Government of **Western Australia**
Department of **Environment Regulation**

Your ref L8239/2008/2
Our ref DEC7565
Enquiries Jane Dalin
Phone 9333 7409
Fax 9333 7550
Email jane.dalin@der.wa.gov.au

Mr Gordon Groth
Environment Branch
Water Corporation
PO Box 100
LEEDERVILLE WA 6902

Dear Mr Groth

***ENVIRONMENTAL PROTECTION ACT 1986*: LICENCE GRANTED**
Premises: York Wastewater Treatment Plan
Lot 460 on Diagram 91128 YORK WA 6302
Licence Number: L8239/2008/2

A licence under the *Environmental Protection Act 1986* (the Act) has been granted for the above premises. The Department of Environment Regulation will advertise the issuing of this licence in the public notices section of *The West Australian* newspaper.

The licence includes attached conditions. Under section 58(1) of the Act, it is an offence to contravene a condition of a licence. This offence carries a penalty of up to $125,000 and a daily penalty of up to $25,000.

In accordance with section 102(1)(c) of the Act, you have 21 days to appeal the conditions of the licence. Under section 102(3)(a) of the Act, any other person may also appeal the conditions of the licence. To lodge an appeal contact the Office of the Appeals Convenor on 6467 5190 or by email at admin@appealsconvenor.wa.gov.au.

Where a licence is issued for more than one year it requires payment of an annual fee and will cease to have effect if the fee is unpaid. It is the occupier's responsibility to lodge a fee application and pay the annual fee in sufficient time to avoid incurring a late payment fee and for processing to be completed before the licence anniversary date.

If you have any queries regarding the above information, please contact Jane Dalin on 9333 7409.

Yours sincerely

Rebecca Kelly
Officer delegated under section 20
of the *Environmental Protection Act 1986*

21 April 2015

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Government of Western Australia
Department of Environment Regulation

LICENCE FOR PRESCRIBED PREMISES

Environmental Protection Act 1986

LICENCE NUMBER: L8239/2008/2 **FILE NUMBER: DEC7565**

LICENSEE AND OCCUPIER OF PREMISES
Water Corporation
PO Box 100
LEEDERVILLE WA 6902

NAME AND LOCATION OF PREMISES
York Wastewater Treatment Plant
Lot 460 on Diagram 91128
Great Southern Highway
YORK WA 6302 (as depicted in Attachment 2)

PRESCRIBED PREMISES CATEGORIES
Schedule 1 of the *Environmental Protection Regulations 1987*

Category	Description	Capacity
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	130 cubic metres per day

CONDITIONS OF LICENCE
Subject to the conditions of licence set out in attached 11 pages.

Officer delegated under Section 20
of the *Environmental Protection Act 1986*

ISSUE DATE Tuesday, 21 April 2015

COMMENCE DATE Wednesday, 22 April 2015

EXPIRY DATE Tuesday, 21 April 2020

CONDITIONS OF LICENCE

Environmental Protection Act 1986

LICENCE NUMBER: L8239/2008/2 **FILE NUMBER: DEC7565**

DEFINITIONS

In these conditions, unless inconsistent with the text or subject matter:

"APHA-AWWA-WEF" means American Public Health; American Water Works Association; Water Environment Federation,

"AS3780" means Australian Standard 3780:2008: *The storage and handling of corrosive substances*;

"AS/NZS 5667.10 means Australian/New Zealand Standard: *Water quality – Sampling* – Part 10: *Guidance on sampling of waste waters*;

"AS/NZS 5667.11 means Australian/New Zealand Standard: *Water quality – Sampling* – Part 11: *Guidance on sampling of groundwaters;*

"Chief Executive Officer" and "Department of Environment Regulation" for the purpose of correspondence means-

Manager Licensing (Waste Industries)
Department of Environment Regulation
Locked Bag 33
CLOISTERS SQUARE WA 6850
Telephone: (08) 9333 7510
Facsimile: (08) 9333 7550

"Licensed facility" means facility licensed under the *Environmental Protection Act 1986* to accept waste, as determined by reference to the waste type set out in the document titles *Landfill Waste Classification and Waste Defintions 1996 (as amended December 2009)* published by the Chief Executive Officer on 17 December 2009;

"NATA"' means National Association of Testing Authorities; and

"Premises" means York Wastewater Treatment Plant Lot 460 on Diagram 91128, Great Southern Highway, York WA 6302 (as depicted in Attachment 2).

WATER POLLUTION CONTROL CONDITIONS

MAINTENANCE OF WASTEWATER TREATMENT PONDS

1 The licensee shall manage the wastewater treatment ponds in a manner such that:

(i) stormwater runoff resulting from roof and site drainage shall be prevented from entering the wastewater treatment ponds or causing the erosion of outer pond embankments;

(ii) overtopping of the wastewater treatment ponds does not occur;

(iii) there is no discernible seepage loss from the ponds; and

(iv) vegetation (emergent or otherwise) shall be prevented from growing in the pond wastewaters or on the inner pond embankments.

EMISSION TO LAND

2 The licensee is permitted, subject to conditions in the licence, to emit waste to land through the emission point listed in Table 1 and identified on the map of emission points in the Attachment 5.

