

Decision Report

Application for Works Approval

Part V Division 3 of the Environmental Protection Act 1986

Works Approval Number	W6581/2021/1
Applicant	Water Corporation
File Number	DER2021/000423
Premises	Woodman Point Wastewater Treatment Plant Part of Lot 9 Cockburn Road MUNSTER WA 6166
	Legal description Lot 9 on Diagram 31097 as defined by the coordinates in Schedule 2 of the Works Approval
Date of Report	18 February 2022
Decision	Works approval granted

MANAGER WASTE INDUSTRIES REGULATORY SERVICES INDUSTRY REGULATION

An officer delegated by the CEO under section 20 of the EP Act

Table of Contents

1.	Decision summary1						
2.	Scope of assessment1						
	2.1	Regulatory framework1					
	2.2	Application summary and overview of Premises1					
	2.3	Proposed works1					
	2.4	Part IV of the EP Act4					
	2.5	Contaminated Sites4					
3.	Risk	assessment4					
	3.1	Source-pathways and receptors4					
		3.1.1 Emissions and controls					
		3.1.2 Receptors					
	3.2	Risk ratings9					
4.	Cons	ultation13					
5.	Conc	lusion13					
Refe	erence	s14					
		1: Summary of applicant's comments on risk assessment and draft					
Арр	endix	2: Application validation summary17					

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 time-limited operation of the Premises. As a result of this assessment, Works Approval W6581/2021/1 has been granted.

2. Scope of assessment

2.1 Regulatory framework

In completing the assessment documented in this Decision Report, the department has considered and given due regard to its Regulatory Framework and relevant policy documents which are available at https://www.der.wa.gov.au.

2.2 Application summary and overview of Premises

On 19 July 2021 the applicant submitted an application for a works approval to the department under section 54 of the *Environmental Protection Act 1986* (EP Act).

The application is to undertake construction works relating to capacity and infrastructure upgrades for the sludge treatment process at the Premises.

The Premises relates to the categories and assessed design capacity under Schedule 1 of the *Environmental Protection Regulations 1987* (EP Regulations) which are defined in Works Approval W6581/2021/1. The infrastructure and equipment relating to the premises category and any associated activities which the department has considered in line with *Guidance Statement: Risk Assessments* (DER 2017) are outlined in Works Approval W6581/2021/1.

2.3 **Proposed works**

The premises currently operates as prescribed premises Category 54: *Sewage facility* and Category 61: *Liquid waste facility* under licence L4201/1991/11.

The wastewater treatment process was recently upgraded and commissioned in 2019, through an amendment to L4201/1991/11, to provide 180 ML/d of wastewater treatment capacity, with the potential to further upgrade this to 220 ML/d.

Following this upgrade, it was identified that the sludge treatment process also required capacity and infrastructure upgrades due to an expected increase of combined thickened sludge production by 33% on annual average, and by 76% in the theoretical maximum months (summer) compared to the historical plant operation. This is due to the lower sludge age of the new secondary process, as well as improvements to solids capture.

The proposed sludge treatment process works include:

- Upgrade of the reclaimed effluent network
- Upgrade of existing 4 inlet screens
- Raw Primary Sludge (RPS) Screening
- RPS Thickening and Polymer System
- Thickened Excess Activated Sludge (TEAS) Screening and Pre-Dewatering
- Pre-Dewatering (Centrifugal) Facility
- Sludge receival facility (from satellite WWTPs)
- Digestion Pre-Treatment Facility

- Thermal hydrolysis process side stream centrate treatment facility
- Digested Sludge- Dewatering and Unloading Facility
- Odour Control Facility
- Energy Recovery and Biogas Facility
- Decommissioning of redundant assets

The existing wastewater treatment process will be operational during the entirety of the proposed constructions and commissioning works. Figure 1 illustrates the proposed flow of the upgraded process.



