Decision Report

Application for Licence

Division 3, Part V *Environmental Protection Act 1986*

Licence Number	L9320/2022/1
Applicant	Department of Communities Water Corporation
File Number	DER2022/000743
Premises	Mowanjum Wastewater Treatment Plant Legal description - Lot 501 on Deposited Plan 049870 / Reserve 1326 Certificate of Title Volume LR3156 Folio 329 Lot 85 on Deposited Plan 213679 Certificate of Title Volume 1445 Folio 632 As defined by the coordinates in Schedule 1 of the Licence
Date of Report	9 May 2022
Status of Report	Final

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1. Definitions of terms and acronyms

In this Decision Report, the terms in Table 1 have the meanings defined.

Table 1**: Definitions**

Term	Definition
Applicant	Department of Communities Water Corporation
AACR	Annual Audit Compliance Report
AER	Annual Environment Report
BGM	Bituminous geomembrane liner
BOD	Biochemical Oxygen Demand
Category/ Categories/ Cat.	Categories of Prescribed Premises as set out in Schedule 1 of the EP Regulations
CS Act	*Contaminated Sites Act 2003* (WA)
Decision Report	refers to this document.
Delegated Officer	an officer under section 20 of the EP Act.
Department	means the department established under section 35 of the *Public Sector Management Act 1994* and designated as responsible for the administration of Part V, Division 3 of the EP Act.
DWER	Department of Water and Environmental Regulation As of 1 July 2017, the Department of Environment Regulation (DER), the Office of the Environmental Protection Authority (OEPA) and the Department of Water (DoW) amalgamated to form the Department of Water and Environmental Regulation (DWER). DWER was established under section 35 of the *Public Sector Management Act 1994* and is responsible for the administration of the *Environmental Protection Act 1986* along with other legislation.
DoC	Department of Communities
EPA	Environmental Protection Authority
EP Act	*Environmental Protection Act 1986* (WA)
EP Regulations	*Environmental Protection Regulations 1987* (WA)
EPBC Act	*Environment Protection and Biodiversity Conservation Act 1999* (Cth)

Term	Definition
m^3	cubic metres
Minister	the Minister responsible for the EP Act and associated regulations
mAHD	Metres Australian Height Datum
MAC	Mowanjum Aboriginal Community
NEPM	National Environmental Protection Measure
Noise Regulations	*Environmental Protection (Noise) Regulations 1997* (WA)
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
Primary Activities	as defined in Schedule 2 of the Revised Licence
P&DC	Production and design capacity
Risk Event	As described in *Guideline: Risk Assessments*
RIWI Act	Rights in Water and Irrigation Act 1914
TN	Total Nitrogen
TP	Total Phosphorus
TSS	Total Suspended Solids
UDR	*Environmental Protection (Unauthorised Discharges) Regulations 2004* (WA)
MWWTP	Mowanjum Wastewater Treatment Plant
WC	Water Corporation
WWTP	Wastewater Treatment Plant
mg/L	milligrams per litre

2. Purpose and scope of assessment

The Applicant has applied for a Licence to construct and operate the MWWTP on Lot 85 on Deposited plan 213679 and Lot 501 on Deposited Plan 049870 MAC. The Premises is an existing registered sewage facility (R504/1997/1) that has been operating since 1998. It is considered that the existing WWTP will continue to operate under the existing registration whilst upgrade works are carried out.

WC and DoC have entered into an agreement to regularise Aboriginal Community water services. Once each WWTP has been upgraded, WC will operate the WWTP and become the sole Licence Holder. Works Approval W6129/2018/1 was issued to DoC on 4 June 2018 for upgrades to the MWWTP but expired on 3 June 2021. To facilitate the WC upgrades and operation of Aboriginal Community WWTP's, DWER and WC have an agreement to streamline the regulatory process which allows WC to progress straight to Licence whereby the upgrades will be authorised under the Licence – a separate Works Approval will not be required.

The Applicant intends to refurbish and upgrade the existing MWWTP to a P&DC of 149m^3/day, encompassing the following works:

- Diversion of the pressure main to a new inlet discharge chamber at the new pond location;
- New primary pond with BGM 4mm liner with a permeability of 4 x 10^{-14} m/s;
- Refurbishment of the existing primary pond, including hydraulic modifications of the inlet pipe 90^o bend and stub baffle and installation of a BGM liner;
- Relocation of P2-S1 connector pipework;
- Refurbishment of the existing secondary pond, installation of baffle and BGM lined;
- Raise all new and existing pond embankments to a freeboard of 500mm to capture a 1 in 10-year 72-hour rainfall event;
- Subdivision of the existing evaporation / infiltration pond 1 into secondary pond S2 and evaporation / infiltration pond E1 with construction of embankment of 500mm in height;
- Replacement of pipework of existing emergency overflow pipe outlet;
- Construction of new evaporation / infiltration pond E3; and
- Sludge drying area – a Bunded and lined laydown area for sludge drying. Leachate will be returned to the pond of origin.

All treated wastewater is to be fully contained within the WWTP including allowance for a 1:10 ARI rainfall event.

2.1 Application details

Table 2 lists the documents submitted during the assessment process.

Table 2: Documents and information submitted during the assessment process

Document/information description	Date received
Application form	23 December 2021
CS03554 Mowanjum Wastewater Treatment Plant Upgrade Licence Application Supporting Information Document – December 2021	23 December 2021
Response to Comments – new technical drawings for WWTP ponds	14 April 2022

3. Background

Table 3 lists the prescribed premises categories that have been applied for.

Table 3: Prescribed Premises Categories in the Existing Licence

Classification of Premises	Description	*Approved Premises production or design capacity or throughput*
54	Sewage facility; premises – (a) on which sewage is treated (excluding septic tanks); or (b) from which treated sewage is discharged onto land or into waters	149m^3/day

4. Overview of Premises

4.1 Operational aspects

The MWWTP treats wastewater for MAC which currently services a population of approximately 258 people. MAC is located approximately 10 km southeast of Derby (refer to Figure 1). The MWWTP is located to the northwest of the community. The current 96 m^3/day WWTP operates under existing registration R504/1997/1 and treats wastewater to a secondary standard. The existing WWTP was constructed in 1998 with a pump station and sewer main upgrade in 2012, and consists of an unlined primary pond, secondary pond and two evaporation / infiltration ponds.

Construction of the new MWWTP is to allow for the WWTP P&DC to increase from 96 m^3/day to 149 m^3/day to treat an average dry weather flow and average wet weather flow capacity of 122.2 m^3/day and 148.7 m^3/day respectively; based on a 10-year growth forecast at 3% per annum. Table 4 provides the upgraded MWWTP dimensions and Figure 2 provides an overview of the proposed WWTP (in relation to the existing WWTP).

Table 4 MWWTP upgrade pond dimensions

Pond	Lining	Width (m)	Length (m)	Depth (m)
New primary pond 1	BGM 4mm with a permeability of 4 x 10^{-14} m/s	30	57	1.8
Refurbished primary pond 2		40	45	1.5
Secondary pond 1		23	38	1.5
Secondary pond 2		35	70	1.3
Evaporation / infiltration pond E1	Embankments only lined with BGM 4mm with a permeability of 4 x 10^{-14} m/s	52	55	1.0
Evaporation / infiltration pond		53	110	1.0

E2				
Evaporation / infiltration pond E3		46	61	1.0

The proposed design effluent for the upgraded MWWTP is provided in Table 5

Table 5 Proposed design effluent for MWWTP

Parameter	Value
pH	6.8-8.5 pH units
BOD	20 mg/L (2.4 kg/day)
TP	6 mg/L (0.7 kg/day)
TN	20 mg/L (2.42 kg/day)
TDS	Influent + 10%
TSS	< 150 mL
E. coli	<4,500 cfu/100mL
Ammonium	1 mg/L (0.2 kg/day)
Nitrate + nitrite-nitrogen	15 mg/L (1.8 kg/day)

Infiltration testing at the new pond location showed a permeability of 5.83 x 10^{-7} m/s and a higher infiltration rate of 4.4 mm/day was applied for the evaporation pond 3 design (evaporation pond floors will not be lined; hence infiltration will occur). For existing evaporation / infiltration pond 1 and 2, an infiltration rate of 2.2 mm/day was used. Evaporation / infiltration pond 1 is expected to remain full each year which could contribute to maturation pond (pathogen reduction) function while also delivering treated wastewater infiltration. Evaporation / infiltration pond 2 and 3 receive treated waste from evaporation / infiltration pond 1 and will most likely empty each year. A water balance model has been prepared for the MWWTP to demonstrate adequate storage capacity which include a 1in 10-year 72-hour rainfall event (refer to Figure 3).

