



Amendment Notice 1

Licence Number L6796/1991/13

Licence Holder Water Corporation

File Number: DER2016/000585

Premises Narrogin Wastewater Treatment Plant
Lots 698, 699, 704, 705 and 1556 on Plan 222899
(Crown Reserve 26458)
NARROGIN WA 6312
and
Lot 2001 on Plan 67196
NARROGIN VALLEY WA 6312

Date of Amendment 12 April 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 : 12 April 2018

Rebecca Kelly

MANAGER LICENSING (WASTE INDUSTRIES)

REGULATORY SERVICES (ENVIRONMENT)

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

Definitions and interpretation

Definitions

In this Amendment Notice, the terms in Table 1 have the meanings defined.

Table 1: Definitions

Term	Definition
ACN	Australian Company Number
AER	Annual Environment Report
Amendment Notice	refers to this document
Category/ Categories/ Cat.	categories of Prescribed Premises as set out in Schedule 1 of the EP Regulations
CEO	means Chief Executive Officer. CEO for the purposes of notification means: Director General Department Administering the <i>Environmental Protection Act 1986</i> Locked Bag 33 Cloisters Square PERTH WA 6850 info@dwer.wa.gov.au
CS Act	<i>Contaminated Sites Act 2003 (WA)</i>
Delegated Officer	an officer under section 20 of the EP Act
Department	means the department established under section 35 of the <i>Public Sector Management Act 1994</i> and designated as responsible for the administration of Part V, Division 3 of the EP Act.
DWER	Department of Water and Environmental Regulation
EP Act	<i>Environmental Protection Act 1986 (WA)</i>
EP Regulations	<i>Environmental Protection Regulations 1987 (WA)</i>
Existing Licence	The Licence issued under Part V, Division 3 of the EP Act and in force prior to the commencement of and during this Review
Licence Holder	Water Corporation
Occupier	has the same meaning given to that term under the EP Act.

Prescribed Premises	has the same meaning given to that term under the EP Act.
Premises	refers to the premises to which this Decision Report applies, as specified at the front of this Decision Report.
Risk Event	as described in <i>Guidance Statement: Risk Assessment</i>

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 to permit the upgrade of the chlorination unit and associated infrastructure, and minor administrative amendments. No changes to the aspects of the original Licence relating to Category 54 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: Setting Conditions (October 2015)*
- *Guidance Statement: Land Use Planning (February 2017)*
- *Guidance Statement: Licence Duration (August 2016)*
- *Guidance Statement: Decision Making (February 2017)*
- *Guidance Statement: Risk Assessment (February 2017)*
- *Guidance Statement: Environmental Siting (November 2016)*

Amendment description

The Licence Holder has applied to upgrade the Wastewater treatment facility to replace the existing chlorinator to enable the production of 'low exposure risk' quality recycled water. The Licence Holder has proposed to undertake the following works:

1. Replacing the existing chlorine disinfection unit with a gaseous cylinder chlorination module consisting of duty/standby chlorinators, a transportable module with 4 rooms and 30-day chlorine supply. The unit is expected to treat up to 950 kL per day with a dose rate of 8 mg/L
2. Installing a self-cleaning mechanical filtration for algal solids so that downstream disinfection can achieve Department of Health compliance criteria (200 microns)
3. Installing a new recycled water delivery pump station to transfer recycled water from the reuse dam to various storage areas in Narrogin. This will consist of end suction pumps with a design flow rate of 11 Litres per second at approximately 85 metres head.
4. Installing approximately 130 recycled water warning signs
5. Electrical work and instrumentation necessary to run the new facility.

The Licence Holder has indicated that the chlorination module will only be active during the Shire of Narrogin's watering period.

The Licence Holder has also requested that Table 3.2.1 is amended to change the averaging period from weekly to monthly.

Amendment history

Table 2 provides the amendment history for L6796/1991/13

Table 2: Licence amendments

Instrument	Issued	Amendment
L6796/1991/13	20 October 2011	Licence re-issue
L6796/1991/13	7 June 2012	Licence amendment to include Environmental Improvement Plan
L6796/1991/13	30 June 2016	Licence amendment to include new infrastructure constructed under Works Approval A5633/2014/1

Location and receptors

Table 3 below lists the relevant sensitive land uses in the vicinity of the Prescribed Premises which may be receptors relevant to the proposed amendment.