Figure 1. Proposed process flow diagram

Note: Figure supplied within the application

Works Approval: W6581/2021/1

IR-T13 Decision Report Template (short) v1.0 (May 2020)

2.4 Part IV of the EP Act

The Premises is subject to Ministerial Statement 665, which specifies criteria for wastewater discharge to the Sepia Depression via the Sepia Depression Ocean Outlet Landline.

Ministerial Statement 665 is not impacted by the proposed works and has thus not been considered in this assessment.

2.5 Contaminated Sites

A notice of classification for Lot 9 on Diagram 31097, dated 13 November 2013, indicated that the premises was classified as 'potentially contaminated - investigation required' (PC-IR) based on information submitted to the then DER in May 2007.

The premises PC-IR classification is understood to have been based on visual indications of cinder ash originating from the Fremantle Coke and Gas Works which was used as a development base for a motorcycle track in the mid 1970's.

However, during the development of the Preliminary Site Investigation (PSI), it was noted that the cinder ash was only reported to be present within adjacent Lot 20, located to the north of Lot 9, and not related to the wastewater treatment plant premises.

In 2019, ERM completed its PSI within the property boundary. Given the confirmed presence of asbestos contaminated material (ACM) in various structures (roofing, pipes insultation, flooding etc) at different locations on-site, the applicant has engaged a consultant to remove any environmental / contamination constraints, to the extent practicable prior to the commencement of the construction program.

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 *Guidance Statement: Risk Assessments* (DER 2017).

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

3.1 Source-pathways and receptors

3.1.1 Emissions and controls

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

Emission	Sources	Potential pathways	Proposed controls
Construction			
Dust	Vehicle movements on unsealed access roads.	Air/windborne pathway	- A Construction Environmental Management Plan (CEMP) will be prepared prior to construction works commencing.
	Civil and		- Wetting/dust suppression of unsealed

 Table 1: Proposed applicant controls

Emission	Sources	Potential pathways	Proposed controls
	construction works to facilitate modifications		surfaces using benign dust suppressants will be used on disturbed areas as required during construction.
			- Site preparation and excavations (cut and fill) will not be conducted if wind conditions are not favourable with respect to down-wind receptors.
Noise	Civil and construction works	Air/windborne pathway	- The Environmental Protection (Noise) Regulations 1997 apply.
	to facilitate modifications.		- Construction will be undertaken during the hours of 7am and 7pm Monday to Saturday, however, should works be required outside approved times Water Corporation will seek relevant approvals from DWER and the Local Government authority, prepare a Noise Management Plan and undertake community consultation in accordance with the <i>Environmental Protection (Noise) Regulations</i> <i>1997</i> .
Odour	Interruption of treatment process to upgrade and install	Air/windborne pathway	 A Construction Environmental Management Plan (CEMP) will be prepared prior to construction works commencing.
	new infrastructure		- It is anticipated that each of these tie-ins will require the Odour Control Facility (OCF) to be shut down for a day. During the detailed design/planning phase Water Corporation will work with the contractor to minimize duration of the shutdowns and look at the possibility of combining some of these tie-ins on a single day.
Spills of hydrocarbons	Installation of wastewater	Overland flow and	- The Environmental Protection (Unauthorised Discharge) Regulations 2004 apply.
from vehicles and equipment	infrastructure	infiltration to soil and groundwater	- All hazardous chemicals and hydrocarbons required on-site are to be stored in appropriately bunded areas compliant with AS1940 and AS192 to contain any potential leaks or spills.
			- Appropriate spill kits, containment and recovery equipment, personal protective equipment and relevant operator instructions/emergency procedure guides for the management of waste and chemicals associated with activities will be kept and maintained on site.
Commissionin	ng and Time-limited Op	peration	
Odour	Increase in capacity of sludge processing locations	Air/windborne pathway	- The Upgrade will include a combined air volume extraction rate of 91,000 m ³ /hr, which is diverted to the expanded Odour Control Facility (OCF) (Bioscrubber and Carbon