The Applicant proposes the following construction sequence to enable the continued use of the WWTP while construction and upgrade activities occur:

- Construction of the new primary pond 1 and evaporation / infiltration pond 3, pressure main pipework and pond lining;
- Concurrent refurbishment of evaporation / infiltration pond 2, pump out existing ponds into evaporation / infiltration pond E2;
- Pressure main tie-in and diversion to new primary pond 1, 15 days fill time and convert continuing flow to evaporation pond 2 and 3;
- Refurbishment, earthworks, pipework, baffles and lining of existing primary pond 2 and secondary pond 1;
- Pump out evaporation / infiltration pond 1 for sub-division to secondary pond 2 and evaporation pond 1;
- Windrowing/ridging on infiltration pond floors in the evaporation / infiltration ponds; and
- Completion of commissioning.

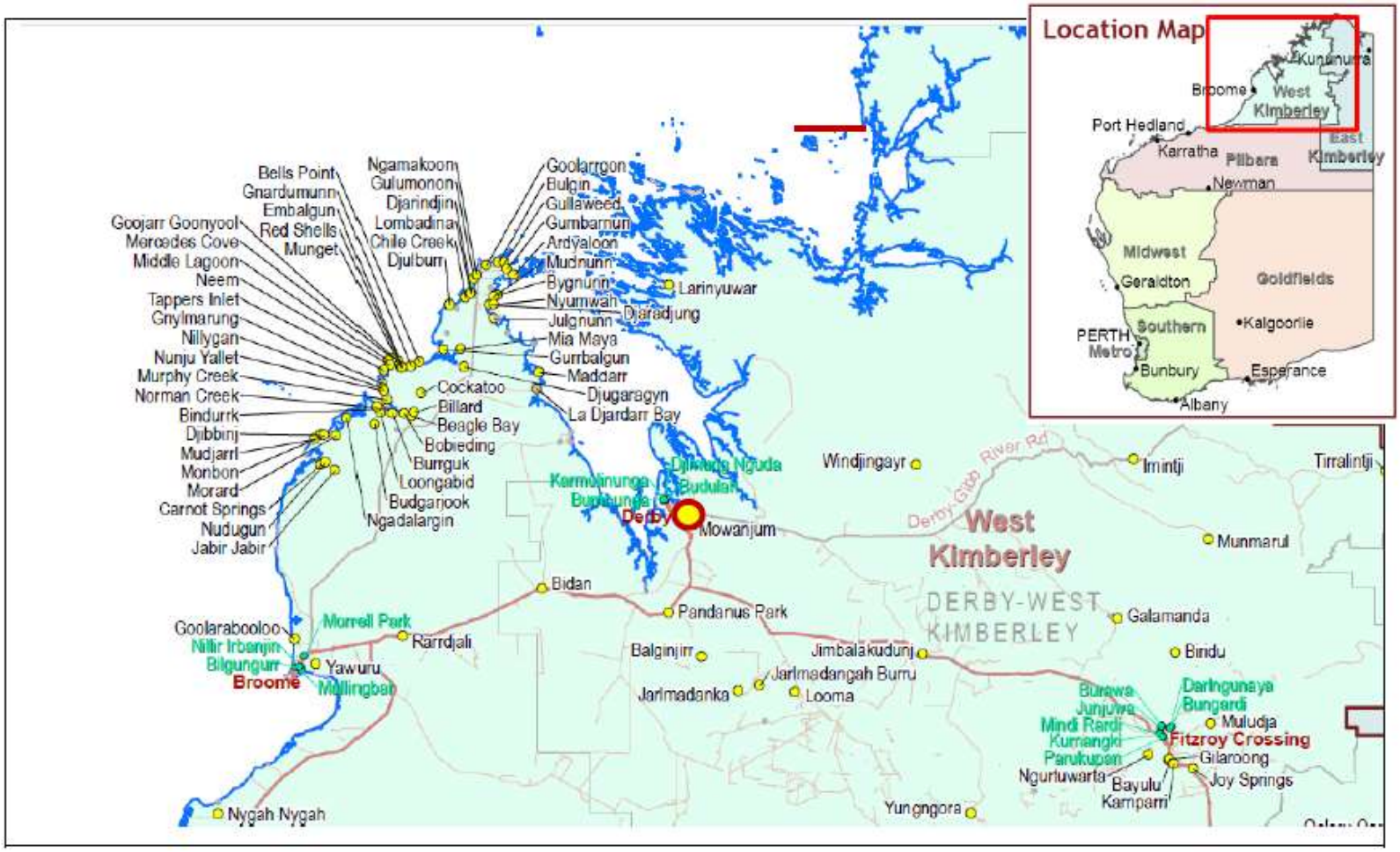


Figure 1 Mowanjum Aboriginal Community.

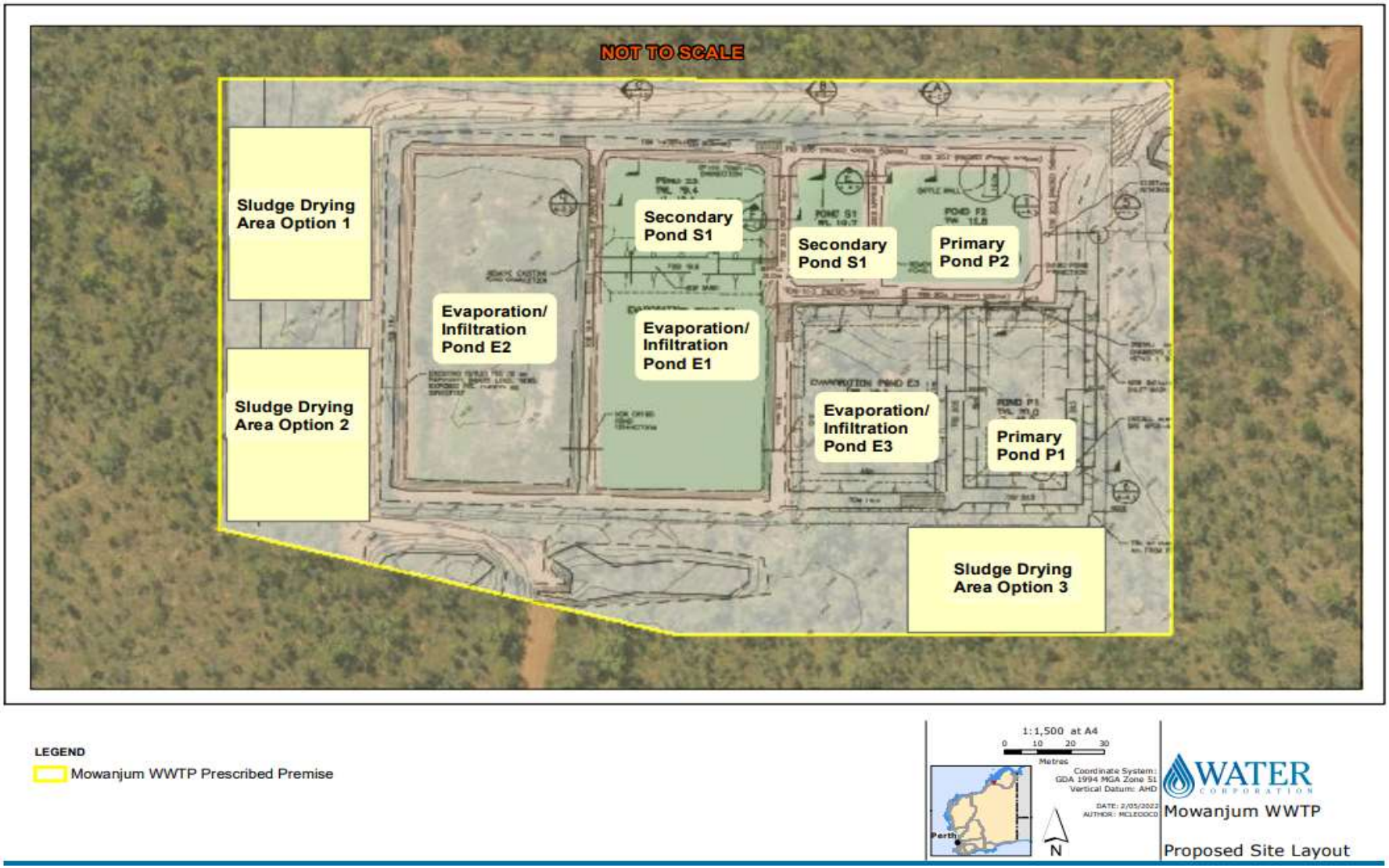


Figure 2 Proposed upgraded WWTP.