Table 3: Receptors and distance from activity boundary

Residential and sensitive premises	Distance from Prescribed Premises
Residential Properties	Immediately adjacent to the north, west and south

Table 4 below lists the relevant environmental receptors in the vicinity of the Prescribed Premises which may be receptors relevant to the proposed amendment.

Table 4: Environmental receptors and distance from activity boundary

Environmental receptors	Distance from Prescribed Premises
Groundwater	Depth to groundwater is unknown. The Premises is underlain by bedrock at 2.2-2.7 metres
Threatened ecological community – unspecified species	Within the Premises boundary
Narrogin Brook	Within the Premises boundary

Risk assessment

Tables 5 and 6 below describe the Risk Events associated with the amendment consistent with the *Guidance Statement: Risk Assessments*. Both tables identify whether the emissions present a material risk to public health or the environment, requiring regulatory controls.

Table 5: Risk assessment for proposed amendments during construction

Risk Event					Consequence rating	Likelihood rating	Risk	Reasoning	
Source/Activities		Potential emissions	Potential receptors	Potential pathway					Potential adverse impacts
Cat 54 Sewage Facility	Construction of infrastructure	Dust: From vehicle movements and construction activities	Residents adjacent to the premises	Air	Health and amenity impacts	Slight	Possible	Low	The Delegated Officer has determined that due to the short construction timeframe and the nature of the construction works dust and noise impacts are likely to be low and can be adequately regulated under the general provisions of the EP Act
		Noise: From construction machinery			Amenity impacts	Slight	Possible		

Table 6: Risk assessment for proposed amendments during operation

Source/Activities		Risk Event				Consequence rating	Likelihood rating	Risk	Reasoning
		Potential emissions	Potential receptors	Potential pathway	Potential adverse impacts				
Cat 54 Sewage Facility	The operation of the new chlorinator and associated infrastructure	Odour: From the storage of treated wastewater and chlorine	Residents adjacent to the premises	Air	Amenity impacts	Minor	Rare	Low	The Delegated Officer considers the risk profile of odour emissions is not altered by the proposed changes to infrastructure and therefore the risk rating of Low remains.
		Treated sewage: From the planned discharge to Narrogin Brook, or the unintended failure of any containment infrastructure	Groundwater	Seepage	Impacts to groundwater quality	N/A	N/A	N/A	The Delegated Officer considers there is unlikely to be a pathway to groundwater through bedrock.
			Onsite and adjacent properties (including threatened ecological community habitats)	Direct emission, overland flow	Impacts to soil quality and ecosystems. Health risk to humans or animals accessing the land.	Moderate	Possible	Moderate	The Delegated Officer considers the risk profile of treated sewage emissions is not altered by the proposed changes to infrastructure and therefore the risk rating of Moderate remains.
			Narrogin Brook	Overland flow	Impacts to surface water quality. Health risk to humans or animals accessing the water source.	Moderate	Possible	Moderate	
		Chlorine: From any spills or leaks	Residents adjacent to the premises	Direct contact	Health impacts	Minor	Rare	Low	The storage of chlorine was not previously assessed. The Delegated Officer considers the risk to be low due to the containment infrastructure and management
			Onsite and adjacent properties (including	Direct emission, overland flow	Impacts to soil quality and ecosystems.	Minor	Rare	Low	

Risk Event					Consequence rating	Likelihood rating	Risk	Reasoning
Source/Activities	Potential emissions	Potential receptors	Potential pathway	Potential adverse impacts				
		threatened ecological community habitats)		Health risk to humans or animals accessing the land				measures implemented at the premises.
		Narrogin Brook	Overland flow	Impacts to surface water quality. Health risk to humans or animals accessing the water source	Minor	Rare	Low	

Decision

The Delegated Officer has determined that the risk profile of emissions is not altered by the proposed construction and operation of the new infrastructure. Therefore, the licence will be amended to authorise the construction and operation of the infrastructure, and no additional control measures are required.

The Delegated Officer has also determined that the request to change the averaging period from weekly to monthly is administrative in nature and does not alter the risk profile of emissions at the Premises. Table 3.2.1 requires monitoring to be undertaken continuously, and therefore the averaging period relates only to the reporting method.

