WASTE DISCHARGE LICENCE

(Pursuant to section 74 of the Water Act)

Licence Details	
Licence Number:	WDL149-01
Commencement Date:	1 November 2011
Expiry Date	31 May 2012
Licensee Details	
Legal Entity Name:	Power and Water Corporation
ABN:	NT BN 008 957 75
	15 Iliffe Street,
Registered Business Address:	Stuart Park
	Northern Territory 0820
Destal Address:	PO Box 37471
Postal Address:	Winnellie NT 0821
Contact Person:	Steve McKenzie
Position Title:	General Manager Water Services
Contact Details:	
b/h:	08 8985 7135
email:	Steve.McKenzie@powerwater.com.au

Location of Operation to which this licence applies

Name:		Larrakeyah Macerator
Address:		Lot No. 5734A, Larrakeyah, Macerator, Town of Darwin
Telephone Numbers:		c/- Ludmilla WWTP
	b/h:	(08) 8941 7218

24 hour emergency response

Contact Person:

Telephone Numbers:Power Water Corporation Emergency Response Lineb/h:1800 245 090Licensed Action(s)The discharge of waste water from Larrakeyah
Macerator to Darwin Harbour subject to the Licence
Conditions.

TABLE OF CONTENTS

TABLE OF CONTENTS	. 2
Licence Objective(s) (for sites with legacy issues only) Definitions of Terms Responsibilities of Licensee Duration of Licence Public Register Supporting Guidelines and Documents Environmental Interests.	. 3 . 3 . 3 . 3 . 3
LICENCE CONDITIONS	. 4
ADMINISTRATIVE (A)	. 4
Obligations to comply Change of contact details Operational changes Change of Ownership or Cessation of Operations Communicati	. 4 . 4 . 4
DISCHARGE (D)	. 5
Discharge regime Qualitative discharge limits	
MONITORING (M)	. 5
Surface Water Monitoring Groundwater Monitoring Biological Monitoring Sediment Monitoring Site Specific Trigger Values	.5 .5 .6
RECORDING AND REPORTING (R)	. 6
Incident reporting Reporting Periodic report Audit and Compliance Report (ACR)	. 6 . 6
DEFINITIONS	. 8
APPENDIX 1 SURFACE WATER MONITORING	. 9
APPENDIX 2 AUDIT AND COMPLIANCE REPORT	10

INFORMATION ABOUT THIS LICENCE

Licence Objective(s)

The objectives of this licence are to:

- provide an operational licence for the discharge from the Larrakeyah Macerator until its anticipated closure in May 2012; and
- minimise the impact of waste water discharges by the application qualitative discharge limits.

Definitions of Terms

A section on the definition of terms used in this licence can be found at the end of the licence.

Responsibilities of Licensee

Separate to the conditions set out in this licence, responsibilities of Licensees are set out in the *Waste Management and Pollution Control Act* and Regulations and the *Water Act*. Licensees must comply at all times with the requirements of these Acts.

Current legislation is available to view online via the Northern Territory Government website at:

http://dcm.nt.gov.au/strong_service_delivery/supporting_government/current_northern_territ ory_legislation_database

Duration of Licence

This licence will remain in force until its expiry date, unless it is surrendered by the licence holder or suspended or revoked by the Controller.

Public Register

A copy of this licence will be placed on a register in accordance with section 95 of the *Water Act.* The register is publicly available for viewing on the Department website.

A copy of the Annual Audit and Compliance Report will also be placed on the register.

Supporting Guidelines and Documents

This licence has been developed based on the information provided by the Licensee in the following documentation:

- Power Water Corporation letter dated 27 June 2011 to Executive Director Environment and Heritage; and
- Waste Discharge Licence WDL149

Environmental Interests

Sites of Conservation Significance, Darwin Harbour, SOCS Number 6 (NT Parks and Conservation Masterplan Map Number 12) as listed on the Department website at: http://www.nt.gov.au/nreta/environment/conservation/list.html.

Beneficial Uses as defined in Table 1.

Table 1 Declaration of Beneficial Use

Discharge Declared Water Point System		Beneficial Use	Gazette Reference	
SPA100	Darwin Harbour	Protection of environment (aquatic ecosystems) cultural and aquaculture	Gazette Number G27 dated 7 July 2010 (attached)	

LICENCE CONDITIONS

ADMINISTRATIVE (A)

A1 Obligations to comply

A1.1 The Licensee must not contravene or fail to comply with the conditions of this licence.

A2 Change of contact details

A2.1 The Executive Director must be notified within 24 hours by emailing <u>Environmentops.nretas@nt.gov.au</u> if there are changes to the details of the 24 hour emergency contact person.