Emission	Sources	Potential pathways	Proposed controls
	Operation of		Scrubbing Farm).
	infrastructure Receipt, processing and treatment of wastewater, and the		- Environmental and Air Quality Consulting Pty Ltd (EAQ) Woodman Point Waste Water Treatment Plant – Sludge Facility Upgrade Odour Assessment.
	discharge of wastewater		- Sludge conveyance is entirely contained within dedicated pipework to the Rotary Screw Thickeners (RSTs) and Dissolved Air Flotation Thickeners (DAFTs).
			- All contained odour emissions are extracted to the OCF.
			- Sludge Tankering (receivals from other WWTP's and final load-out) is undertaken via semi-enclosed receivals and load-out tunnel with odour extraction and connection to the OCF.
			 Biogas produced during the mesophilic anaerobic digestion process is collected in an enclosed piping and tank system.
Noise	Operation of infrastructure	Air/windborne pathway	Existing operational controls consistent with Licence L4201/1991/11.
Wastewater discharge to the environment	Loss of containment	Overland flow and infiltration to soil and groundwater	 Existing operational controls consistent with Licence L4201/1991/11. Works will occur alongside the existing operating plant.
	Discharge of treated wastewater	Direct discharge through the Sepia Depression Ocean Outlet Landline	- The Sepia Depression Ocean Outlet Landline (SDOOL) transfers treated wastewater from the premises to the Sepia Depression. The treated wastewater quality discharged from the premises both during construction and during operation of the upgraded plant is expected to remain as per the current situation (with improvements expected long-term) and will not exceed the discharge loads to the ocean required by Ministerial Statement 665 or the licence.
			The SDOOL Marine Monitoring Plan will continue to be implemented during construction works and monitoring will continue as per the current licence arrangements.

3.1.2 Receptors

In accordance with the *Guidance Statement: Risk Assessment* (DER 2017), the Delegated Officer has excluded employees, visitors and contractors of the applicant'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 2 and **Error! Reference source not found.**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 (*Guidance Statement: Environmental Siting* (DER 2016)).

Human receptors	Distance from prescribed activity		
Residential properties	The nearest residential home is located approximately 530 m north-east of the nearest emission source at the premises.		
	Residents approximately 1.0 km to the north-east from the centre of the premises.		
	Residents approximately 1.7 km to the north from the centre of the premises.		
Coogee Primary School	Approximately 1.5 km north from the centre of the premises.		
Woodman Point Recreation Reserve	Approximately 1.1 km to the north-west from the centre of the premises.		
Industrial premises	Adjacent to the southern boundary.		
Environmental receptors	Distance from prescribed activity		
Jervoise Bay	Approximately 250 m to the west from the centre of the premises.		
Lake Coogee (geomorphic wetland)	Adjacent to the eastern boundary.		
Groundwater	Groundwater is approximately 18.5 m below ground level. (https://maps.water.wa.gov.au/#/webmap/gwm)		
Bush forever site 261 (Lake Coogee and Adjacent Bushland, Munster)	Adjacent to the eastern boundary.		
Bush forever site 341 (Woodman Point)	Adjacent to the western boundary.		

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



Figure 2: Distance to sensitive environmental and residential receptors

3.2 Risk ratings

Risk ratings have been assessed in accordance with the *Guidance Statement: Risk Assessments* (DER 2017) for each identified emission source and takes into account potential source-pathway and receptor linkages as identified in Section 3.1. Where linkages are in-complete they have not been considered further in the risk assessment.

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

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

Works Approval W6581/2021/1 that accompanies this Decision Report authorises construction and time-limited operations. The conditions in the issued Works Approval, as outlined in Table 3 have been determined in accordance with *Guidance Statement: Setting Conditions* (DER 2015).

A licence is required following the time-limited operational phase authorised under the works approval to authorise emissions associated with the ongoing operation of the Premises. A risk assessment for the operational phase has been included in this Decision Report, however licence conditions will not be finalised until the department assesses the licence application.