Table 1: Emission point to land

Emission point reference	Emission point reference on map of emission points	Description	Source
Irrigation laterals	Sandalwood lots	Discharge to onsite sandalwood lots irrigation area	Treated wastewater

3 The licensee shall not cause or allow emissions to land greater than the limits listed in Table 2.

Table 2: Emission limits to land

Emission point	Parameter	Limit (including units)
Sandalwood lots irrigation laterals (Attachment 5)	Total inorganic nitrogen loadings	300 kg/ha/y
	Total reactive phosphorous loadings	50 kg/ha/y

4. The licensee shall manage the irrigation of treated wastewater such that:

(a) bunding/cut-off drains are maintained around irrigation areas such that run-off wastewater is contained within the premises;

(b) no irrigation generated run-off, spray drift or discharge occurs beyond the boundary of the premises;

(c) treated wastewater is evenly distributed over the irrigation area;

(d) soil erosion is minimised;

(e) irrigation does not occur on land that is waterlogged; and

(f) vegetation cover is maintained over the irrigation area.

FLOW MONITORING DEVICE

5 The licensee shall maintain a suitable device for measuring monthly cumulative volumes of treated wastewater discharged from the treatment plant. The monthly flow results shall be presented in the next Annual Monitoring Report in a tabular form.

TREATED WASTEWATER SAMPLING REQUIREMENTS

6 The licensee shall take, every three months, representative samples of the treated wastewater being discharged from the final storage pond within the Premises (as depicted in Attachment 3). The following parameters shall be monitored:

(i) pH;
(ii) Total Suspended Solids;
(iii) Biochemical Oxygen Demand;
(iv) Total-nitrogen;
(v) ammonium-nitrogen;
(vi) Nitrate+Nitrite-Nitrogen;
(vii) Total-phosphorus; and
(viii) *Eschenchia. Coli*

With the exception of pH and *E. Coli*, all measurements are to be reported in milligrams per litre (mg/L).

7 The licensee shall collect all samples required under condition 6 in accordance with AS/NZS 5667.10.

8 The licensee shall submit all samples required under condition 6 to a laboratory with current NATA accreditation for the analysis of parameters specified for analysis in accordance with the current "Standard Methods for Examination of Water and Wastewater-APHA-AWWA-WEF".

GROUNDWATER MONITORING PROGRAMME

9 The licensee shall take, every three months, representative water samples from the monitoring bores as specified in the table below and analyse these samples for the following parameters:

Column 1	**Column 2**	**Column 3**
Sampling location Monitoring Bore (MB)	**Parameters to be analysed**	**Sampling frequency**
MB 1/97 MB 2/97 MB 3/97 (as depicted in Attachment 4)	pH Electrical Conductivity Total Nitrogen Total Phosphorus Standing Water Level (SWL)	Every 3 months

With the exception of pH and SWL, all measurements are to be reported in milligrams per litre (mg/L).

10 The licensee shall collect all samples required under condition 9 in accordance with AS/NZS 5667.11.

11 The licensee shall submit all samples required under condition 10 to a laboratory with current NATA accreditation for the analysis of parameters specified for analysis in accordance with the current "Standard Methods for Examination of Water and Wastewater-APHA-AWWA-WEF".

CALCULATION OF CONTAMINANT LOAD

12 The licensee shall determine the 3 monthly loads of each contaminant in the wastewater discharged from the plant (except pH and bacteria) using flow weighted data. The loads shall

be based on the discharge rate and the concentration as measured in accordance with condition 5 and 6. 3-monthly and annual average loads of the contaminants shall be reported in the annual monitoring report in kilograms per day.

BUNDING AND CONTAINMENT

13 The licensee shall store environmentally hazardous chemicals, including alum and hypochlorite, (where the total volume of each substance stored on the Premises exceeds 250 litres) within bunded areas in accordance with AS3780.

14 The licensee shall ensure that perimeter valves on bunded areas are locked or otherwise secured in the closed position whilst the site is unattended.

SOLID WASTE CONTROL

15 The licensee shall dispose of collected vegetation and floating debris from the treatment ponds to a licensed landfill.

16 The licensee shall:

(i) inform the Chief Executive Officer prior to taking a treatment pond offline for maintenance works;

(ii) inform the Chief Executive Officer no less than 14 days prior to the removal of sludge from a treatment pond; and

(iii) where sludge is temporarily stored on-site, direct sludge to a hard-stand area or approved drying bed which;

(a) is adequately bunded to prevent surface runoff of leachate or sludge from crossing the boundary of the Premises; and

(b) where possible, returns sludge leachate from the storage area back to the treatment pond.

17 The licensee shall dispose of sludge and biosolids in accordance with the document *Western Australian Guidelines for Biosolids Management*, Department of Environment and Conservation, December 2012 (as amended from time to time).

MONITORING AND REPORTING CONDITIONS

18 The licensee shall provide to the Chief Executive Officer by 1 September each year, an Annual Monitoring Report containing data collected over the previous year (1 July to 30 June). The report shall contain:

(i) monitoring data or other collected data required by any condition of this licence;

(ii) an explanation of the monitoring results with respect to the environmental impacts of the project;

(iii) the number and type of complaints received including date of the complaint, nature of complaint (where appropriate cross referenced with prevailing wind directions) and action taken; and

(iv) any changes surface drainage channels and on-site or off-site impacts or pollution.

ANNUAL AUDIT COMPLIANCE REPORT

19 The licensee shall by 1 September in each year, provide to the Chief Executive Officer an Annual Audit Compliance Report (AACR) in the form in Attachment 1 to this licence, signed and certified in the manner required by Section C of the form, indicating the extent to which the licensee has complied with the conditions of this licence, and any previous licence issued under Part V of the Act for the Premises, during the period beginning 1 July to 30 June of the previous year.