Licence Holder's comments

The Licence Holder was provided with the draft Amendment Notice on 16 March 2018. Comments received from the Licence Holder have been considered by the Delegated Officer as shown in Appendix 2.

Amendment

1. Definitions of the Licence are amended by the insertion of the red text shown in underline below:

“Works” refers to the Works described in Table 5.1.1 at the locations shown in Schedule 1 of this Licence to be carried out subject to the Conditions.

2. Table 3.2.1 of the Licence is amended by the deletion of text shown in strikethrough and the insertion of the red text shown in underline below:

Table 3.2.1: monitoring of inputs and outputs					
Input/Output	Monitoring point reference	Parameter	Units	Averaging Period	Frequency
Sewage inlet flow	Inflow metre at Havelock St SPS	Volumetric flow rate (cumulative)	m ³ /day	Weekly <u>Monthly</u>	Continuous
Treated sewage to offsite irrigation	Outflow measuring unit (Town Storage Pond)	Treated sewage flow rate (cumulative)	m ³ /day	Weekly <u>Monthly</u>	Continuous
Treated sewage to discharge into Narrogin Brook	Outflow measuring unit (Narrogin Brook Discharge Point)	Treated sewage flow rate (cumulative)	m ³ /day	Weekly <u>Monthly</u>	Continuous

3. The Licence is amended by the insertion of the following Conditions 5.1.1 to 5.1.4 and Table 5.1.1:

5. Works

5.1 Authorised works

5.1.1 The Licence Holder must install and undertake the Works for the

infrastructure and equipment:

- (a) specified in Column 1;
- (b) to the requirements specified in Column 2; and
- (c) at the location specified in Column 3

of Table 5.1.1 below.

5.1.2 The Licence Holder must not depart from the requirements specified in Column 2 of Table 5.1.1 except:

- (a) where such departure does not increase risks to public health, public amenity or the environment; and
- (b) all other Conditions in this Licence are still satisfied.

5.1.3 Subject to Condition 5.1.1, within 30 days of the completion of the Works specified in Column 1 of Table 5.1.1, the Licence Holder must provide to the CEO a report with photographs confirming each item of infrastructure or component of infrastructure specified in Column 1 of Table 5.1.1 below has been constructed with no material defects and to the requirements specified in Column 2.

5.1.4 Where a departure from the requirements specified in Column 2 of Table 5.1.1 occurs and is of a type allowed by Condition 5.1.2, the Licence Holder must provide to the CEO a description of, and explanation for, the departure along with the certification required by Condition 5.1.3.