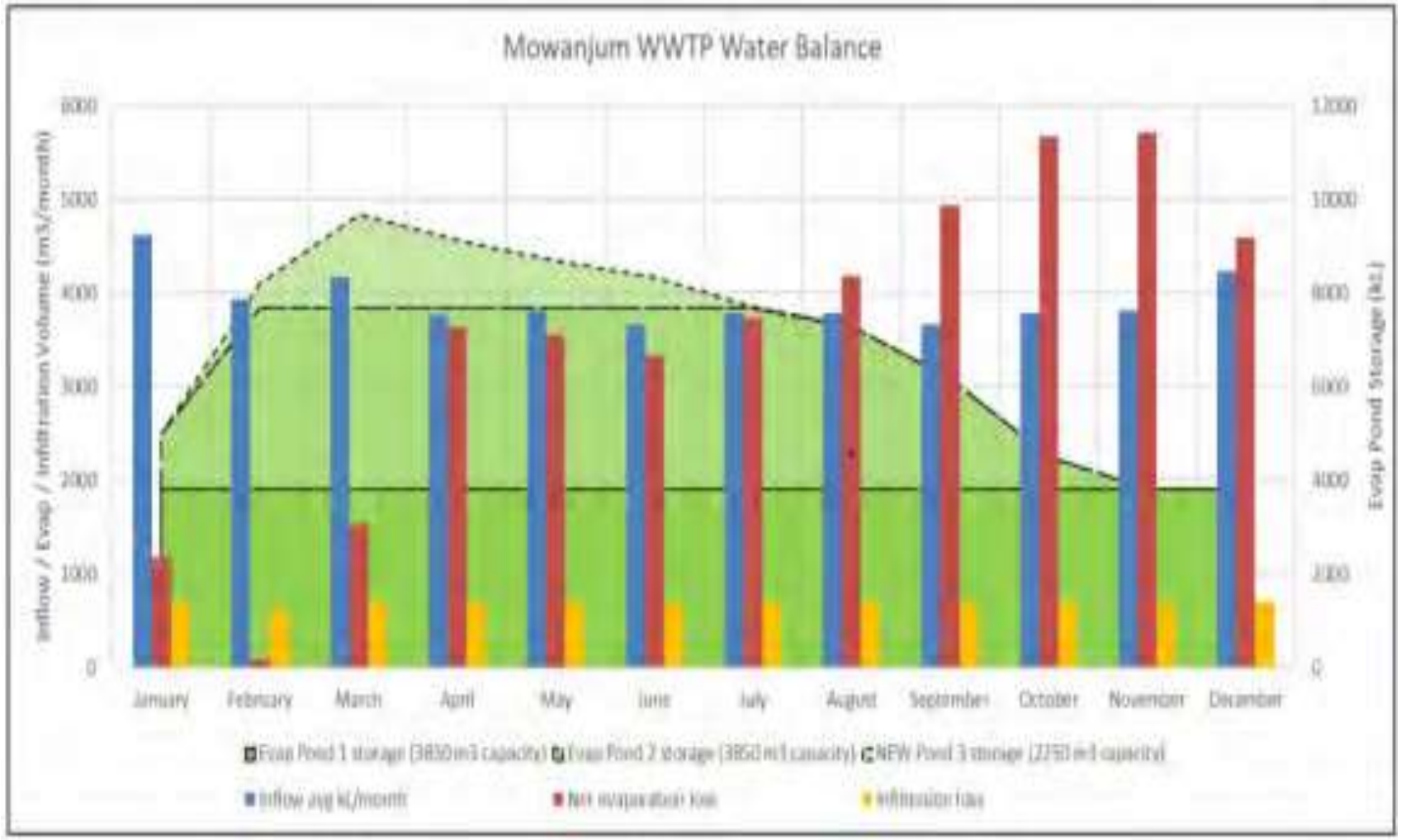


Figure 3 MWWTP Water balance

4.2 Infrastructure

The sewage facility infrastructure, as it relates to Category 54 activities, is detailed in Table 6 and with reference to the Site Plan attached in the Licence.

Table 6 lists infrastructure associated with each prescribed premises category.

Table 6: Sewage facility Category 54 infrastructure

	Infrastructure	**Site Plan Reference**
	Prescribed Activity Category 54	
WWTP		
1	New primary pond 1	Attachment 1 Site Plan
2	Refurbished primary pond 2	
3	Secondary pond 1	
4	Secondary pond 2	
5	Evaporation / infiltration pond E1	
6	Evaporation / infiltration pond E2	
7	Evaporation / infiltration pond E3	
	Directly related activities	
Biosolids from the WWTP		
1	Sludge drying area	Attachment 1 Site Plan

5. Legislative context

5.1 Contaminated sites

Section 7.7 of the Application advises the MWWTP has not been reported nor classified by DWER as a contaminated site.

The Premises appears to have no current classification status under the CS Act.

5.2 Other relevant approvals

5.2.1 Planning approvals

The Applicant identifies in section 9 of the Supporting Application that the Shire of Derby West Kimberley has been briefed on the planned work. It is intended that the MWWTP site will be excised from Reserve 1326 and a new WC managed reserve created. WC are currently working with the Shire to process the change to the reserve. The Shire's endorsement of the proposed works is provided in Attachment C of the Application. The Shire's response letter to WC, dated 01/11/2021, advises that WC will need to apply for additional approvals for access

to the site for construction works in line with the *Water Services Act 2012.*

5.2.2 Department of Health

The Applicant identifies in section 2.3 of the Application that the Applicant has submitted, in parallel to this application, an Application to Construct and Install Apparatus for the Treatment of Sewage to the Department of Health. Approval is pending.

5.3 Part V of the EP Act

5.3.1 Applicable regulations, standards and guidelines

The overarching legislative framework of this assessment is the EP Act and EP Regulations.

The guidance documents which inform this assessment are:

- *Guidance Statement: Setting conditions (October 2015)*
- *Guidance Statement: Licence duration (August 2016)*
- *Guidance Statement: Publication of Annual Audit Compliance Reports (May 2016)*
- *Guideline: Decision making (December 2020)*
- *Guideline: Environmental siting (December 2020)*
- *Guideline: Regulatory principles (December 2020)*
- *Guideline: Risk assessments (December 2020)*

5.3.2 Clearing

The Applicant has not applied for a concurrent Clearing Permit with the Licence Application.

Section 2.2 of the Application advises that the previous Works Approval W6129/2018/1 did not require a clearing permit as it qualified for an exemption under Regulation 5, Item 1 of the *Environmental Protection (Clearing of Native Vegetation) Regulations 2004* as per the following criteria:

- *All relevant building approvals must be obtained prior to commencing the clearing;*
- *The clearing is to be limited to the extent necessary for the construction;*
- *This exemption does not extend to riparian vegetation which includes vegetation growing on the edges of a stream, river or wetland; and*
- *This exemption does not apply within an environmentally sensitive area (ESA).*

The following advice has been received by DWER Clearing Regulation in regard to the Applicant's use of this exemption;

- *The proposed clearing is less than 5 hectares;*
- *A WWTP is considered a structure;*
- *The proposed clearing does not occur within an ESA; and*
- *No watercourses or wetlands are mapped within the Mowanjum WWTP sites.*

The Delegated Officer therefore accepts the Applicant's use of an exemption under Regulation 5, Item 1 of the *Environmental Protection (Clearing of Native Vegetation) Regulations 2004* for clearing associated with the upgrade works.

5.3.3 Works approval and licence history

Table 7 summarises the works approval and licence history for the premises.

