# **Amendment Report**

## **Application for Works Approval Amendment**

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

Works Approval

Number

W6480/2020/1

Works Approval Holder Edna May Operations Pty Ltd

**ACN** 136 365 001

File Number DER2020/000584

Premises Edna May Treated Wastewater Disposal Area

772 Carrabin-Westonia Rd

Legal description -

Lot 1523 on Deposited Plan 187255

WESTONIA, WA 6423

Certificate of Title Volume 1987 Folio 491

As defined by the Premises maps attached to the issued

works approval

**Date of Report** 17/12/2021

**Decision** Revised works approval granted

Steve Checker
MANAGER WASTE INDUSTRIES
REGULATORY SERVICES

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

## **Table of Contents**

1.	Decision summary1							
2.	Scor	Scope of assessment						
	2.1	Regulatory framework						
	2.2	Application summary						
3.	Risk	assessment						
	3.1	Source-pathways and receptors						
		3.1.1 Emissions and controls						
		3.1.2 Receptors	2					
	3.2	Risk ratings	3					
4.	Cons	sultation	6					
5.	Cond	clusion	6					
	5.1	Summary of amendments	6					
Ref	erence	es						
App	endix	1: Summary of Works Approval Holder's comments on riskent and draft conditions						
Apr	endix	2: Application validation summary	Ç					

## 1. Decision summary

Works Approval W6480/2020/1 is held by Edna May Operations Pty Ltd (Works Approval Holder) for the Edna May Treated Wastewater Disposal Area (the Premises), located at 772 Carrabin-Westonia Rd, Lot 1523 on Deposited Plan 187255, WESTONIA, WA 6423.

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 and operation of the Premises. As a result of this assessment, Revised Works Approval W6480/2020/1 has been granted.

## 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 <a href="https://dwer.wa.gov.au/regulatory-documents">https://dwer.wa.gov.au/regulatory-documents</a>.

#### 2.2 Application summary

On 02 September 2021, the Works Approval Holder submitted an application to the department to amend Works Approval W6480/2020/1 under section 59 and 59B of the *Environmental Protection Act 1986* (EP Act). The following amendment is being sought:

The existing works approval includes irrigation using sprinkler systems, this amendment seeks to replace the sprinkler system with drip irrigation. The discharge rate per day will be 25 – 30 kL/day. The proposed drip line to be used is NETAFIM Dripnet 17.55 mm 500 m rolls (1.0L/L @0.75 M spacing). The use of drip lines is to reduce the risk of overspray towards neighbouring farmland and native vegetation.

No other amendments are proposed to other aspects of the current works approval.

#### 3. Risk assessment

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

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

## 3.1 Source-pathways and receptors

#### 3.1.1 Emissions and controls

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

**Table 1: Works Approval Holder controls** 

Emission	Sources	Potential pathways	Proposed controls
Odour	Discharge of wastewater via drip irrigation to land	Air/windborne pathway	The drip line will be regularly inspected to ensure the integrity of the pipeline and to ensure there is no blockages or pooling.
			As per the existing approved works approval the Irrigation area is to be graded, contoured or employ earthen bunded to ensure that runoff from the irrigation area does not occur.
Leakages	Rupture of pipes resulting in sewage discharge to land - key contaminants include Nitrogen and		Under the agreement should treated wastewater not meet required water quality standards, transportation of treated wastewater to the oval and the secondary discharge area will cease immediately;
	Phosphorous		All pipelines will be buried;
			Buried pipes will be sign posted;
			Pipelines will include daily visual inspections when the discharge is occurring;
			Monitor treated water quality at outlet pipe from WWTP.
Treated effluent	Effluent from the WWTP discharged at the irrigation spray field area	Direct discharge	Should treated wastewater not meet required water quality standards, irrigation to the oval and secondary discharge area will cease immediately;
			Monitor treated effluent water quality at outlet pipe from WWTP;
			This secondary discharge area will only be used if the recycled water is required to be redirected from the town oval for any reason;
			The treatment of effluent for the re-use for irrigation is regulated by the Department of Health under the Health Act 1911 via a Recycled Water Scheme Approval (Approval Number: E28/WS000).