Table 3: Risk assessment of potential emissions and discharges from the Premises during construction, commissioning and operation

Risk Event	Risk Event							
Source/Activities	Potential emission	Potential pathways and impact	Receptors	Applicant controls	C = Applicant consequence sufficient? L = likelihood	Conditions ² of works approval	Justification for additional regulatory controls	
Construction								
Vehicle movements on unsealed access roads. Civil and construction works to facilitate modifications to the	initial endocements on sealed access roads. Air/windborne pathway causing is located approximately approximately ivil and construction orks to facilitate implemention of the pathway causing is located approximately	Refer to Section 3.1	C = Minor L = Rare Low Risk	Ν	Conditions 1 and 2	The applicant has committed to having a Construction Environmental Management Plan (CEMP) which will address the potential for noise emissions and provide mitigation measures. The works approval will specify the minimum requirements for the CEMP to manage noise emissions.		
Premises.	Dust		north-east	Refer to Section 3.1	C = Minor L = Rare Low Risk	Ν	Conditions 1 and 2	The works approval will specify the minimum requirements for the CEMP to manage dust emissions, including the potential disturbance of asbestos contaminated soils.
Interruption of treatment process to upgrade/install new equipment/infrastructure	Odour	Air/windborne pathway causing impacts to health and amenity	The nearest residential home is located approximately 530m to the north-east	Refer to Section 3.1	C = Minor L = Likely Medium Risk	Y	Condition 7 Conditions 1 and 2	The works approval will specify the minimum requirements for the CEMP to manage odour emissions. Time periods for cut overs from the existing infrastructure to the new system will be limited to reduce the potential for odour emissions.
Installation of wastewater infrastructure	Spills of hydrocarbons from vehicles and equipment	Overland flow and infiltration to soil and groundwater causing ecosystem disturbance	Jervoise Bay approximately 250 m to the west	Refer to Section 3.1	C = Moderate L = Rarey Medium Risk	Y	N/A	Minor hydrocarbon and chemical spillages are adequately regulated by the <i>Environmental</i> <i>Protection (Unauthorised</i> <i>Discharges) Regulations 2004.</i>

Works Approval: W6581/2021/1

IR-T13 Decision Report Template (short) v1.0 (May 2020)

Risk Event				Risk rating ¹	Annellanat			
Source/Activities	Potential emission	Potential pathways and impact	Receptors	Applicant controls	C = consequence L = likelihood	Applicant controls sufficient?	Conditions ² of works approval	Justification for additional regulatory controls
Commissioning and time	e-limited-operation	s operations						
Increase in capacity of sludge processing locations Operation of infrastructure Receipt, processing and treatment of wastewater, and the discharge of wastewater	Odour	Air/windborne pathway causing impacts to health and amenity	The nearest residential home is located approximately 530m to the north-east	Refer to Section 3.1	C = Moderate L = Possible Medium Risk	Ν	Conditions 3, 7, 12 Conditions 4, 5, 8, 9, 13, 15 and 16	Existing licence L4201/1991/11 conditions for the premises require that Water Corporation operate and maintain odour pollution control equipment on the premises to prevent and mitigate odour emissions. The controls provided in the existing licence condition has been included in the works approval to address odour emissions that may result from commissioning activities. Conditions 4 and 5 require the submission of an Environmental Compliance Report to verify the works have been constructed in accordance with the relevant requirements. Conditions 8 and 9 require the submission of an Environmental Commissioning Report to verify infrastructure against manufacturer's specifications. Conditions 15 and 16 require the undertaking of four odour field assessments during the summer and autumn period to determine the extent of possible odour impacts to sensitive receptors. This assessment allows further validation of odour controls once operational in combination with the odour field assessments undertaken in August 2020.
Operation of infrastructure	Noise	Air/windborne pathway causing impacts to health	The nearest residential home is located	Refer to Section 3.1	C = Minor L = Unlikely	Y	Conditions 3, 7 Conditions 4, 5, 8 and	The operation of the proposed infrastructure does not alter the risk as previously assessed for

