



Licence Number	L8521/2011/1
Licence Holder	Department of Corrective Services
ACN	25103389163
Registered business address	Level 9, 141 St Georges Terrace PERT WA 6000
Prescribed Premises	Category 15 - Abattoir Category 54 – Sewage facility
Premises	Lot 1034 Kingsbury Drive Serpentine Murray Land District Forrest Lease 1481/40 SERPENTINE WA 6125
Date of Amendment	23 January, 2018

Amendment

The Chief Executive Officer (CEO) of the Department of Water and Environmental Regulation (DWER) has amended the above Licence in accordance with section 59 of the *Environmental Protection Act 1986* (EP Act), as set out in this Amendment Notice. This Amendment Notice constitutes written notice of the amendment in accordance with section 59B(9) of the EP Act.

Date signed: 23 January 2018

Caron Goodbourn

A/Manager Licensing (Process Industries)

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

Amendment Notice

This amendment is made pursuant to section 59 of the *Environmental Protection Act 1986* (EP Act) to amend the Licence issued under the EP Act for a prescribed premises as set out below. This notice of amendment is given under section 59B(9) of the EP Act.

This notice is limited only to an amendment for Category 54. No changes to the aspects of the original licence relating to Category 15 have been requested by the Licence Holder.

The following guidance statements have informed the decision made on this amendment:

- *Guidance Statement: Regulatory Principles* (July 2015)
- *Guidance Statement: Risk Assessment* (February 2017)

Amendment description

The Department of Correctional Services (the Licence Holder) operates the Karnet Prison Farm Wastewater Treatment Plant (WWTP) and abattoir under licence L8521/2011/1.

The WWTP receives sewage from the Karnet Prison Farm and treats it through an extended aeration and caustic, coagulant and hypochlorite dosing process. A Membrane Bio Reactor (MBR) was used for the physical separation of suspended solids, some bacteria and viruses. However, during the membrane backwash cleaning process, the MBR was fouled due to an incorrect chemical being utilised.

This amendment application is therefore to modify the design of the current process and replace the MBR.

Table 1: Indicates the expected effluent quality to be achieved following the modifications:

Parameter	Expected quality
pH	Between 6.5 – 8.5
Total suspended solids (TSS)	< 30mg/L
Biochemical oxygen demand (BOD)	< 20 mg/L
E.coli	< 10 cfu/100mL
Total Nitrogen (TN)	< 30 mg/L
Total Phosphorous (TP)	< 2 mg/L
Residual Free Chlorine	0.2 – 2.0 mg/L
Turbidity	< 2 NTU

The proposed additional new infrastructure, as it relates to Category 54 activities, is detailed in Table 2 and with reference to the Site Plan.

Table 2 Additional new infrastructure table for Category 54

Infrastructure	Site Plan Reference
Prescribed Activity Category 54	
Additional new infrastructure consists of the following:	
1	clarifier tank
2	clarified water buffer tank
3	glass media filtration system
4	a new caustic dosing system including pH analyser to control the pH inside the existing anoxic and aerobic tank.
See Figure 1: New Flow Diagram of WWTP	

Amendment history

Table 2 provides the amendment history for L8521/2011/1.

Table 2: Licence L8521/2011/1 amendment history

Instrument	Issued	Amendment
L8521/2011/1	26/05/2011	Licence granted
L8521/2011/1	9/08/2012	Licence amendment.
L8521/2011/1	29/04/2016	Amendment by notice to extend the expiry date
L8521/2011/1	14/07/2016	Licence amendment to include abattoir operations and additional irrigation areas.
L8521/2011/1	22/12/2016	Amendment Notice 1 - extending the due dates for improvement reports under condition 4.1.1 from 31 December 2016 to 31 March 2017.
L8521/2011/1	23/01/2018	Amendment Notice 2 – modifying the WWTP process

Decision

In assessing the application, the Delegated Officer has determined that the application for the licence amendment should be granted as there will not be a detrimental change to the expected effluent quality following the modifications.

Licence Holder controls for the modification are conditioned on the licence to ensure that emissions to land continue to comply with the emission limits specified in Condition 2.2.2 on existing Licence L8521/2011/1.

A detailed risk-assessment is not required due to there being no direct environmental risk implication/s associated with the modifications and replacement of the MBR.