#### 3.1.2 Receptors

In accordance with the *Guideline: Risk assessments* (DWER 2020), the Delegated Officer has excluded employees, visitors and contractors of the Works Approval 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 2 below provides a summary of potential human and environmental receptors that may be impacted as a result of activities upon or emission and discharges from the prescribed premises (*Guideline: Environmental siting* (DWER 2020)).

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

## activity

Human receptors	Distance from prescribed activity
Privately owned broadacre agricultural farmland	To the south, approximately 50m from the boundary of this land
The Westonia Caravan park	Approximately 1km from Edna discharge farm
Edna May Accommodation Village WWTP	Approximately 1km from Edna discharge farm
Westonia oval	Approximately 1.3 km from the discharge
Environmental receptors	Distance from prescribed activity
Lake Campion	Approximately 25 km from the discharge farm
Lake Mount Brown	Approximately 50 km from the discharge farm
TEC – Wheatbelt Woodlands	Immediately to the east of the premises boundary
Groundwater	Depth to groundwater encountered at approximately 28 m to 40 m below ground level
	Westonia Groundwater Area - RIWI Proclaimed Groundwater Area
Threatened fauna:	
	~1,000 m north east of the premises; and
	~ 1,800 m east of the premises
Threatened flora	
	Multiple sightings within 1,000 m of the premises boundary