ATTACHMENT 1 - ANNUAL AUDIT COMPLIANCE REPORT

LICENCE NUMBER: L8239/2008/2 **FILE NUMBER: DEC7565**

SECTION A

LICENCE DETAILS

Licence Number:	Licence File Number:
Company Name: Trading as:	ABN:
Reporting period: _____ to _____	

STATEMENT OF COMPLIANCE WITH LICENCE CONDITIONS

1. Were all conditions of licence complied with within the reporting period? (please tick the appropriate box)

Yes □ Please proceed to Section C
No □ Please proceed to Section B

Each page must be initialed by the person(s) who signs Section C of this annual audit compliance report

INITIAL:_____

LICENCE NUMBER: L8239/2008/2 **FILE NUMBER: DEC7565**

SECTION B

DETAILS OF NON-COMPLIANCE WITH LICENCE CONDITION.

Please use a separate page for each licence condition that was not complied with.

a) Licence condition not complied with?
b) Date(s) when the non compliance occurred, if applicable?
c) Was this non compliance reported to DEC?
☐ Yes ☐ Reported to DEC verbally Date _____ ☐ Reported to DEC in writing Date _____ ☐ No
d) Has DEC taken, or finalised any action in relation to the non compliance?
e) Summary of particulars of non compliance, and what was the environmental impact?
f) If relevant, the precise location where the non compliance occurred (attach map or diagram)
g) Cause of non compliance
h) Action taken or that will be taken to mitigate any adverse effects of the non compliance
i) Action taken or that will be taken to prevent recurrence of the non compliance

Each page must be initialed by the person(s) who signs Section C of this annual audit compliance report

INITIAL:_____

ATTACHMENT 1 - ANNUAL AUDIT COMPLIANCE REPORT

LICENCE NUMBER: L8239/2008/2 **FILE NUMBER: DEC7565**

SECTION C - SIGNATURE AND CERTIFICATION

This Annual Audit Compliance Report may only be signed by a person(s) with legal authority to sign it. The ways in which the Annual Audit Compliance Report must be signed and certified, and the people who may sign the statement, are set out below.
Please tick the box next to the category that describes how this Annual Audit Compliance Report is being signed. If you are uncertain about who is entitled to sign or which category to tick, please contact the licensing officer for your premises.

If the licence holder is		The Annual Audit Compliance Report must be signed and certified:
an individual	□	by the individual licence holder, or
	□	by a person approved in writing by the Chief Executive Officer of the Department of Environment Regulation to sign on the licensee's behalf.
A firm or other unincorporated company	□	by the principal executive officer of the licensee; or
	□	by a person with authority to sign on the licensee's behalf who is approved in writing by the Chief Executive Officer of the Department of Environment Regulation.
A corporation	□	by affixing the common seal of the licensee in accordance with the Corporations Act 2001; or
	□	by two directors of the licensee; or
	□	by a director and a company secretary of the licensee, or
	□	if the licensee is a proprietary company that has a sole director who is also the sole company secretary – by that director, or
	□	by the principal executive officer of the licensee; or
	□	by a person with authority to sign on the licensee's behalf who is approved in writing by the Chief Executive Officer of the Department of Environment Regulation.
A public authority (other than a local government)	□	by the principal executive officer of the licensee; or
	□	by a person with authority to sign on the licensee's behalf who is approved in writing by the Chief Executive Officer of the Department of Environment Regulation.
a local government	□	by the chief executive officer of the licensee; or
	□	by affixing the seal of the local government.

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. There is a maximum penalty of $50,000 for an individual or body corporate.

I/We declare that the information in this annual audit compliance report is correct and not false or misleading in a material particular.

