

# Government of Western Australia Department of Water and Environmental Regulation

### **Annual Audit Compliance Report Form**

Environmental Protection Act 1986, Part V Division 3

Once completed, please submit this form either via email to <a href="mailto:info-der@dwer.wa.gov.au">info-der@dwer.wa.gov.au</a>, or to the below postal address:

Department of Water and Environmental Regulation Locked Bag 10 Joondalup DC, WA, 6919

Licence number:	L6245/1991/8	Licence file number:	DER2013/001026
Licence holder:	Water Corporation		
Trading as:	Wickham Wastewater Treatment Plant		
ACN:	28 033 434 917		
Registered address:	629 Newcastle Street, LEEDERVILLE, WA 6007		
Reporting period:	01/07/2020 to 30/06/2021		

#### Section B – Statement of Compliance with Licence Conditions

Did you comply with all of your licence conditions during the reporting period? (please tick the appropriate box)

- ☐ Yes please complete:
  - · section C;
  - · section D if required; and
  - · sign the declaration in Section F.

#### ⋈ No – please complete:

- section C;
- · section D if required;
- · section E; and
- sign the declaration at Section F.

#### Section C - Statement of Actual Production

Provide the actual production quantity for this reporting period. Supporting documentation is to be attached.

Prescribed Premises Category	Actual Production Quantity	
54	824 m³/day	

#### Section D - Statement of Actual Part 2 Waste Discharge Quantity

Provide the actual Part 2 waste discharge quantity for this reporting period. Supporting documentation is to be attached.

Prescribed Premises Category	Actual Part 2 Waste Discharge Quantity	
Not Applicable		

#### Section E - Details of Non-Compliance with Licence Condition

Please use a separate page for each condition with which the licence holder was non-compliant at a time during the reporting period.

Condition no:

1.3.5 (a)

Date(s) of noncompliance: February 2020 to December 2020 (as reported in last AACR), then again June 2021

#### Details of non-compliance:

Treated wastewater exceeded treatment plant evaporation basin capacity and overflowed (via overflow and spillway) to the adjacent tidal flats following cyclone Damien from February 2020 to December 2020. Minor overflow started again (overflow pipe only) in late June 2021.

What was the actual (or suspected) environmental impact of the non-compliance?

**NOTE** – please attach maps or diagrams to provide insight into the precise location of where the non-compliance took place.

A Baseline Assessment (BA) was undertaken for the Wickham WWTP site in 2019 to characterise potential environmental, human health and amenity risks associated with current and historical site operations. The BA involved desk-based review of the environmental attributes of the site to develop a preliminary conceptual site model (CSM). The preliminary CSM identified potentially complete source-pathway-receptor (SPR) linkages relevant to the site and associated data gaps warranting further investigation.

Following completion of the BA, an Environmental Site Assessment (ESA) was undertaken. The objective of the ESA was to collect relevant purpose-driven data to address the identified data gaps in the preliminary CSM understanding, and enable reappraisal of potential risks posed to human health, the environment and environmental values associated with historical and ongoing site operations.

The 2020 ESA comprised the following high-level scope of work:

- Installation of eight groundwater monitoring wells and commencement of a monitoring program (during both wet and dry season conditions)
- Pore water, surface water and sediment monitoring program

Monitoring program results demonstrated that there were multiple lines of evidence to suspect that the site and off-site parcel of land to the east meets the threshold to be reported as suspected contaminated sites.

Cause (or suspected cause) of non-compliance:

The cause of the overflow is as a result of two factors as follows:

- 1. Continued elevated inflows into the WWTP as a results of groundwater intrusion through cracks in the Wickham vitreous clay sewer conveyance network.
- Continued decreased tertiary treatment plant treated water consumption as a result of treatment plant issues.

Both of the above are exacerbated during and following rain events.

Action taken to mitigate any adverse effects of non-compliance and prevent recurrence of the non-compliance:

Significant works have been undertaken to rectify both contributing issues and are summarised as follows:

- Thorough CCTV investigation and conductivity monitoring program of Wickham sewer conveyance network which has determined that there are numerous fractures in the vitreous clay pipes resulting in significant groundwater intrusion.
  - · Two projects are now underway to reline Wickham sewer conveyance network,

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Reported to DWER in writing

both are anticipated to be completed by December 2021.

2. A works approval has been sought and granted to upgrade the Wickham WWTP. One of the upgrades will include the installation of a DAF to improve feedwater quality to the tertiary treatment plant which should reduce membrane fouling issues and allow improved consistency in the operation (and consequently treated water demand) of the TTP.

Completion of both of the above should see a reduction in the volume of treated wastewater being sent to the evaporation ponds, which will allow them to be used as contingency basins and provide some redundancy during rainfall events and TTP shutdowns.

Was this non-compliance previously reported to DWER?

Yes, and

Reported to DWER verbally

Date: / /

Date: Last AACR and WebEOC notification

22/06/2021

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Section E – Details of Non-Compliance with Licence Condition					
Please use a sepa at a time during the		ondition with which the licence	ce holder was non-compliant		
Condition no:	1.3.5 (a)	Date(s) of non- compliance:	23/03/2021		
Details of non-com	pliance:				
	on it was noted that t localised pond overt	there was moisture between opping.	storage pond 2 to storage		
What was the actua	al (or suspected) env	ironmental impact of the nor	n-compliance?		
NOTE – please attac compliance took place		provide insight into the precise	location of where the non-		
Nil environmental ii contained onsite.	npact suggested as t	this was a flow between trea	itment ponds and was		
Cause (or suspected	ed cause) of non-com	pliance:			
Suspected cause o and 3.	f overtopping was a l	olockage in the transfer pipe	between storage pond 2		
Action taken to miti non-compliance:	gate any adverse eff	ects of non-compliance and	prevent recurrence of the		
Levels in storage p storage pond 3.	ond 2 lowered by ope	ening equaliser valve betwee	en storage pond 2 and		
Was this non-comp	liance previously rep	orted to DWER?			
☐ Yes         No					
☐ Reported to	DWER verbally	Date: / /			
☐ Reported to	DWER in writing	Date: / /			

Section F - Declar	TO SECURE AND ADDRESS OF THE PARTY OF THE PA	
is not false or misle	information in this Annual Audit Compliance Report is ding in a material particular <sup>1</sup> . I/We consent to the Annued on the Department of Environment Regulation's (DE	al Audit Compliance
Signature <sup>2</sup> :	Signature:	
Name: (printed)	Name: (printed)	
Position:	Position:	
Date:	Date:	
Seal (if signing under seal):		

<sup>&</sup>lt;sup>1</sup> It is an offence under section 112 of the *Environmental Protection Act 1986* for a person to give information on this form that to their knowledge is false or misleading in a material particular.

<sup>2</sup> AACRs can only be signed by the licence holder or an authorised person with the legal authority to sign on behalf of the

licence holder.