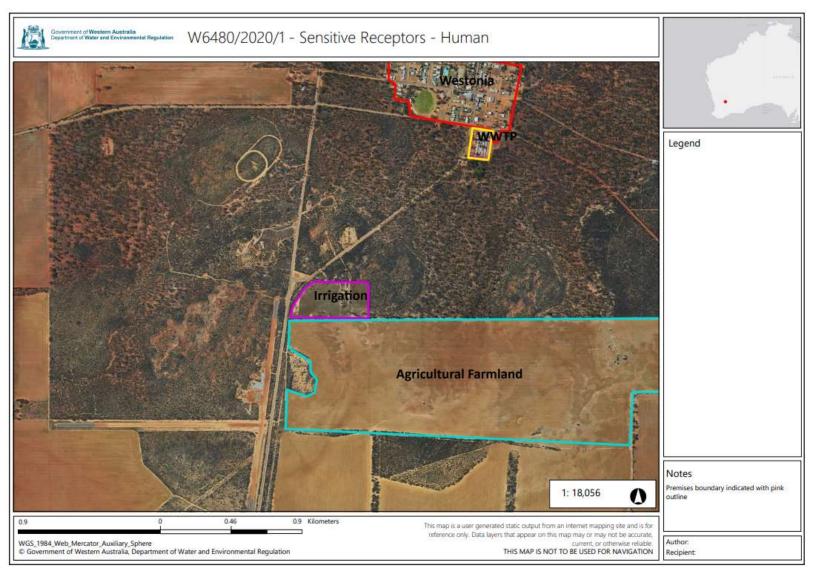


Figure 1: Distance to sensitive receptors - Human

Works Approval: W6480/2020/1

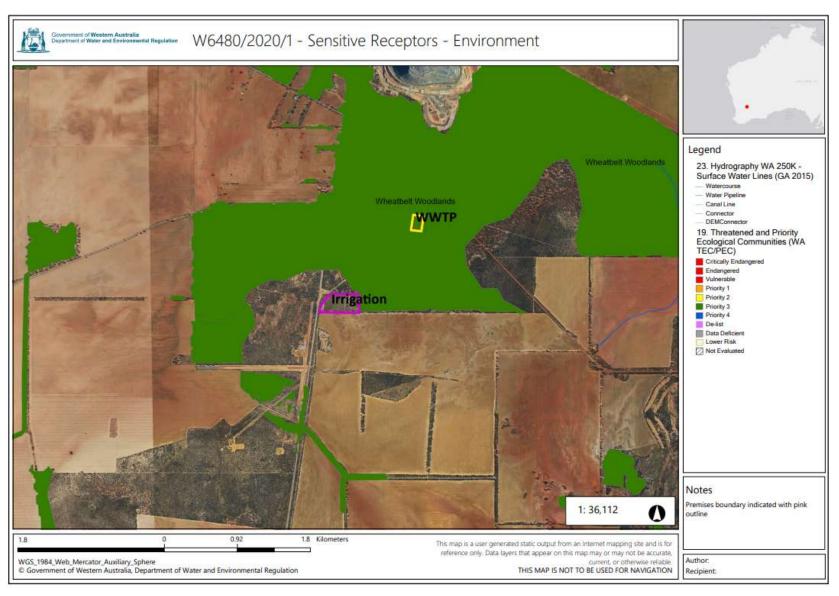


Figure 2: Distance to sensitive receptors - Environment

Works Approval: W6480/2020/1

### 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 incomplete they have not been considered further in the risk assessment.

Where the Works Approval 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 Works Approval Holder'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 Works Approval Holder's controls are not deemed sufficient. Where this is the case the need for additional controls will be documented and justified in Table 3.

The Revised Works Approval W6480/2020/1 that accompanies this Amendment Report authorises construction only. The conditions in the Revised Works Approval have been determined in accordance with *Guidance Statement: Setting Conditions* (DER 2015).

A licence is required to authorise emissions associated with the ongoing operation of the Premises i.e. discharge by drip irrigation. A risk assessment for the operational phase has been included in this Amendment Report, however licence conditions will not be finalised until the department assesses the licence application.

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

Risk Event					Risk rating <sup>1</sup>	Works Approval Holder's controls sufficient?	Conditions <sup>2</sup> of works approval	Justification for additional regulatory controls
Source/Activities	Potential emission	Potential pathways and impact	Receptors	Works Approval Holder's controls	C = consequence L = likelihood			
Construction								
	Dust	Air/windborne pathway causing impacts to health and amenity  Privately owned farmland adjacent to the discharge farm.  Westonia Caravan Park.	owned farmland		C = Slight	Y N/A	The Delegated Officer considers impacts from dust emissions are unlikely but can be regulated under s49 of the EP Act. No further risk assessment is required	
Excavation works for the installation of dripper irrigation	Noise		the discharge farm.  Refer to Section 3.1  Westonia Caravan		L = Unlikely Low Risk	Υ	N/A	The Delegated Officer considers that if any noise impacts arise, management under the Environmental Protection (Noise) Regulations 1997 will be adequate. No further risk assessment is required.
Operation (Operational Premis	Operation (Operational Premises subject to Registration which is not subject to specific conditions)							
Irrigation – Transportation and discharge of treated effluent wastewater by drip irrigation	Odour	Air/windborne pathway causing impacts to health and amenity	Privately owned farmland adjacent to the discharge farm. Westonia Caravan Park	Refer to Section 3.1	C = Slight L = Unlikely Low Risk	Υ	N/A	The Delegated Officer considers odour impacts are unlikely and that any emissions can be regulated under s49 of the EP Act. No further risk assessment is

Works Approval: W6480/2020/1

Risk Event	- Risk rating <sup>1</sup>	Works						
Source/Activities	Potential emission	Potential pathways and impact	Receptors	Works C = consequent		Approval Holder's controls sufficient?	Conditions <sup>2</sup> of works approval	Justification for additional regulatory controls
								required.
	Treated effluent discharge outside of irrigation area from over irrigation, rupture of pipes	Overland flow potentially impacting health of adjacent vegetation via waterlogging of soils and excess nutrients	Soil and vegetation adjacent to discharge area		C = Slight L = Unlikely Low Risk	Y	Condition 1 of the works approval specifies the location and infrastructure requirements for the establishment of the discharge area, including a requirement in the construction stage to employ contouring or earthen bunding to ensure that runoff from the irrigation area does not occur.	The Delegated Officer considers that the new discharge method does not alter the nutrient loading rates and the proposal presents a low risk to the environment.