SIGNATURE: _____ SIGNATURE: _____

NAME:(printed) _____ NAME:(printed) _____

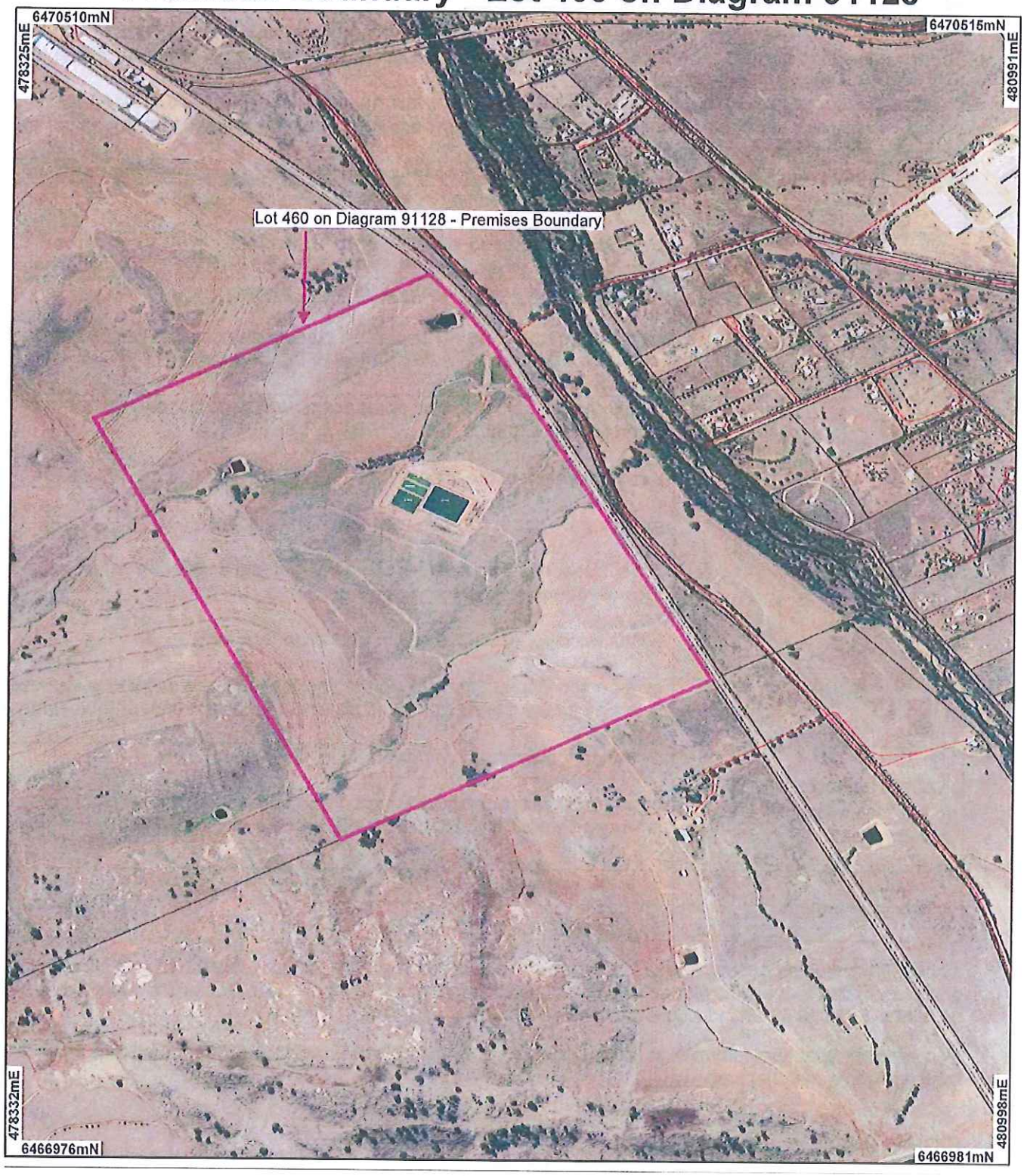
POSITION: _____ POSITION: _____

DATE: _____/_____/_____ DATE: _____/_____/_____

SEAL (if signing under seal)

LICENCE NUMBER: L8239/2008/2 **FILE NUMBER: DEC7565**

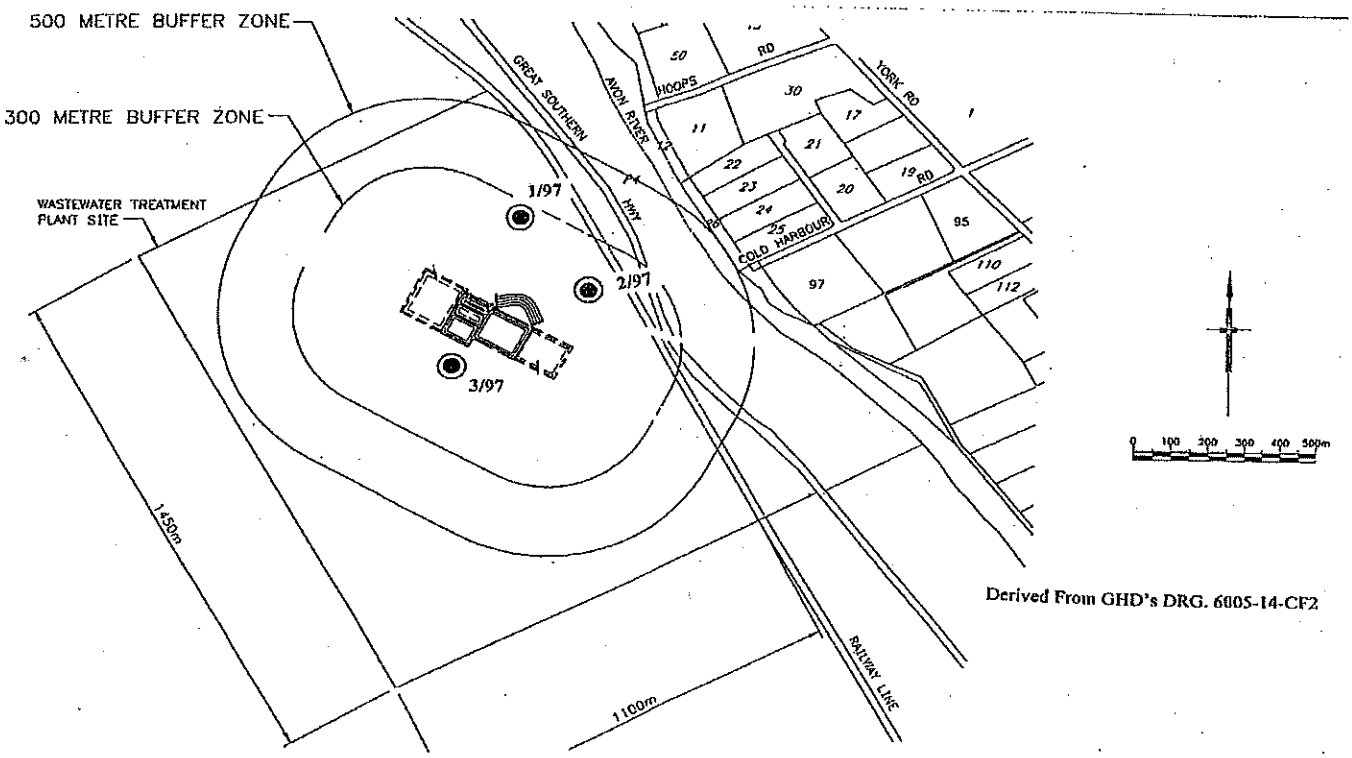
Premises Boundary - Lot 460 on Diagram 91128