Table 7: Works approval and licence history

Instrument	Issued	Nature and extent of works approval, licence or amendment
W6129/2018/1	4/06/2018	New Works Approval
L9320/2022/1	Xx/05/2022	New Licence to upgrade and operate MWWTP

5.3.4 Key and recent works approvals

Works Approval W6219/2018/1 was issued on 4 June 2018 to upgrade the existing WWTP P&DC from 96 m^3/day to 149 m^3/day to treat a capacity throughput of 122 m^3/day to service MAC. Works Approval W6219/2018/1 expired on 3 June 2021. No construction works occurred under W6219/2018/1.

6. Modelling and monitoring data

6.1 Monitoring of discharges to land

As the existing WWTP is a Registered premises (R504/1997/1) and not subject to conditions, there is no current requirement for monitoring associated with the WWTP. The Application reports one sample frequency undertaken in March 2017. Two wastewater samples were collected and analysed: raw water at the MAC SPS and treated effluent at the secondary pond outlet. Table 8 provides an overview of the monitoring results.

Table 8 MWWTP March 2017 Monitoring results

Parameter	Influent sample	Effluent sample
BOD	150mg/L	55mg/L
TSS	120mg/L	54mg/L
TN	40mg/L	14mg/L
TP	4.5mg/L	3.3mg/L
E. coli	2,700,000cfu/100mL	6400cfu/100mL

Post construction of the WWTP upgrades, the Applicant is proposing to sample effluent quality monthly (section 11 of the Supporting Information Document), and this will occur at the outflow connection point between the final treatment ponds prior to entering evaporation / infiltration pond 1.

During Operation of the WWTP, infiltration will occur through the evaporation / infiltration pond floors because they are not lined. The Applicant will install four (4) groundwater monitoring bores in the shallow aquafer to monitor and collect groundwater quality and this data will identify any potential environmental or human health risk associated with operation of the WWTP.

It is expected that regular effluent and groundwater monitoring will be a condition of the Licence.

Key finding:

The Delegated Officer has reviewed the information regarding Monitoring and has found:

1. *Applicant is proposing to construct a new BGM lined primary pond and an additional third evaporation / infiltration pond which includes refurbishment of existing infrastructure.*

2. *The construction is to allow a WWTP P&DC of 149m^3/day.*
3. *All treated wastewater is to be fully contained within the WWTP including allowance for a 1:10 ARI rainfall event.*
4. *Ongoing effluent monitoring post construction of the WWTP will assess environmental performance of the MWWTP.*
5. *Ongoing groundwater monitoring post construction of the WWTP will assess environmental and human health risk associated with operation of the MWWTP.*

7. Consultation

The Application was advertised on 7 March 2022 seeking any public comment. No comments were received.

Mowanjum Aboriginal Corporation was sent a Referral letter for comment on 4 March 2022. No comments were received.

Shire of Derby West Kimberley was sent a Referral letter for comment on 4 March 2022. No Comments were received.

Department of Health (DoH) was sent a Referral letter for comment on 4 March 2022. DoH responded on 23/03/2025, advising no concerns with the proposal and indicating support for the installation of groundwater monitoring bores to assess any potential environmental/health impacts from the infiltration ponds

8. Location and siting

8.1 Siting context

The Premises is located on Lot 85 on Deposited plan 213679 and Lot 501 on Deposited Plan 049870 MAC, 500 m northwest of the Community. The land surrounding the MWWTP is relatively flat and gently slopes in a westerly direction towards Derby. The WWTP sits approximately 18-20 m above sea level and is surrounded by a buffer of native vegetation on all sides (Crown Reserve).

8.2 Residential and sensitive receptors

The distances to residential and sensitive receptors are detailed in Table 9.

Table 9: Receptors and distance from activity boundary

Sensitive Land Uses	Distance from Prescribed Activity
Residential Premises	500 m southeast

8.3 Specified ecosystems

Specified ecosystems are areas of high conservation value and special significance that may be impacted as a result of activities at or Emissions and Discharges from the Premises. The distances to specified ecosystems are shown in Table 10. Table 10 also identifies the distances to other relevant ecosystem values which do not fit the definition of a specified ecosystem.

The table has also been modified to align with the *Guideline: Environmental Siting.*

Table 10: Environmental values

Specified ecosystems	**Distance from the Premises**
REWI Groundwater Areas	Premises lies within Derby Groundwater Management Plan 1992
Contaminated Sites	3000 m southwest – Derby Airport classified 'possibly contaminated - investigation required'
Biological component	**Distance from the Premises**
Threatened/Priority Flora	Occurring within 5km of premises *Night Parrot* *Princess Parrot* *Australian Painted Snipe* *Northern Quoll* *Ghost Bat* *Greater Bilby* *Bare-rumped Sheath-tailed Bat* *Northern Brushtail Possum* *Water Mouse*
Threatened/Priority Fauna	Occurring within 5km of premises *Eriochloa fatmensis* – P3 *Gomphrena cucullata* – P3

8.4 Groundwater and water sources

The distances to groundwater and water sources are shown in Table 11.

Table 11: Groundwater and water sources

Groundwater and water sources	**Distance from Premises**	**Environmental value**
Swamp non perennial	2050 m northeast	Recreational
Area subject to Inundation	980 m northeast	Recreational
Creek (Doctors Creek)	3000 m northwest	Recreational
Groundwater	Depth to groundwater not known at WWTP. Investigations as part of the Application (GALT, 2020) advise that groundwater was intercepted at 1.9 – 2.2 mbgl for site excavations. Regional hydrogeological investigations (DWER) indicate	Production bore.

	groundwater levels range from 48 mbgl in the east to less than 5 mbgl near the coast. One bore located southeast of the Premises are just within 1km of Premises based on available GIS dataset –WIN Groundwater Sites).	

8.5 Soil type

DWER's GIS identifies the soil class as AB26 – Sand plain with longitudinal sand dunes and some active drainage-ways: chief soils are red earthy sands (Uc5.21) associated with (Uc5.22) and (Uc5.1 l) soils on the plains, with dunes and hummocks of red sands (Uc1.23). Some (Gn2.21) and (Dy5.32) soils occur in lower sites often with a heavy surface layer of ferruginous gravel. Occurs on sheet(s): 9

9. Risk assessment

9.1 Determination of emission, pathway and receptor

In undertaking its risk assessment, DWER will identify all potential emissions pathways and potential receptors to establish whether there is a Risk Event which requires detailed risk assessment.

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. Where there is no actual or likely pathway and/or no receptor, the emission will be screened out and will not be considered as a Risk Event. In addition, where an emission has an actual or likely pathway and a receptor which may be adversely impacted, but that emission is regulated through other mechanisms such as Part IV of the EP Act, that emission will not be risk assessed further and will be screened out through Table 12, 13 and 14.

The identification of the sources, pathways and receptors to determine Risk Events are set out in Tables 12, 13 and 14 below.

Table 12: Identification of emissions, pathway and receptors during construction

Risk Events						***Continue to detailed risk assessment***	***Reasoning***
Sources/Activities		***Potential emissions***	***Potential receptors***	***Potential pathway***	***Potential adverse impacts***		
Construction of WWTP	*Vehicle movements on unsealed access roads* *Construction of new ponds and infrastructure*	*Noise*	*Residential premises located 500m southeast of the Premises.*	*Air / wind dispersion*	*Amenity impacts causing nuisance*	*No*	The construction works will be short duration (Dry Season). Hours of work are 7 am to 7pm Monday to Friday - excluding Sunday and Public holidays. Community will be advised prior to works commencing. Environmental Management Plan with comply with the EP Noise Regs. Vehicles to be fitted with noise suppression controls and regularly inspected and maintained. Noise can be adequately regulated by the EP Noise Regs.
		Dust				*No*	The Applicant will draft an Environment Management Plan. A water cart will be employed to manage dust lift off and all areas will be watered down prior to excavation activities so dust emissions will be limited. Speed limit at the premises. The Delegated Officer has considered the separation distance between the source and receptors as a guide to inform the risk of dust emissions as not foreseeable. Dust can be adequately regulated by section 49 of the EP Act.

