ⊠	No clearing is proposed.	
Has the applicant applied for, or have an existing RIWI Act licence or permit in relation to this proposal?	Yes □ 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: Pilbara Groundwater Area; Pilbara Surface Water Area Type: Proclaimed Groundwater Area/Surface Water Area Has Regulatory Services (Water) been consulted? Yes ⋈ No □ N/A □ Regional office: North West	
Is the Premises situated in a Public Drinking Water Source Area (PDWSA)?	Yes □ No ⊠		
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 □	Department of Health Recycled Water Scheme Approval D48/00000	
Is the Premises within an Environmental Protection Policy (EPP) Area?	Yes □ No ⊠		
Is the Premises subject to any EPP requirements?	Yes □ No ⊠		
Is the Premises a known or suspected contaminated site under the <i>Contaminated Sites Act 2003?</i>	Yes □ No ⊠		