York Wastewater Treatment Plant - Site Plan

LICENCE NUMBER: L8239/2008/2 **FILE NUMBER: DEC7565**

Groundwater Monitoring Bores – York WWTP



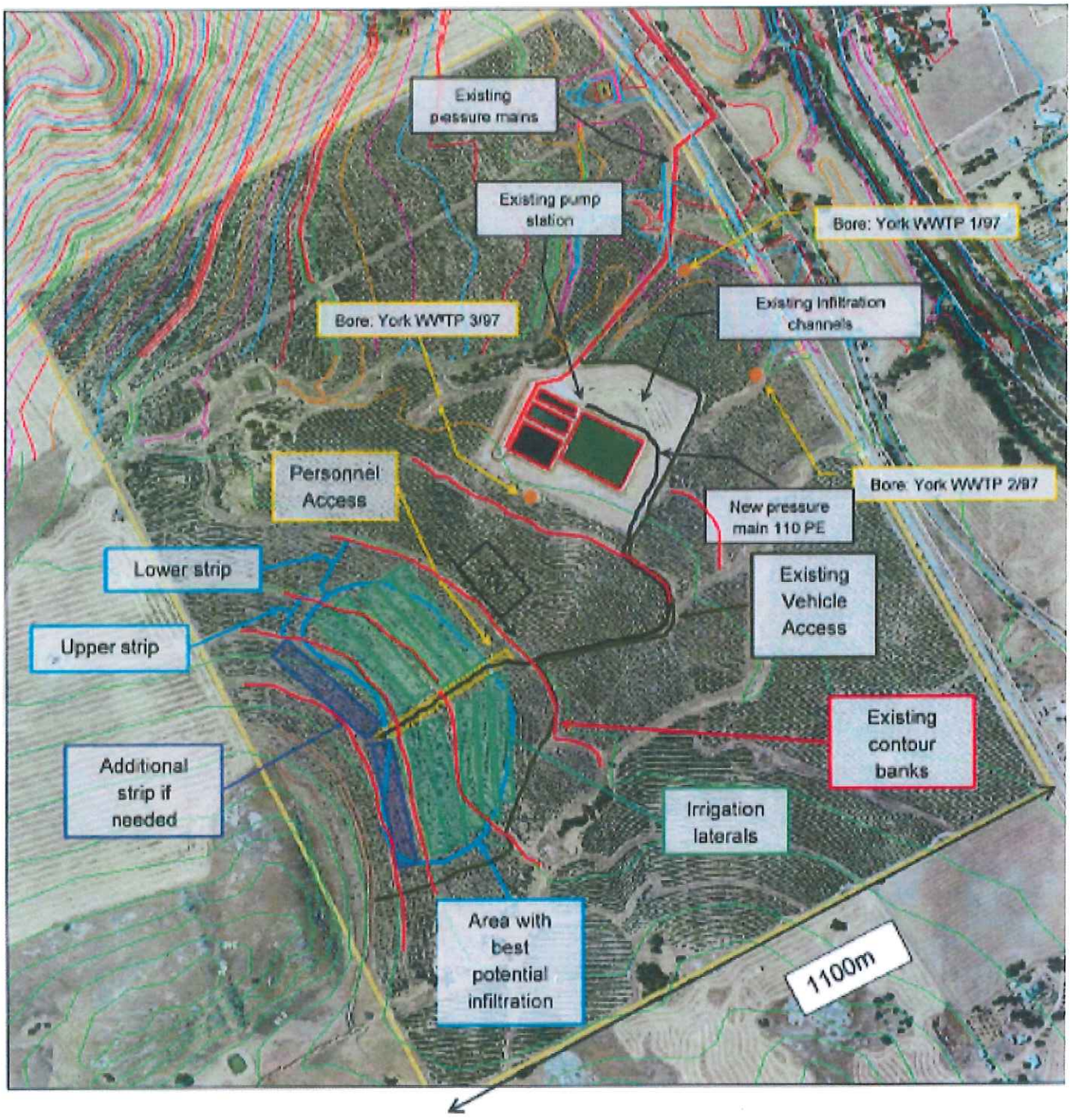


Figure 1: York WWTP - TWW Disposal via Managed Irrigation Planning Details

Government of Western Australia
Department of Environment Regulation

ENVIRONMENTAL ASSESSMENT REPORT

LICENCE NUMBER: L8239/2008/2
LICENCE FILE NUMBER: DEC7565
APPLICATION DATE: 27/01/2015
EXPIRY DATE: 21/04/2020

PREMISES DETAILS

LICENSEE AND OCCUPIER

Water Corporation
PO Box 100
LEEDERVILLE WA 6007

PREMISES

York Wastewater Treatment Plant
Lot 460 on Diagram 91128
Great Southern Highway
YORK WA 6302

PRESCRIBED PREMISES CATEGORY

Table 1: Prescribed Premises Category from Schedule 1 of the *Environmental Protection Regulations 1987*

Category number	Description	Production or Design Capacity	Nominated Rate of Throughput	Throughput Classification *
54	Sewage facility: premises a) on which sewage is treated (excluding septic tanks); or b) from which treated sewage is discharged onto land or waters	(maximum plant capability) 130 cubic meters per day	(actual/current) 92 cubic meters per day	Not more than 200 cubic meters per day

* From Schedule 4 of the *Environmental Protection Regulations 1987*

This Environmental Assessment Report (EAR) has been drafted for the purposes of detailing information on the management and mitigation of emissions and discharges from the prescribed premises. The objective of the EAR is to provide a risk assessment of emissions and discharges, and information on the management of other activities occurring onsite which are not related to the control of emissions and discharges from the prescribed premises activity. It is important to note that the licence is not a mechanism to regulate those activities that occur on-site that are not related to the prescribed premises activity.