Table 13: Identification of emissions, pathway and receptors during Commissioning

Risk Events						Continue to detailed risk assessment	Reasoning
Sources/Activities		Potential emissions	Potential receptors	Potential pathway	Potential adverse impacts		
Wastewater Treatment Plant	Operation of treatment ponds	Noise movement of light vehicles	Residential premises: 500m southeast	Air / wind dispersion	Amenity impacts causing nuisance	No	There will only be very limited access to the MWWTP so vehicle movement will be restricted and infrequent. There is no mechanical infrastructure required at the WWTP and no noise generation is expected from normal operations. The Delegated Officer considers the separation distance between the source and receptors as adequate to inform the risk of noise emissions as not foreseeable. Noise can be adequately regulated by the EP Noise Regs.
		Dust from movement of vehicles	Residential premises: 500m southeast	Air / wind dispersion	Health and amenity impacts - Potential suppression of photosynthetic and respiratory functions	No	The Delegated Officer considers the separation distance between the source and receptors as adequate to inform the risk of dust emissions as not foreseeable. Dust can be adequately regulated by section 49 of the EP Act.
	Treated effluent	Leachate / seepage from ponds to groundwater	Groundwater dependent ecosystems, subterranean fauna	Direct discharge (Infiltration)	Groundwater contamination	Yes	See section 9.4

Risk Events						Continue to detailed risk assessment	Reasoning
Sources/Activities		Potential emissions	Potential receptors	Potential pathway	Potential adverse impacts		
	Treatment of sewage	Odour	Residential premises: 500m southeast	Air / wind dispersion	Amenity impacts causing nuisance	No	The Delegated Officer considers the separation distance between the source and receptors as adequate to inform the risk of significant odour impacts as not foreseeable. Odour can be adequately regulated by section 49 of the EP Act.
	Sewage pond	Overtopping of ponds resulting in sewage discharge to land	Vegetation adjacent to discharge area	Direct discharge land and surface waters	Soil contamination inhibiting vegetation growth and survival Surface water contamination	Yes	See section 9.5

Table 14: Identification of emissions, pathway and receptors during Operation

Risk Events						Continue to detailed risk assessment	Reasoning
Sources/Activities		Potential emissions	Potential receptors	Potential pathway	Potential adverse impacts		
Wastewater Treatment Plant	Operation of treatment ponds	Noise from operation of ponds and movement of light vehicles	Residential premises: 500m southeast	Air / wind dispersion	Amenity impacts causing nuisance	No	There will only be very limited access to the MWWTP so vehicle movement will be restricted and infrequent. There is no mechanical infrastructure required at the WWTP and no noise generation is expected from normal operations. The Delegated Officer considers the separation distance between the source and receptors as adequate to inform the risk of significant noise impacts as not foreseeable. Noise can be adequately regulated by the EP Noise Regs
		Dust from movement of vehicles	Residential premises: 500m southeast	Air / wind dispersion	Health and amenity impacts - Potential suppression of photosynthetic and respiratory functions	No	The Delegated Officer considers the separation distance between the source and receptors as adequate to inform the risk of dust emissions as not foreseeable. Dust can be adequately regulated by section 49 of the EP Act.
	Treated effluent	Leachate / seepage from ponds to groundwater	Groundwater dependent ecosystems, subterranean fauna	Direct discharge (Infiltration)	Groundwater contamination	Yes	See section 9.4

Risk Events						Continue to detailed risk assessment	Reasoning
Sources/Activities		Potential emissions	Potential receptors	Potential pathway	Potential adverse impacts		
	Treatment of sewage	Odour	Residential premises: 500m southeast	Air / wind dispersion	Amenity impacts causing nuisance	No	The Delegated Officer considers the separation distance between the source and receptors as adequate to inform the risk of significant odour impacts as not foreseeable. Odour can be adequately regulated by section 49 of the EP Act.
	Sewage pond	Overtopping of ponds resulting in sewage discharge to land	Vegetation adjacent to discharge area	Direct discharge land and surface waters	Soil contamination inhibiting vegetation growth and survival Surface water contamination	Yes	See section 9.5

9.2 Consequence and likelihood of risk events

A risk rating will be determined for risk events in accordance with the risk rating matrix set out in Table 15 below.

Table 15: Risk rating matrix

Likelihood	Consequence				
	Slight	Minor	Moderate	Major	Severe
Almost certain	Medium	High	High	Extreme	Extreme
Likely	Medium	Medium	High	High	Extreme
Possible	Low	Medium	Medium	High	Extreme
Unlikely	Low	Medium	Medium	Medium	High
Rare	Low	Low	Medium	Medium	High

DWER will undertake an assessment of the consequence and likelihood of the Risk Event in accordance with Table 16 below.

Table 16: Risk criteria table

Likelihood		**Consequence**		
The following criteria has been used to determine the likelihood of the Risk Event occurring.		**The following criteria has been used to determine the consequences of a Risk Event occurring:**		
			Environment	**Public health* and amenity (such as air and water quality, noise, and odour)**
Almost Certain	The risk event is expected to occur in most circumstances	Severe	• **onsite impacts**: catastrophic • **offsite impacts local scale**: high level or above • **offsite impacts wider scale:** mid-level or above • Mid to long-term or permanent impact to an area of high conservation value or special significance^ • Specific Consequence Criteria (for environment) are significantly exceeded	• Loss of life • **Adverse health effects:** high level or ongoing medical treatment • Specific Consequence Criteria (for public health) are significantly exceeded • **Local scale impacts:** permanent loss of amenity
Likely	The risk event will probably occur in most circumstances	Major	• **onsite impacts**: high level • **offsite impacts local scale**: mid-level • **offsite impacts wider scale**: low level • Short-term impact to an area of high conservation value or special significance^ • Specific Consequence Criteria (for environment) are exceeded	• **Adverse health effects:** mid-level or frequent medical treatment • Specific Consequence Criteria (for public health) are exceeded • **Local scale impacts**: high level impact to amenity
Possible	The risk event could occur at some time	Moderate	• **onsite impacts**: mid-level • **offsite impacts local scale**: low level • **offsite impacts wider scale**: minimal • Specific Consequence Criteria (for environment) are at risk of not being met	• **Adverse health effects:** low level or occasional medical treatment • Specific Consequence Criteria (for public health) are at risk of not being met • **Local scale impacts:** mid-level impact to amenity
Unlikely	The risk event will probably not occur in most circumstances	Minor	• **onsite impacts**: low level • **offsite impacts local scale**: minimal • **offsite impacts wider scale**: not detectable • Specific Consequence Criteria (for environment) likely to be met	• Specific Consequence Criteria (for public health) are likely to be met • **Local scale impacts:** low level impact to amenity
Rare	The risk event may only occur in exceptional circumstances	Slight	• **onsite impact**: minimal • Specific Consequence Criteria (for environment) met	• **Local scale**: minimal to amenity • Specific Consequence Criteria (for public health) met

^ Determination of areas of high conservation value or special significance should be informed by the *Guideline: Environmental Siting.*

* In applying public health criteria, DWER may have regard to the Department of Health's *Health Risk Assessment (Scoping) Guidelines.*

"onsite" means within the Prescribed Premises boundary.

9.3 Acceptability and treatment of Risk Event

DWER will determine the acceptability and treatment of Risk Events in accordance with the Risk treatment table 17 below:

Table 17: Risk treatment table

Rating of Risk Event	Acceptability	Treatment
Extreme	Unacceptable.	Risk Event will not be tolerated. DWER may refuse application.
High	May be acceptable. Subject to multiple regulatory controls.	Risk Event may be tolerated and may be subject to multiple regulatory controls. This may include both outcome-based and management conditions.
Medium	Acceptable, generally subject to regulatory controls.	Risk Event is tolerable and is likely to be subject to some regulatory controls. A preference for outcome-based conditions where practical and appropriate will be applied.
Low	Acceptable, generally not controlled.	Risk Event is acceptable and will generally not be subject to regulatory controls.

9.4 Risk Assessment – Seepage of treated effluent

9.4.1 Description of seepage

The MWWTP will receive untreated sewage from the MAC sewerage infrastructure for treatment at the WWTP. Seepage of treated wastewater will occur within the Primary, Secondary and predominantly the three evaporation / infiltration ponds. Seepage of treated wastewater has the potential to infiltrate into groundwater beneath the WWTP and any seepage of treated wastewater has the potential to infiltrate through the unsaturated zone to groundwater followed by lateral transport of contaminants within groundwater. Seepage and infiltration of treated wastewater has the potential to increase nutrients into the environment which can cause degradation of the environment or nitrification.