Works Approval: W6581/2021/1

Risk Event					Risk rating ¹			
Source/Activities	Potential emission	Potential pathways and impact	Receptors	Applicant controls	C = consequence L = likelihood	Applicant controls sufficient?	Conditions ² of works approval	Justification for additional regulatory controls
		and amenity	approximately 530m to the north-east		Medium Risk		<u>9</u>	equivalent infrastructure for Licence L4201/1991/11. The Delegated Officer considers that the provisions of the Environmental Protection (Noise) Regulations 1997 are sufficient to regulate noise emissions during time-limited operations.
Loss of containment	Wastewater discharge to the environment	Overland flow and infiltration to soil and groundwater causing ecosystem disturbance	Groundwater approximately 18mbgl Jervoise Bay approximately 250 m to the west	Refer to Section 3.1	C = Moderate L = Unlikely Medium Risk	Y	Conditions 3, 7 <u>Conditions 4, 5, 8 and</u> 9	The operation of the proposed infrastructure does not alter the risk as previously assessed for equivalent infrastructure for Licence L4201/1991/11.
Discharge of treated wastewater	Wastewater discharge to the environment	Direct discharge through the Sepia Depression Ocean Outlet Landline causing ecosystem disturbance	4 km offshore into the Sepia depression	Refer to Section 3.1	C = Major L = Unlikely Medium Risk	Y	Conditions 3, 7 <u>Conditions 4, 5, 8 and</u> 9	The proposed works are not expected to adversely impact the current quality of treated wastewater. The existing conditions of Licence L4201/1991/11 and the discharge requirements of Ministerial Statement 665 provide sufficient control to mitigate the potential for adverse emissions through wastewater discharge to the Sepia Depression.

Note 1: Consequence ratings, likelihood ratings and risk descriptions are detailed in the Guidance Statement: Risk Assessments (DER 2017).

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

4. Consultation

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

Table 4: Consultation

Consultation method	Comments received	Department response
Application advertised on the department's website (closed 23/09/2021)	None received	N/A
Local Government Authority advised of proposal (09/09/2021)	The City of Cockburn provided no comments on the proposal.	N/A
Department of Health (DOH) advised of proposal (09/09/2021)	 DOH advised that they have no objection to the proposal subject to the following: comply with the <i>Health</i> (<i>Miscellaneous Provisions</i>) Act 1911; comply with DWER water quality discharge criteria; sludge managed appropriately; odour assessments to be undertaken during summer (comparable to the one undertaken during winter); submit an application for approval to DOH for the proposed upgrade. An Asbestos Management Plan may also be required during construction works due to the potential for asbestos in soils which may be disturbed. 	The Delegated Officer has considered the recommendations provided by DOH, and has included asbestos management within the Construction Environmental Management Plan to be submitted prior to construction activities commencing. Odour field assessments will also be required during time-limited operations to determine the extent of odour impacts on sensitive receptors following the upgrade.
Applicant was provided with draft documents on 2 November 2021	Refer to Appendix 1	Refer to Appendix 1

5. 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) 2016, *Guidance Statement: Environmental Siting*, Perth, Western Australia.
- 2. DER 2017, Guidance Statement: Risk Assessments, Perth, Western Australia.
- 3. DER 2015, Guidance Statement: Setting Conditions, Perth, Western Australia.
- 4. Department of Water and Environmental Regulation (DWER) 2019, Guideline: Decision Making, Perth, Western Australia
- 5. DWER 2019, Guideline: Industry Regulation Guide to Licensing, Perth, Western Australia