Basis of Assessment

This licence application has been assessed as "prescribed premises" under Category number 54, within Schedule 1 (Part 1) of the *Environmental Protection Regulations 1987*.

Category 54 'Sewage facility' is defined as "premises (a) on which sewage is treated (excluding septic tanks); or (b) from which treated sewage is discharged onto land or into waters".

The Water Corporation currently holds an active registration for the York Waste Water Treatment Plant (R956/1997/1) under Category 85 Sewage Facility within Schedule 1 (Part 2) of the *Environmental Protection Regulations 1987*.

1.0 BACKGROUND

1.1 GENERAL COMPANY DESCRIPTION

The Water Corporation manages the State's water supply of drinking water and owns and operates over 249 water treatment plants and 101 wastewater treatment plants across Western Australia (Water Corporation, 5 November 2009).

The Water Corporation currently has several of its business units Environmental Management Systems ISO14001 accredited and is in the process of implementing a corporate-wide ISO14001 accredited EMS. The Water Corporation complies with AS/NZS 5667:1998 and the (internal) document SG100 "Standards for Wastewater Monitoring" when conducting sampling and monitoring activities.

The Water Corporation's Environmental Policy is publicly available on their website www.watercorporation.com.au.

1.2 BUSINESS PURPOSE

The York Waste Water Treatment Plant (WWTP) site is restricted to treat sewage from general urban areas and some industrial areas with approximately 300 connections. The York WWTP is designed to treat 130m^3/day of sewage with a current inflow of 100m^3/day (Water Corporation, 5 November 2009).

The York WWTP was constructed in 1997 and will remain in operation for as long as the surrounding community requires wastewater treatment. The facility may undergo upgrading when required in the near future (Water Corporation, 5 November 2009).

1.3 LOCATION OF PREMISES

York is located in the Avon Valley at approximately 97 kilometres east of Perth. The town is a rural community with a highly productive broad acre farming industry and a smaller diversified agricultural base such as perennial horticulture (Water Corporation, 5 November 2009).

A tree lot for sandalwood cultivation was planted in June 2007 on the south side of the York WWTP under an agreement with the Forest Products Commission.

The York WWTP site is 159 ha in size and includes a 500 meter buffer zone. It is located at approximately 3km south of York Township and 200m south east of the Great Southern Highway. There is rural land located to the south and west sides of the York WWTP and parks and recreation to the north east of the site. The WWTP is located within the Avon River catchment and is situated at approximately 259m from the Avon River (Water Corporation, 5 November 2009).

The current treatment plant at York is reaching its capacity and the Water Corporation is currently undertaking preliminary planning studies to upgrade the plant in the future.

The York Township has a population of about 1700 residents.

The closest odour sensitive receptors are:

- residential building located at approximately 1km south of the site;
- residential building located at approximately 650m east of the site; and
- industrial facility located at 1.2km in a north direction of the site.

Public drinking water is supplied from the Goldfields and Agriculture Water Supply Scheme originating from the Mundaring Weir.

The nearest major watercourse is the Avon River situated at approximately 259 metres east of the premises (GIS dataset: Hydrography, Linear [Medium Scale, 250k GA]).

There are several minor non-perennial watercourses identified within the cadastral boundaries of the premises (GIS dataset: Hydrography Linear [Hyd_Type]).

1.4 PROCESS DESCRIPTION

The York Wastewater Scheme was established under the Infill Sewerage Program. The first stage was constructed in 1997/98 which included the construction of the York WWTP. The York WWTP has a treatment capacity of 130m^3/day and treatment comprises of 3 ponds in series with a total storage volume of 12ML.

The WWTP is designed to treat wastewater to a secondary standard (nitrogen and phosphorus removal) (Water Corporation, 5 November 2009). The water treatment consists of ponds in series that provide different pond conditions in succession to optimise wastewater treatment. The first pond is usually facultative, with successive ponds being either facultative or aerobic (Water Corporation, 28 January 2010). The maturation or finishing pond is usually aerobic. The aim of this pond is to "polish" the final effluent to remove pathogens and suspended solids (Water Corporation, 28 January 2010).

After moving through the three successive ponds, the treated wastewater is stored in a storage pond of approximately 14ML at the treatment plant site with infiltration trenches (or channels) for emergency overflows (Water Corporation, 5 November 2009). See Figure 1 York Wastewater Scheme Process.