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

Note 2: Proposed Works Approval Holder's 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
Works Approval Holder was provided with draft amendment on 8/11/21	Two minor administrative corrections to the Works Approval	Requested administrative changes made
The Department of Health were provided a copy of the application on 2/12/2021	The DOH supports dripper irrigation for the disposal area in reference to AS/NZS 1547:2012 requirements. Please send all relevant information relating to the amendments and upgrades of the recycled water quality management plan (RWQMP). The revised plan appears to show less reticulated areas with the 5 metre buffers and may require a larger disposal area upon review.	The applicant advises that:  'The move to drip irrigation will not reduce the coverage of the system and that the proposed disposal area is the same as the current disposal area.  The drip lines will be spread across the entire discharge area.  As part of the NIMP that will be submitted with the registration approval, EMO will include a management action to review the spacing of the drip line, and add additional drip line rows if required to disperse discharge within the approved area.'  DWER will ensure that DOH are provided with the NIMP and any RQWMP that is submitted on the future registration application.

#### 5. Conclusion

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

## 5.1 Summary of amendments

Table 5 provides a summary of the proposed amendments and will act as record of implemented changes. All proposed changes have been incorporated into the Revised Works Approval as part of the amendment process.

Table 5: Summary of works approval amendments

Condition no.	Proposed amendments
Condition 1, Table 1	Irrigation method amended from Sprinklers to Drip Irrigation
Schedule 1, Figure 3	Map updated

## 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 2020, Guideline: Risk Assessments, Perth, Western Australia.

# Appendix 1: Summary of Works Approval Holder's comments on risk assessment and draft conditions

Condition	Summary of Works Approval Holder's comment	Department's response

## **Appendix 2: Application validation summary**

SECTION 1: APPLICATION SUMMARY (as updated from validation checklist)							
Application type							
Works approval							
		Relevant works approval number:		Non e			
		Has the works appropried with?	oroval been	Yes 🗆	□ No □		
Licence		Has time limited o the works approva acceptable operat	al demonstrated	Yes 🗆	□ No □ N/A		
		Environmental Co Critical Containme Report submitted?	ent Infrastructure	Yes 🗆	□ No □		
		Date Report receiv	ved:				
Renewal		Current licence number:					
Amendment to works approval ⊠		Current works approval number:	W6480/2020/1				
		Current licence number:					
Amendment to licence		Relevant works approval number:		N/A			
Registration		Current works approval number:		Non e			
Date application received		2/9/2021					
Applicant and Premises details	S						
Applicant name/s (full legal name	e/s)	Edna May Operations Pty Ltd					
Premises name		Edna Farm					
Premises location	772 Carrabin-Westonia Road WESTONIA WA 6423 Lot 1523 on Deposited Plan 187255						
Local Government Authority	Shire of Westonia						
Application documents							
HPCM file reference number:	DER2020/000584 – FA259716						
Key application documents (addito application form):	Attachment 1A. Certificate of title Attachment 2. Premises boundary map Attachment 3A. Irrigation details						

	Scope of application/assessment						
		Works approval [amendment]					
Summary of proposed activities or changes to existing operations.		Seeking to use drip irrigation instead of sprinklers. No further changes are requested for any other aspects within the current works approval. The size and location of the discharge area will remain the same.					
		the exist area in L	ting irrigation that is Lot 1523. The propo	are proposing to utilise and upgonesent within the old sandlew based dripline to be used is NET (ls (1.0L/hr @0.75M spacing).	ood trial		
	Category number/s (activities that car Table 1: Prescribed premises category		premises to bec	ome prescribed premises)			
	Prescribed premises category and description		Assessed prod	luction or design			
	Category 85: Sewage facility		Not more than 30	cubic metres per day			
	Legislative context and other approva	als		,			
	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: 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 ⊠	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: N/A
Is the Premises situated in a Public Drinking Water Source Area (PDWSA)?	Yes □ No ⊠	Name: 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 ⊠	N/A
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 – not listed in DWERS Geocortex viewer  Date of classification: N/A