9.4.2 Identification and general characterisation of emission

The type of emission is direct seepage discharge of treated wastewater primarily from the three evaporation / infiltration ponds. The WWTP has a new P&DC of 149m^3/day with a percentage of this volume infiltrating into the environment which would constitute treated sewage with low nutrient concentration(s). The frequency of seepage will be continuously daily.

9.4.3 Description of potential adverse impact from the emission

Alteration to groundwater that has the potential to disrupt ecological processes of groundwater with excess nutrients. Soil contamination may inhibit vegetation growth and cause health impacts to fauna.

9.4.4 Criteria for assessment

Relevant land and groundwater quality criteria include:

- National Environment Protection (Assessment of Site Contamination) Measure 1999;
- ANZECC & ARMCANZ (2000) – freshwater and marine waters criteria; and
- DoH 2011 – non-potable groundwater use.

9.4.5 Applicant controls

The MWWTP has a new P&DC of 149m^3/day to service average dry and wet weather flows of 122 m^3/day and 148.7 m^3/day respectively. The capacity of the new MWWTP has been designed to cater for this inflow including a 1:10 ARI rainfall event including a freeboard of 500 mm.

The primary and secondary ponds will be lined with a BGM 4 mm liner with a permeability of 4 x 10^{-14} m/s.

The Applicant will monitor treated effluent monthly upon construction of the WWTP and install four (4) groundwater monitoring bores in the shallow superficial aquifer to monitor groundwater quality concentrations. Monitoring of treated wastewater and groundwater will identify and address the potential for human health and environmental risk associated with the operation of the MWWTP.

9.4.6 Key findings

Key finding:

The Delegated Officer has reviewed the information regarding seepage and has found:

1. *All treated wastewater is to be fully contained within the WWTP including allowance for a 1:10 ARI rainfall event.*
2. *The proposed WWTP treated wastewater concentrations are considered acceptable (Table 5).*
3. *BGM lining proposed for primary and secondary ponds will provide suitable containment of untreated and partially treated effluent.*
4. *Proposed ongoing monthly effluent monitoring post construction of the WWTP will assess environmental performance of the MWWTP.*
5. *No specific groundwater data is available for the Premises. Investigations conducted as part of the Application (Supporting Document) advise that excavations encountered groundwater at 1.9 – 2.2 mbgl at the site.*
6. *The Licence holder will install four (4) groundwater monitoring bores to assess groundwater impacts and human health and environmental risk at the premises and groundwater monitoring will occur monthly during commissioning and operations.*

9.4.7 Consequence

When seepage occurs, then the Delegated Officer has determined that the impact of seepage will be low level on-site impacts, minimal off-site impacts, not detectable off-site wider scale impacts with Specific Consequence Criteria likely to be met. Therefore, the Delegated Officer considers the consequence of seepage to be **Minor**.

9.4.8 Likelihood of Risk Event

The Delegated Officer has determined that the impacts from seepage could occur at some time. Therefore, the Delegated Officer considers the likelihood of Risk Event to be **Possible**.

9.4.9 Overall rating of Seepage

The Delegated Officer has compared the consequence and likelihood ratings described above with the risk rating matrix (Table 15) and determined that the overall rating for the risk of seepage is **Medium**.

9.5 Risk Assessment – Overtopping of ponds

9.5.1 Description of Operation- Overtopping of ponds

The ponds will receive untreated sewage from the MAC sewerage infrastructure for treatment at the WWTP. Overtopping of the ponds could occur during normal operating procedures and in extreme rainfall events (cyclones and large storms) which occur in the region. Any overtopping has the potential to directly discharge both untreated sewage and treated wastewater into the vegetation adjacent to the treatment pond(s) and if cyclonic conditions prevail the wastewater may discharge into floodwaters and associated coastal plains. Any overflow of untreated sewage and treated wastewater has the potential to increase nutrients into the environment which can cause degradation of the environment or nitrification.

9.5.2 Identification and general characterisation of emission

The type of emission is direct discharge of untreated/treated wastewater from the ponds. The WWTP has a new capacity of 149 m^3/day and depending on the type of incident (cyclone for example) a large percentage of this volume could overtop into the environment which would constitute untreated sewage high in nutrient concentration(s). It is however anticipated that the frequency of overtopping will be very low to rare and generally only for a short duration and highly diluted; maximum of weeks in a cyclone for example if it occurred.

9.5.3 Description of potential adverse impact from the emission

Soil contamination may inhibit vegetation growth and cause health impacts to fauna. Potential impacts include eutrophication of fresh waters if untreated sewage was to enter the freshwater environment.

9.5.4 Criteria for assessment

Relevant land and surface water quality criteria include:

- National Environment Protection (Assessment of Site Contamination) Measure 1999;
- ANZECC & ARMCANZ (2000) – freshwater and marine waters criteria; and
- DoH 2011 – non-potable groundwater use.

9.5.5 Applicant controls

A water balance has been completed for the MWWTP with a new capacity of 149m^3/day.

The P&DC of the new MWWTP has been designed to cater for a 1:10 ARI rainfall event including a freeboard of 500mm.

The Applicant will monitor treated effluent monthly upon construction of the WWTP and install four (4) groundwater monitoring bores in the shallow superficial aquifer to monitor

groundwater quality concentrations. Monitoring of treated wastewater and groundwater will identify and address the potential for human health and environmental risk associated with the operation of the MWWTP.

9.5.6 Key findings

The Delegated Officer has reviewed the information regarding overtopping and has found:

1. *An acceptable water balance has been completed for the MWWTP with a new capacity of 149m^3/day.*
2. *WWTP design includes inflow for a 1:10 ARI rainfall event including a freeboard of 500mm.*
3. *Treated wastewater and groundwater monitoring will be conducted which will will identify and address the potential for human health and environmental risk associated with the operation of the MWWTP.*
4. *The closest surface water sensitive receptor is 890 m northeast.*
5. *Any overflow due to excessive rainfall will likely be heavily diluted (for example, if overflow occurs during a cyclone).*

9.5.7 Consequence

If overtopping occurs, then the Delegated Officer has determined that the impact of overtopping will be low level on-site impacts, minimal off-site impacts, not detectable off-site wider scale impacts with Specific Consequence Criteria likely to be met. Therefore, the Delegated Officer considers the consequence of overtopping to be **Minor**.

9.5.8 Likelihood of Risk Event

The Delegated Officer has determined that impacts from overtopping could occur at some time. Therefore, the Delegated Officer considers the likelihood of Risk Event to be **Possible.**

9.5.9 Overall rating of overtopping

The Delegated Officer has compared the consequence and likelihood ratings described above with the risk rating matrix (Table 15) and determined that the overall rating for the risk of overtopping is **Medium**.

9.6 Summary of acceptability and treatment of Risk Events

A summary of the risk assessment and the acceptability or unacceptability of the risk events set out above, with the appropriate treatment and control, are set out in Table 18 below. Controls are described further in section 11.

Table 18: Risk assessment summary

	Description of Risk Event			Applicant controls	Risk rating	Acceptability with controls (conditions on instrument)
	Emission	**Source**	**Pathway/ Receptor (Impact)**			
1.	Seepage of wastewater	Sewage ponds	Infiltration to land and groundwater environment causing impacts on soil /vegetation and water quality.	Infrastructure and management controls.	Minor consequence Possible **Medium risk**	Acceptable subject to proponent controls conditioned / outcomes-based controls
2.	Overtopping of wastewater	Sewage ponds	Overtopping to land and aquatic environment causing impacts on soil /vegetation and water quality.	Infrastructure and management controls.	Minor consequence Possible **Medium risk**	Acceptable subject to proponent controls conditioned / outcomes-based controls

10. Regulatory controls

A summary of regulatory controls determined to be appropriate for the Risk Event is set out in Table 19. The risks are set out in the assessment in section 10 and the controls are detailed in this section. DWER will determine controls having regard to the adequacy of controls proposed by the Applicant. The conditions of the Licence will be set to give effect to the determined regulatory controls.