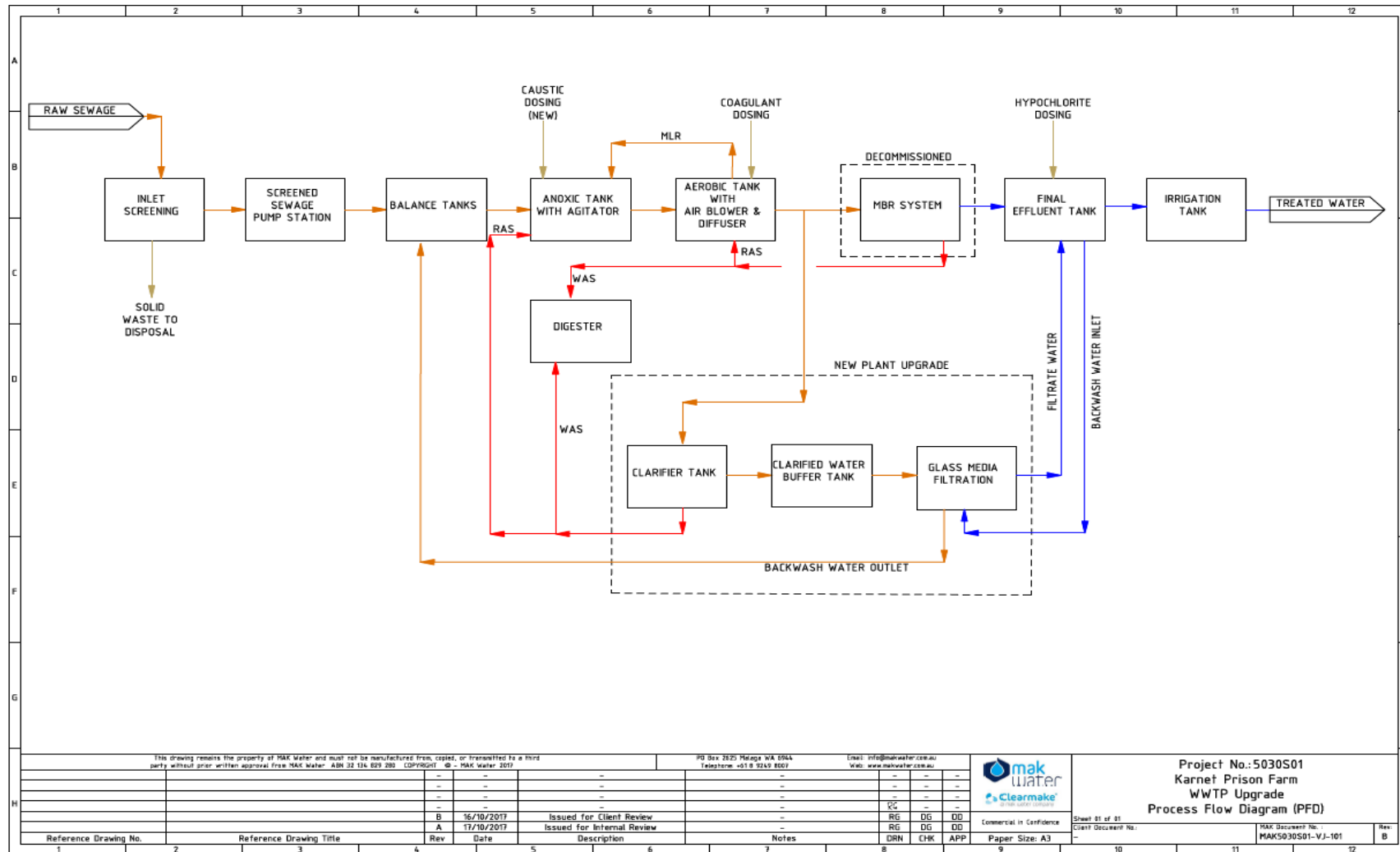
Licence Holder's comments

The Licence Holder was provided with the draft Amendment Notice on 20/12/ 2017. No comments were received.

Amendment

The Licence is amended with the insertion of a revised "Flow Diagram of the WWTP" to Schedule 1: Maps as shown below:

Flow Diagram of the WWTP



Appendix 1: Key documents

	Document title	In text ref	Availability
1	Licence L8521/2011/1- Department of Corrective Services	L8521/2011/1	accessed at www.dwer.wa.gov.au
2	DER, July 2015. <i>Guidance Statement: Regulatory Principles</i> . Department of Environment Regulation, Perth.		accessed at www.dwer.wa.gov.au
3	DER, November 2016. <i>Guidance Statement: Risk Assessments</i> . Department of Environment Regulation, Perth.		
4	DER, November 2016. <i>Guidance Statement: Decision Making</i> . Department of Environment Regulation, Perth.		
5	E-Mail – application notification		
6	E-Mail – Karnet Prison WWTP modifications		

Appendix 2: Summary of Licence Holder comments

The Licence Holder was provided with the draft Amendment Notice on 20/12/2017 for review and comment. No comments were received.