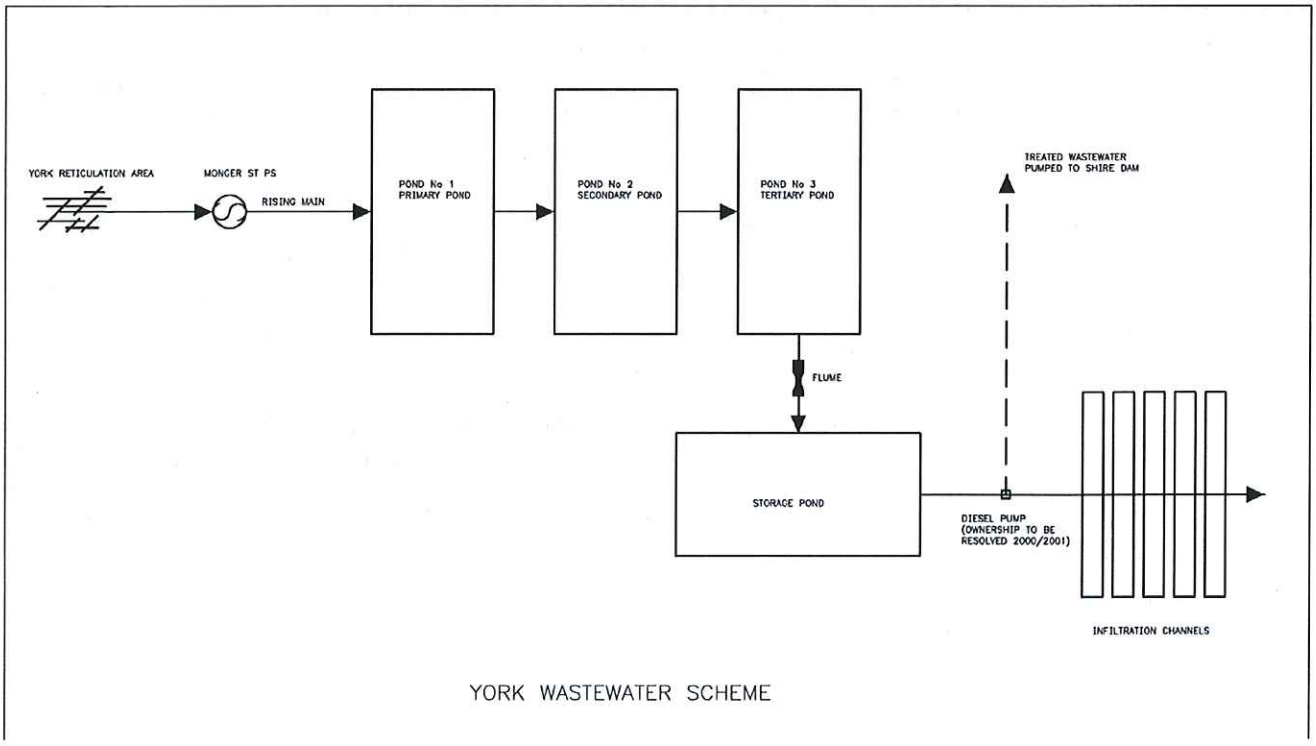


Figure 1. York Wastewater Scheme Process

1.5 REGULATORY CONTEXT

1.5.1 Part V Environmental Protection Act 1986, Environmental Management

The site has been assessed as a 'prescribed premises': Category 54 – Sewage Facility.

Other Department of Environment Regulation legislation relevant to this premises include:

- *Environment Protection (Controlled Waste) Regulations 2004*
- *Environmental Protection (Noise) Regulations 1997*
- *Environmental Protection (Unauthorised Discharges) Regulations 2004*

1.5.2 Other DMA's Legislation which applies

The Department of Health granted approval to the Shire of York on 15 February 2001 to reuse treated wastewater on the football and hockey ovals located within the Forrest Oval Recreation Complex at the corner of Forrest and South Streets in the Shire of York.

1.5.3 Local Government Authority

The relevant local government authority is the Shire of York. The site is zoned "rural" under the Town Planning Scheme within the Shire of York.

1.5.3 Guidelines/Codes of Practice

Western Australian Guidelines for Direct Land Application of Biosolids and Biosolids Products, Department of Environmental Protection, Water and Rivers Commission and Department of Health (February 2002).

Department of Water – Water Quality Protection Notes that may apply:

- WQPN 22 – Irrigation with Nutrient-rich Wastewater, July 2008
- WQPN 33 – Nutrient and Irrigation Management Plans, June 2006
- WQPN 27 – Liners for containing pollutants, using engineered soils, February 2006
- WQPN 39 – Ponds for Stabilising Organic Matter, February 2009

2.0 EMISSIONS AND DISCHARGES RISK ASSESSMENT

The Department of Environment Regulation considers that conditions should focus on regulating emissions and discharges of significance. Where appropriate, emissions and discharges which are not significant should be managed and regulated by other legislative tools or management mechanisms.

The following section assesses the environmental risk of potential emissions from the York WWTP. In order to determine the site's appropriate environmental regulation, an emissions and discharges risk assessment was conducted of the York WWTP using the environmental risk matrix outlined in Appendix B. The results of this are summarised in Table 2.

Table 2: Risk assessment and regulatory response summary table.