Table 19: Summary of regulatory controls to be applied

		Controls (references are to sections below, setting out details of controls)				
		10.1.1 Infrastructure and equipment	**10.1.2 Commissioning and Reports**	**12.1.3 Emissions**	**10.1.4 Monitoring**	**10.1.5 Reports**
Risk Items (see risk analysis in section 9)	**1. Seepage**	●	●	●	●	●
	2. Overtopping	●	●	●	●	●

10.1 Licence controls

To facilitate the WC upgrades and operation of Aboriginal Community WWTPs, DWER and WC have an agreement to streamline the regulatory process which allows WC to progress straight to a Licence whereby the upgrades will be authorised under the Licence – a separate Works Approval will not be required.

There will be no emission conditions for the construction of the WWTP as outlined in Table 12 so all construction conditions will be authorised and regulated under licence conditions for Infrastructure and equipment. Commissioning of the WWTP is requested by the Applicant and therefore has been authorised under the Licence conditions for a maximum of 6 months.

10.1.1 Infrastructure and equipment

Licence condition 1 authorises construction of the MWWTP to required specifications.

Licence condition 4 authorises construction the four (4) groundwater monitoring bores as part of monitoring groundwater to assess environmental and human health impacts from the operation of the WWTP.

Licence condition 14 ensures the licence holder must not operate the WWTP upgrade works (as specified in Table 3), other than for the purposes of environmental commissioning, until an Environmental Commissioning Report has been submitted in accordance with condition 12 and 13.

Licence condition 15 ensures infrastructure and equipment specified is maintained in good working order for the life of the WWTP to ensure optimum efficiency of the WWTP.

Licence condition 16 ensures appropriate management of hazardous materials at the premises upon detection of any spill.

Licence condition 17 ensures that only (connected) sewage is authorised to be accepted onto the premises with specific acceptance limits for the waste. No septage waste will be accepted at the MWWTP.

Licence condition 18 regulates wastewater management of all treatment ponds and limits freeboard to 500 mm.

Licence condition 19 ensures there are appropriate security measures at the WWTP.

10.1.2 Commissioning and Reports

Licence condition 6 and 7 authorises Commissioning of the WWTP.

Licence condition 12 and 13 outlines compliance reports required for environmental commissioning of the WWTP to ensure it meets proposed design and performance specifications.

10.1.3 Emissions

Licence condition 8 outlines emission discharge points as part of environmental commissioning.

Licence condition 20 outlines emission discharge points for discharges to land via infiltration from the evaporation / infiltration ponds as part of WWTP operations.

10.1.4 Monitoring requirements

Licence condition 9 outlines monthly monitoring of treated wastewater emission discharged from the WWTP as part of environmental commissioning.

Licence condition 10 outlines monthly monitoring of groundwater as part of environmental commissioning.

Licence condition 11 outlines requirements for monitoring and sampling treated wastewater discharges to land and groundwater samples during environmental commissioning.

Licence condition 21 outlines emission discharge monitoring for operations at the WWTP.

Licence condition 22 outlines groundwater monitoring which will assess environmental and human health risks associated with operations at the WWTP. These can be reviewed with time.

Licence condition 23 and 24 outlines requirements for monitoring and sampling treated wastewater discharges to land and groundwater samples during operations of the WWTP.

10.1.5 Reports

Licence condition 2 and 3 outlines compliance reports required for construction of the WWTP.

Licence condition 5 outlines compliance reports required for construction of the groundwater monitoring bores.

Licence condition 25 outlines complaints and complaints management for the WWTP.

Licence condition 26 outlines requirements for an annual audit compliance reporting resulting from operation of the WWTP.

Licence condition 27 outlines requirements for the submission of an Environmental Report which includes the monthly environmental samples for discharges to land and groundwater monitoring resulting from operation of the WWTP.

Licence condition 28 and 29 outlines requirements to keep books and records/reports for the WWTP.

11. Determination of Licence conditions

The conditions in the issued Licence in Attachment 1 have been determined in accordance with the *Guidance Statement: Setting Conditions*.

The *Guidance Statement: Licence Duration* has been applied and the issued licence expires in 30 years from date of issue.

Table 20 provides a summary of the conditions to be applied to this licence.

Table 20: Summary of conditions to be applied

Condition Ref	Grounds
Construction	
Infrastructure and Equipment 1 and 4	These conditions are valid, risk-based and contain appropriate controls.
Environmental Compliance Condition 2, 3, 5, 12 and 13	Environmental compliance is a valid, risk-based condition to ensure appropriate linkage between the licence and the EP Act.
Environmental Commissioning Condition 6, 7, 8, 9, 10 and 11.	Environmental compliance is a valid, risk-based condition to ensure appropriate linkage between the licence and the EP Act.

Condition Ref	Grounds
Operation	
Infrastructure and Equipment 14, 15, 16, 17, 18 and 19	These conditions are valid, risk-based and contain appropriate controls.
Emissions and discharges Condition 20	These conditions are valid, risk-based and consistent with the EP Act.
Monitoring and Reporting 21, 22, 23 and 24	These conditions are valid, risk-based and consistent with the EP Act.
Information 25, 26, 27, 28 and 29	These conditions are valid and are necessary administration and reporting requirements to ensure compliance.

DWER notes that it may review the appropriateness and adequacy of controls at any time and that, following a review, DWER may initiate amendments to the licence under the EP Act.

12. Applicant's comments

The Applicant was provided with the draft Decision Report and draft issued Licence on 28 March 2022 and 6 May 2022. The Applicant provided comments on the draft documents on 14 April 2022 and 9 May 2022 which are summarised, along with DWER's response, in Appendix 2.

13. Conclusion

This assessment of the risks of activities on the Premises has been undertaken with due consideration of a number of factors, including the documents and policies specified in this Decision Report (summarised in Appendix 1).

Based on this assessment, it has been determined that the Licence will be granted subject to conditions commensurate with the determined controls and necessary for administration and reporting requirements.

Steve Checker

Digitally signed by Steve Checker
Date: 2022.05.09 20:59:17 +08'00'

Stephen Checker
MANAGER WASTE INDUSTRIES

Delegated Officer
under section 20 of the *Environmental Protection Act 1986*

Appendix 1: Key documents

	Document title	In text ref	Availability
1.	CS03554 Mowanjum Wastewater Treatment Plant Upgrade Licence Application Supporting Information Document – December 2021	Application	DWER records (DWERDT563418)
2.	DER, October 2015. *Guidance Statement: Setting conditions*, Perth.	DER 2015b	accessed via https://www.dwer.wa.gov.au/regulatory-documents
3.	DER, August 2016. *Guidance Statement: Licence duration*, Perth.	DER 2016a	
4.	DWER, October 2019, *Procedure: Prescribed premises works approval and licence*, Perth, Western Australia	DWER 2019	
5.	DWER, December 2020, *Guideline: Decision Making*, Perth, Western Australia.	DWER 2020a	
6.	DWER, December 2020, *Guideline: Environmental siting*, Perth, Western Australia.	DWER 2020b	
7.	DWER, December 2020. *Guideline: Regulatory principles*, Perth, Western Australia.	DWER 2020c	
8.	DWER, December 2020, *Guideline: Risk Assessments*, Perth, Western Australia.	DWER 2020d	

Appendix 2: Summary of applicant's comments on risk assessment and draft conditions

Condition	Summary of Licence Holder comment	DWER response
-	Applicant advised in comments that the WWTP design drawings and some pond dimensions provided in the Application are incorrect and provided the correct pond specifications in Table 1 / Attachment 1 and corresponding design drawings in Attachment 3 in the Comments response.	Noted. Table 2 Decision Report amended to include new design and changes made throughout Decision Report and Licence to reflect correct design.
Condition 1 Table 1 Schedule 1 Maps – Premises Figure	Design and Construction installations requirements Table – Attachment 3 correct drawings and design specifications and Premises figure.	Amended Decision Report and Licence accordingly.
Condition 1 Table 1 row 1(d)	Amend wording to: *All sewerage conveyance, storage and treatment infrastructure must be designed and constructed to ensure that stormwater runoff does not enter the sewage treatment system and sewage and treated wastewater storage infrastructure.*	Amended
Condition 1 Table 1 row 1(e)	Amend wording to: *Direct all treated wastewater to evaporation / infiltration pond 1, 2 and 3.*	Amended
Condition 1 Table 1 row 3	The depth of Primary Pond 2 should be 1.5m instead of 1.8m Amend wording to: *Depth of 1.5m*	Amended
Condition 1 Table 1 row 4	The depth of Secondary Pond 1 should be 1.5m instead of 1.3m Amend wording to:	Amended