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

Condition	Summary of applicant's comment	Department's response
Condition 1 Table 1	As per discussion with DWER on the 9th December 2021 specific locations of new assets/infrastructure should not be detailed in the works approval as this does not have any impact of performance or capacity. All Infrastructure locations column will relate to Figure 2, Schedule 1.	Infrastructure location has been specified as provided in the updated figure by the applicant.
Condition 1 Table 1	As per discussion with DWER on the 9th December 2021 the specific design details has been scaled back to allow for changes in design or type of asset but still maintaining output, volumes and purpose etc.	The design and construction requirements within Table 1 have been amended to reflect the design intent of the infrastructure, maintaining certain details relating to capability outcomes and intent.
Condition 4	As per discussion with DWER on the 9th December 2021 Water Corporation is seeking to prepare and submit one environmental compliance report in preparation of environmental commissioning once all 12 infrastructure items are ready for environmental commissioning.	Th works approval has been amended to require the submission of the Environmental Compliance Report within 60 calendar days of the completion of all 12 items of infrastructure being constructed.
Condition 5	Amendment of 'suitably qualified civil or structural engineer' to 'suitably qualified engineer'.	Certification within the Environmental Compliance Report will be required by a suitably qualified engineer, with the definition within the works approval amended to include a minimum of five years of experience working in a supervisory area of civil, structural or mechanical engineering. This ensures certification of infrastructure is completed by an appropriate engineer with technical expertise.
Condition 6	Request to commence environmental commissioning following the submission of the single Environmental Compliance Report for all items of infrastructure.	The condition has been amended to reflect this.
Condition 7 Table 2	The Commissioning Requirements below with regards to the Inlet Screen upgrade is based on an estimate duration to remove existing equipment; repairs to existing civil structure, install new equipment, test and commissioning and bring into service for 28 day proving period. This period between replacement of the screens may be subject to change based on improved design, change in construction methods, repairs civil structure may not be required, commissioning requirements to prove screens may be modified. Ensuring that 12 weeks pass between the removal of each standby screen would not have an environment impact on the performance of the plant in fact reducing that duration to ensure	The commissioning requirements for each item of infrastructure has been amended to require the existing treatment process to remain operational throughout the construction and commissioning of the new sludge treatment process.

Works Approval: W6581/2021/1

Condition	Summary of applicant's comment	Department's response
	new screens are install quickly would be environmental advantageous to the WRRF.	
	Similar comment on the below requirement, one of the proponents has stated that there maybe an option to commission multiply digesters rather than one at a time without impacting on the performance of the digester therefore this condition would be very restrictive.	
	The most important condition is to keep the existing treatment process must remain operational throughout the construction and commissioning of the new sludge treatment process.	
Condition 10	Simplification of the condition	Condition amended to allow time-limted operations following the submission of the Environmental Commissioning Report.
Condition 12 Table 3	Operational requirement details to reflect all requested changes as above in Table 1 for Design and Construction / Installation Requirements.	Amended as per Condition 1, Table 1.
Condition 12 Table 3	As per discussion with DWER on the 9th December 2021 specific locations of new assets/infrastructure should not be detailed in the works approval as this does not have any impact of performance or capacity. All Infrastructure locations column will relate to Figure 2, Schedule 1.	Amended as per Condition 1, Table 1.

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 🗆	
			nental Compliance Report / Containment Infrastructure Yes D No D submitted?		No 🗆	
		Date Report received:				
Renewal		Current licence number:				
Amendment to works approval		Current works approval number:				
Amendment to licence		Current licence number:	cence			
		Relevant works approval number:		N/A		
Registration		Current works approval number:		None		
Date application received		19 July 2021				
Applicant and Premises details		-				
Applicant name/s (full legal name/s)		Water Corporation				
Premises name		Woodman Point Wastewater Treatment Plant				
Premises location		837 Cockburn Road, Munster Western Australia 6166 Lot 9 on Diagram 31097, Volume 2190, Folio 897				
Local Government Authority		City of Cockburn				
Application documents						
HPCM file reference number:		DWERDT479870				
Key application documents (additional to application form):		CS03501 Woodman Point Sludge Upgrade 120tDS: Works Approval Application Supporting Information – July 2021 Environmental Risk Program: Baseline Assessment - Woodman Point Wastewater Treatment Plant				
		Post-Commissioning Odour Field Assessments Ektimo sludge odour results				
		Commissioning Validation Report: Odour Control Facility Sludge Facility Upgrade Odour Assessment				
Scope of application/assessment						