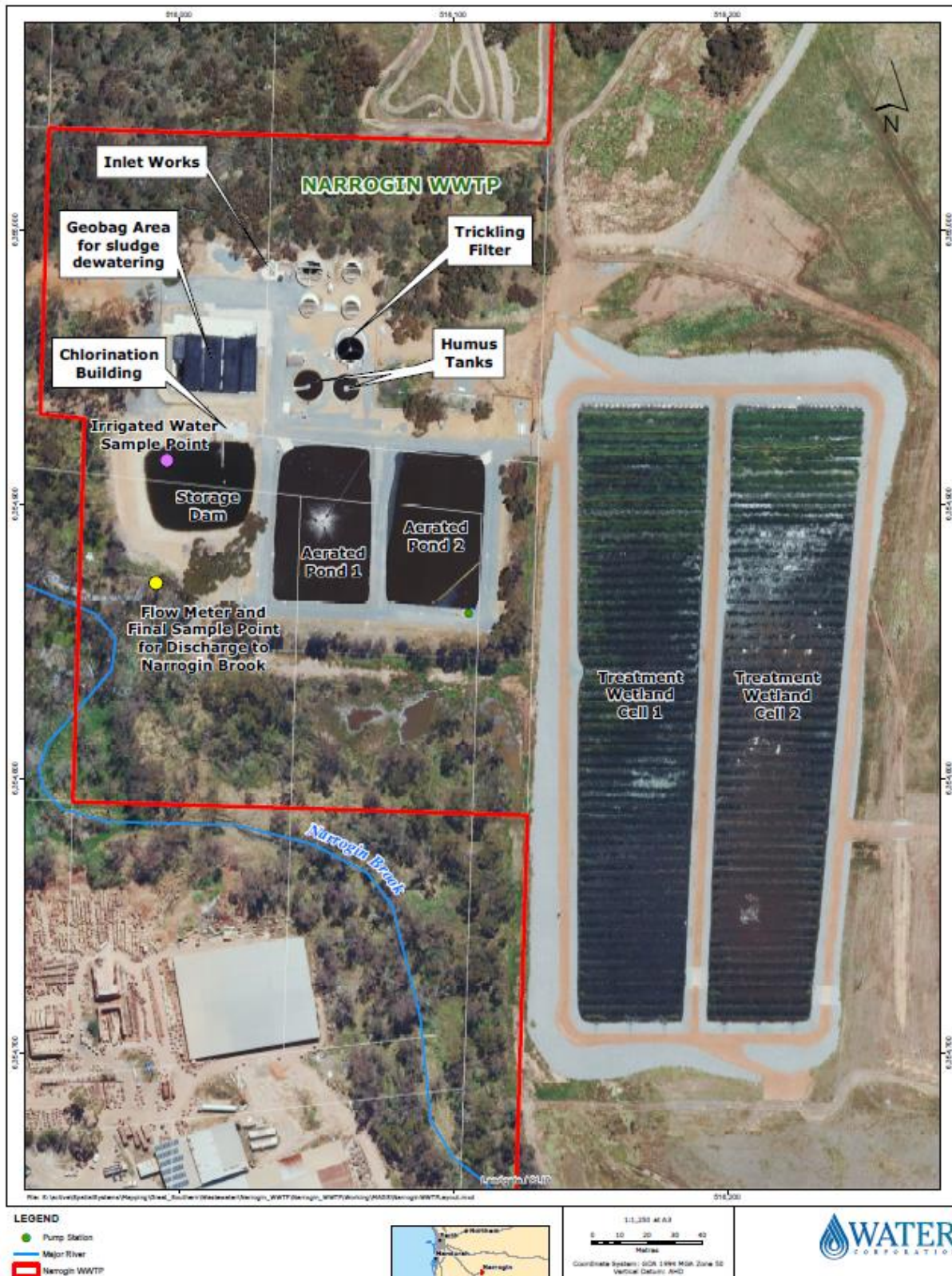
Table 5.1.1: Infrastructure and equipment requirements table

Column 1	Column 2	Column 3
Infrastructure/ Equipment	Requirements (design and construction)	Site plan reference
<i>Replacement Chlorine Disinfection Unit</i>	<ul style="list-style-type: none"> • Design capacity of 950 kL/day with a dose rate of 8 mg/L • To consist of a transportable module with four rooms able to hold a 30 day chlorine supply 	<i>Chlorination Building</i>
<i>Mechanical Filtration</i>	<ul style="list-style-type: none"> • Self-cleaning • Able to achieve disinfection of 200 microns 	<i>Chlorination Building</i>
<i>Pump Station</i>	<ul style="list-style-type: none"> • Designed to achieve a flow rate of 11 litres per second at 85 m head. 	<i>Chlorination Building</i>
<i>Electrical components/ Instrumentation</i>	<ul style="list-style-type: none"> • As necessary for operation of the above items of infrastructure 	N/A

4. The Licence is amended by the insertion of the following Map in Schedule 1:

Site Map

The location of infrastructure as specified in Table 5.1.1 is shown in the site map below



Appendix 2: Summary of Licence Holder comments

The Licence Holder was provided with the draft Amendment Notice on 16 March 2018 for review and comment. The Licence Holder responded on 5 and 9 April 2018 with the following comments.

Condition	Summary of Licence Holder comment	DWER response
Amendment description	The Applicant has requested that the wording “typically summer months” is removed from the description as irrigation occurs throughout the year.	Accepted, wording removed.
Site Map	The applicant has provided an updated site map that identifies a new sampling point and has identified that the mechanical filtration and pump station is located within the chlorination facility.	Accepted, map updated.
Table 3.2.1	The applicant has requested that the averaging period in Table 3.2.1 is changed from weekly to monthly to be consistent with the requirements of condition 3.1.2 and other Water Corporation treatment plant licences.	DWER notes that condition 3.1.2 relates to tables 3.3.1 and 3.4.1 and not 3.2.1, however the request to change the averaging period from monthly to weekly is accepted.