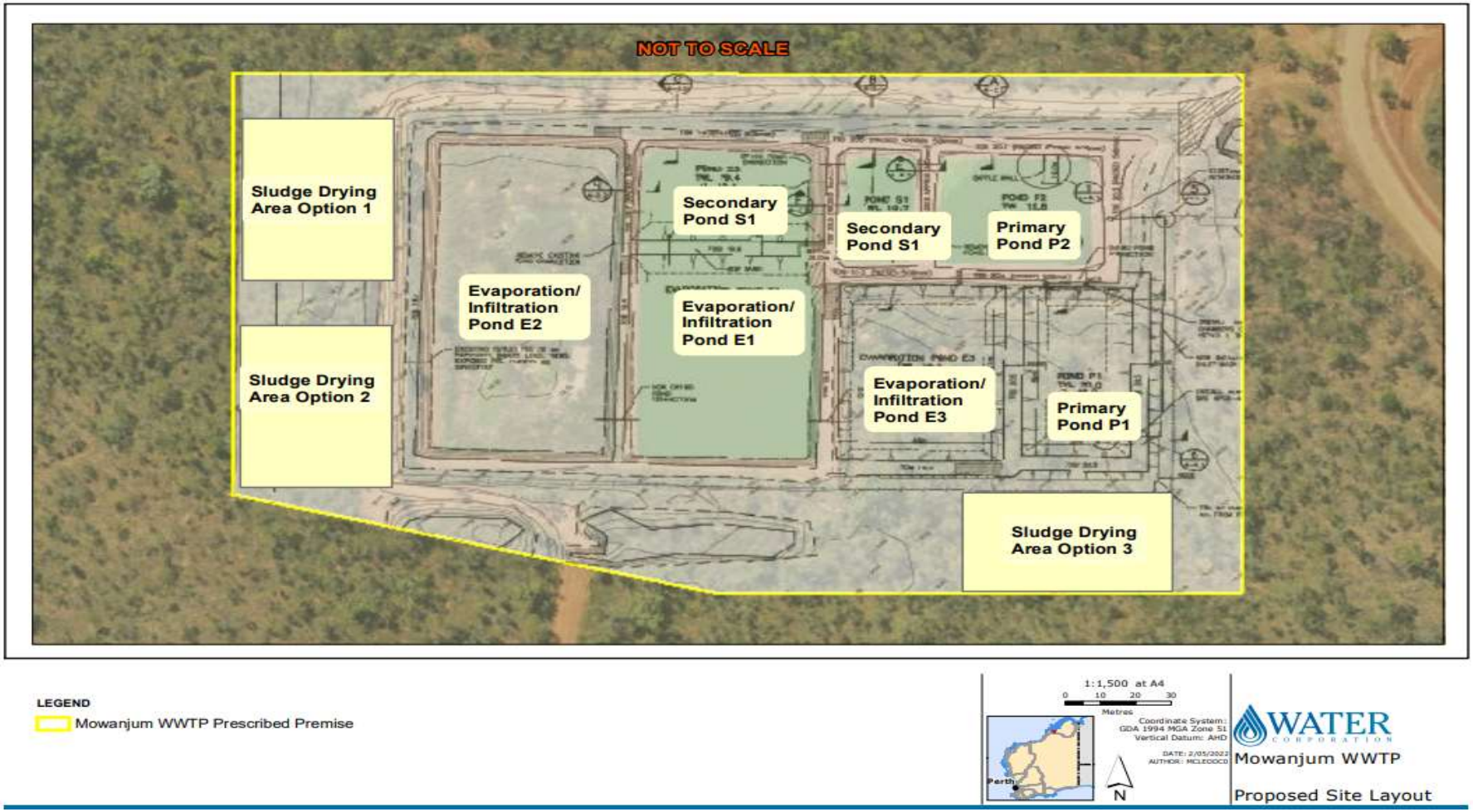
Condition	Summary of Licence Holder comment	DWER response
	Depth of 1.5m	
Condition 1 Table 1 row 6	The length of Evaporation / infiltration Pond 1 should be 70m instead of 55m Amend wording to: *length of 70m*	Amended
Condition 1 Table 1 row 6, 7 and 8	The ponds are Evaporation / infiltration ponds Amend infrastructure accordingly.	Amended
Condition 1 Table 1 row 9	The Mowanjum WWTP is not accepting septage waste, only connected sewer waste from the Mowanjum Community. Desludging will occur during construction and then occur occasionally thereafter (several years in between de-sludging events). Amend name of infrastructure to: *Sludge drying area*	Amended
Condition 3	Requesting amendment of 'civil engineer' wording to be replaced with '*suitably qualified engineer*'.	Amended
Condition 5	Requesting amendment from 60 calendar days to 90 calendar days for the submission of the well construction report.	Amended
Condition 9 Table 5	Requesting amendment for pH to be sampled monthly aligned with the other parameters. Mowanjum WWTP will not be manned, or powered premises and a flow meter is not included. Given the disposal method is evaporation / infiltration Water Corporation requests the requirement for cumulative flow volume, continuous monitoring be removed. This is consistent with other Premises that dispose treated wastewater via evaporation / infiltration.	Amended pH to monthly and deleted flow monitoring

Condition	Summary of Licence Holder comment	DWER response
Condition 15 Table 7	Rename to Evaporation / infiltration pond 1, 2, and 3. Rename to 'sludge drying area'. Water Corporation proposes to return leachate from the sludge drying process back into the same pond it came from via gravity. The leachate quality would be the same if not better. Requested amendment to: *A bunded and lined area capable of preventing surface run-off of leachate and sludge and which returns sludge leachate to the same pond of which it was derived from.*	Amended
Condition 16	The Mowanjum WWTP is not a manned site and spills would not be able to be immediately recovered until notification. Amend to: *The licence holder must recover, or remove and dispose of, spills of environmentally hazardous materials including sewerage, fuel, oil or other hydrocarbons, whether inside or outside an engineered containment system as soon as practicable upon identification of spill.*	Amended to include as soon as practicable upon detection
Condition 17 Table 8	Mowanjum WWTP is not accepting septage waste. The Plant is only receiving connected sewer waste. Amend to: *Treatment of sewerage shall be targeted at or below the treatment capacity of 149m^3/day.* Rename to 'sludge drying area'. Water Corporation proposes to return leachate from the sludge drying process back into the same pond it came from via gravity. The leachate quality would be the same if not better. Requested amendment to: *A bunded and lined area capable of preventing surface run-off of leachate and sludge and which returns sludge leachate to the same pond of which it was derived from.*	Amended

Condition	Summary of Licence Holder comment	DWER response
Condition 21 Table 10	Requesting amendment for pH to be sampled monthly aligned with the other parameters. Mowanjum WWTP will not be manned, or powered premises and a flow meter is not included. Given the disposal method is evaporation / infiltration Water Corporation requests the requirement for cumulative flow volume, continuous monitoring be removed. This is consistent with other Premises that dispose treated wastewater via evaporation / infiltration.	Amended pH to monthly and deleted flow monitoring
Condition 26	Water Corporation requests the compliance reporting submission of the Annual Audit Compliance Report to align with our other licences. Request amendment: *Prepare and submit to the CEO by no later that 93 calendar days after the end of the annual period each year, an Annual Audit Compliance Report for the proceeding annual period in the approved form.*	Amended to 93 days
Condition 27	Water Corporation requests the submission of biennial environmental reports to align with our other licences. Request amendment: The licence holder must submit to the CEO within 93 calendar days after the end of the annual period, and then biennially thereafter, an Environmental Report for the two previous annual periods (or part thereof) for the conditions listed in Table 12 and which provides information in accordance with the corresponding requirement set out in Table 12.	Amended to 93 days
9 May 2022		
Table 1	Adjust text throughout to “Direct all treated wastewater to evaporation/infiltration pond, 1, 2 **and/or** 3	Amended

Condition	Summary of Licence Holder comment	DWER response
Condition 16	Adjust text to remove word “immediately” to “**as soon as practicable**” throughout regarding cleaning up spills	Amended
Condition 1 Table 1 Row 1 (b)(v)	Effluent concentration monitoring: could we replace the TTC with **e-coli**. All of our existing WWTP licences reference e.coli rather than TTC.	Amended

Attachment 1: Site Plan



Attachment 2: Licence L9320/2022/1