	Works entryick (related to 1.4201/4001/44)
	Works approval (related to L4201/1991/11)
	Following the recent completion of wastewater treatment capacity upgrade work at the premises, it was identified that the sludge treatment process requires capacity and infrastructure upgrade (to a design capacity of 120 tDS/day) by 2024 to meet regulatory compliance.
	The proposed works include the design, construction, and upgrade of existing sludge facilities comprising of sludge receival dewatering, sludge digestion, odour, energy recovery, waste gas handling and associated infrastructure using the thermal hydrolysis process (THP) technology.
	The proposed activities include:
	- Earthworks and site preparation
	- Creation of hardstand areas and track access
	- Upgrade of the reclaimed effluent network
Summary of proposed activities or	- Upgrade of existing 4 inlet screens
changes to existing operations.	- Raw Primary Sludge (RPS) Screening
	- RPS Thickening and Polymer System
	 Thickened Excess Activated Sludge (TEAS) Screening and Pre Dewatering
	- Pre-Dewatering (Centrifugal) Facility
	- Sludge receival facility (from satellite WWTPs)
	- Digestion Pre-Treatment Facility
	- THP side stream Centrate Treatment Facility
	- Digested Sludge- Dewatering and Unloading Facility
	- Odour Control Facility
	- Energy Recovery and Biogas Facility
	- Commissioning of the works
	 Upgrade of ancillaries such as upgrade to RE system, polyme system, compressed air,
	electrical upgrades etc
	- Decommissioning of redundant assets

Table 1: Prescribed premises categories

Prescribed premises category and description	Proposed production or design capacity		Proposed changes to the production or design capacity	
Category 54: Sewage facility	Current: 180,000 cubic metres per day Proposed: No change			
Category 61: Liquid waste facility	Current: 50,000 tonnes per annual period Proposed: No change			
Legislative context and other approvals				
Has the applicant referred, or do they intend to refer, their proposal to the EPA		Yes 🗆 No 🛛	Referral decision No: Managed under Part V ⊠	

Works Approval: W6581/2021/1

under Part IV of the EP Act as a		
significant proposal?		Assessed under Part IV
Does the applicant hold any existing Part IV Ministerial Statements relevant to the application?	Yes 🛛 No 🗆	Ministerial statement No: 665 EPA Report No:
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 □ Expiry:
Has the applicant obtained all relevant planning approvals?	Yes 🗆 No 🗆 N/A 🗆	Approval: Expiry date: If N/A explain why?
Has the applicant applied for, or have an existing EP Act clearing permit in relation to this proposal?	Yes 🛛 No 🗆	CPS No: CPS185/8 Approximately 3.8ha Clearing by mechanical means Clearing initially conducted as part of asbestos remediation program prior to constructing assets onsite.
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 Licence / permit not required.
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: N/A Type: Has Regulatory Services (Water) been consulted? Yes I No I N/A I Regional office:
Is the Premises situated in a Public Drinking Water Source Area (PDWSA)?	Yes □ No ⊠	Name: N/A Priority: P1 / P2 / P3 / N/A Are the proposed activities/ landuse compatible with the PDWSA (refer to <u>WQPN 25</u>)? Yes I No I N/A I

Works Approval: W6581/2021/1

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
Is the Premises within an Environmental Protection Policy (EPP) Area?	Yes □ No ⊠	Adjacent to the Environmental Protection (Kwinana)(Atmospheric Wastes) Policy 1999
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 □	A Notice of Classification by the DER for Lot 9 on Diagram 31097 dated 13 November 2013, as provided by the Corporation as part of the assessment, indicated that the Site was classified as 'potentially contaminated – investigation required' (PC-IR) based on information submitted in May 2007. The Sites PC-IR classification is understood to have been based on visual indications of cinder ash. It is understood that the cinder ash originated from the Fremantle Coke and Gas Works.
		However, during the development of the PSI (ERM, 2016), ERM noted that the cinder ash was only reported to be present within adjacent Lot 20, located to the north of Lot 9, and not related to the WRRF Site (Lot 9). This error was due to the WRRF being identified as Lot 20 in the initial investigation. It appears that contamination issues associated with the cinder ash should only be linked to Lot 20, and not to Lot 9 (the WRRF).