Risk factor	Impact	Controls	Consequence	Likelihood	Risk assessment	DER Regulation	Residual Risk	EAR Reference	Other management (legislation, tools, agencies)
Air emissions (point source)	There are no point source emissions to air from the facility								General provisions of the *Environmental Protection Act 1986*
Dust emissions	There are no significant sources of dust from the facility								General provisions of the *Environmental Protection Act 1986*
Odour emissions	Nuisance at the residential areas	The York WWTP utilises a pond system consisting of three ponds to treat 200kL per day, one treated wastewater storage pond and overflow trenches. Pond systems adequately reduces BOD and other contaminants in a controlled manner.	Insignificant –nuisance complaints only. No health impacts expected	Unlikely. The plant is located sufficiently away from the sensitive receptors. The closest sensitive receptor is 650m east of the site.	Low	LIC – N/A No specific conditions relating to odour are required	Low	N/A	General provisions of the Environmental Protection Act 1986
Noise emissions	There are no significant noise sources located on the premises								*Environmental protection (Noise) Regulations 1997*
Light emissions	There are no significant light sources located on the premises								General provisions of the *Environmental Protection Act 1986*
Discharges to water	There is no discharge to water								General provisions of the *Environmental Protection Act 1986*
Discharges to groundwater	There is no discharge to groundwater. The nearest water body is the Avon River which is 535m south-east of the WWTP.								General provisions of the *Environmental Protection Act 1986*

Discharges to land	See Appendix A for detailed assessment								*General provisions of the Environmental Protection Act 1986* *Environmental Protection (Unauthorised Discharges) Regulations 2004*
Solid/liquid waste	Ground and /or surface water contamination from improper storage of waste	All sludge and biosolids are stored within a bunded area or drying bed prior its removal from the site and dispose of in accordance with relevant procedures.	Minor. The impact would be local to the storage area and limited in size due to the quantity of material being stored.	Unlikely. The sludge is managed in properly designed areas and is handled infrequently		Low	LIC – 15-17 Standard outcome based conditions requiring management and disposal of solid wastes will sufficiently manage the risk	Low	*General provisions of the Environmental Protection Act 1986* *Environmental Protection (Unauthorised Discharges) Regulations 2004* *Environmental Protection (Controlled Waste) Regulations 2004* *Landfill Waste Classification and Waste Definitions 1996 (As amended)*
Hydrocarbon and chemical storage	There are no significant quantities of hydrocarbon or chemicals stored on site								*Environmental Protection (Unauthorised Discharges) Regulations 2004*
Native vegetation clearing	No clearing is required								*Environmental Protection (Clearing of Native vegetation) Regulations 2004*
Contaminated site identification	The site is not classified as contaminated. The operation of the site is not expected to cause the site to become contaminated								*Contaminated Sites Act 2003* *Contaminated Sites Regulations 2006*

4.0 GENERAL SUMMARY AND COMMENTS

The York WWTP consists of three treatment ponds with the tertiary pond connected to the onsite storage pond. Treated wastewater is discharged to sandalwood lots for irrigation within the premises. Conditions relating to discharge of treated wastewater to sandalwood lots are included.

OFFICER PREPARING REPORT

Jane Dalin

Position: Senior Licensing Officer
Licensing and Approvals (Waste)
Department of Environment Regulation
9333 7409
20/04/2015

ENDORSEMENT

Rebecca Kelly

Position: Manager Licensing
Licensing and Approvals (Waste)
Department of Environment Regulation
9333 7432
20/04/2015

APPENDIX A:

DISCHARGES TO LAND

Water Corporation will discharge treated wastewater to its sandalwood lots on the premises for irrigation. It will be a planned discharge of 800 kL per week on the total irrigation area of 6ha.

In relation to this amendment of the licence, Water Corporation advised that an estimate of the nutrient loads to be discharged on the irrigation area are as follows:

- Total Nitrogen 121.3 kg/ha
- Total phosphorus 38.3 kg/ha

The concentration of total nitrogen and phosphorous are significantly lower than the threshold set out in nutrient application criteria for risk category C soils of 300kg/ha/y for inorganic nitrogen and 50kg/ha/y for filterable reactive phosphorous (DoW 2008). Category C has been chosen due to Avon River tributaries being <500m from the irrigation area.

Monitoring is undertaken on a quarterly basis at the outlet of the tertiary treatment pond just prior to the storage dam that lies adjacent to the treatment ponds. A V notch flume measuring device has been installed at the WWTP which measures wastewater discharge volume to the onsite storage pond.

Risk Assessment

Emission Description

Emission: Treated wastewater discharged from the wastewater storage dam
Impact: Impact is considered to be insignificant because the discharge of treated wastewater is a managed irrigation of sandalwood within the premises.
Control: Treated wastewater is discharged through the controlled sprinkler irrigation system for irrigating a selected sandalwood area. The selected area has the higher permeability than the surrounding soil of the premises. The irrigation area is the furthest practical distance from the Avon River.

Risk Assessment

Consequence: Minor. The area chosen for irrigation is located to maximise the distance from the Avon River and is crossed by large interceptor contour banks. These are blocked at various locations and will catch and hold any run off from the premises.
Likelihood: Unlikely
Risk Rating: Low

Regulatory Controls
Standard outcome based conditions 2-12 requiring the following have been added to the licence:

- treated wastewater discharge for irrigation;
- flow monitoring for cumulative volumes;
- water quality monitoring;
- groundwater monitoring; and
- calculation of contaminant loads.

Residual Risk
Consequence: Minor
Likelihood: Unlikely
Risk Rating: Low

APPENDIX B

Note: This matrix is taken from the DER Corporate Policy Statement No. 07 - Operational Risk Management

Table 1: Emissions Risk Matrix

Likelihood	Consequence				
	Insignificant	Minor	Moderate	Major	Severe
Almost Certain	Moderate	High	High	Extreme	Extreme
Likely	Moderate	Moderate	High	High	Extreme
Possible	Low	Moderate	Moderate	High	Extreme
Unlikely	Low	Moderate	Moderate	Moderate	High
Rare	Low	Low	Moderate	Moderate	High