A3 Operational changes

- A3.1 The Licensee must not, without the prior notification to the Executive Director alter or change any of the following, if the changes will, or are likely to, cause or increase the levels of pollutant in waste water discharge, or otherwise result in environmental harm:
 - the components or treatment process of the Licensed Action(s);
 - the nature or quantity of materials dealt with or used or produced in the operation of the Licensed Action(s); or
 - the construction, installation, alteration or removal of any structure or equipment used in the course of the operation of the Licensed Actions(s) including the location of monitoring points.

A4 Change of Ownership or cessation of operations

- A4.1 The Executive Director must be notified by emailing <u>environmentops.nretas@nt.gov.au</u> within 14 days of:
 - any changes to the Licensee details shown on page one this licence; or
 - the cessation of the operations to which this licence applies.

A5 Communication

- A5.1 The Licensee must keep a legible record of each complaint made to the Licensee or any employee or agent of the Licensee in relation to the Licensed Action(s). The record of a complaint must include details of the following:
 - the date and time of the complaint;
 - the contact details of the complainant if known;
 - the nature of the complaint and events giving rise to the complaint;
 - prevailing weather conditions at the time of the incident;

- the action taken in relation to the complaint;
- any conclusions the Licensee made regarding the cause of the complaint; and
- any preventative measure put in place to prevent reoccurrence.
- A5.2 The record of a complaint must be kept for at least 1 year after the complaint is made.

DISCHARGE (D)

D1 Discharge regime

D1.1 This licence authorises waste water to be discharged for the discharge point (s) identified in Table 2.

Authorised Discharge Point	Description	Location
Larrakeyah Outfall 01	Larrakeyah Outfall	MGA94, Zone 52
		Eastings: 698831
·		Northings: 8621000

Table 2 Authorised Discharge Point(s)

D2 Qualitative discharge limits

- D2.1 Waste water discharged from the authorised discharge point must not:
 - contain any visible matter, floating oil and grease or petroleum hydrocarbon or scum, or litter or other objectionable matter;
 - cause or generate odours which would adversely affect the use of surrounding waters;
 - cause algal blooms;
 - cause visible change in the behaviour of fish or other aquatic organisms;
 - cause mortality of fish or other aquatic organisms; or
 - cause adverse impacts on plants.

MONITORING (M)

- M1 The Licensee must install, maintain and provide appropriate identification signage at all (terrestrial) sampling points required by this licence so that they are easily identifiable at all times. The Licensee shall attempt to maintain safe access and egress to all sampling points for the duration of the license.
- M2 All samples for chemical and microbiological assessment must be analysed at a laboratory with N.A.T.A. accreditation (or equivalent) for the selected analyses.
- **M3** All samples must be collected and analysed in accordance with relevant standards and methods e.g. Standard Methods for the Examination of Water and Wastewater, 21st Edition, 2005, American Public Health Association.

M4 Surface Water Monitoring

M4.1 Surface water monitoring must be conducted in accordance with APPENDIX 1.

M5 Groundwater Monitoring

- M5.1 Not required for this licence period.
- M6 Biological Monitoring

- M6.1 Not required for this licence period.
- M7 Sediment Monitoring
- M7.1 Not required for this licence period.

M8 Site Specific Trigger Values

M8.1 Not required for this licence period.

RECORDING AND REPORTING (R)

- **R1** All records required to be kept by this licence must be in a legible format.
- **R2** The following records must be kept in respect of each sample required to be collected by this licence:
 - the date(s) on which the sample was taken;
 - the time(s) at which the sample was collected;
 - the point(s) at which the sample was taken;
 - the name of the person who collected the sample;
 - the chain of custody forms relating to the sample(s);
 - the measured or estimated total daily flow volume of the effluent from which the sample was taken; and
 - the field measurements and/or analytical results for the sample.

R1 Incident reporting

R1.1 The Licensee must comply with section 14 of the *Waste Management and Pollution Control Act* in relation to the duty to notify of incidents causing or threatening to cause pollution

R2 Reporting

R2.1 The Licensee must notify the Executive Director in writing by emailing Environmentops.nretas@nt.gov.au within 24 hours when:

- licence parameters exceed the quantitative and qualitative parameters set out in this licence; and /or
- when the Licensee becomes aware of information or data suggesting that wastewater discharge may result in harm to the environment.

The notification must include an assessment of risk posed by the discharge together with details of the actions undertaken to mitigate the risk.

R2.2 The Licensee must notify the Executive Director in writing within 7 days of the Licensee becoming aware of each actual or anticipated non-compliance with the conditions of this licence.

R3 Periodic report

R3.1 The Licensee must provide to a tabulation of bacteriological results from the discharge point required as a condition of this licence, on a monthly basis by emailing: <u>Environmentops.nretas@nt.gov.au</u> and <u>webadmin.nretas@nt.gov.au</u>.

These results will be made publicly available on the Department website at:

http://www.nt.gov.au/nreta/water sampling/testing

R4 Audit and Compliance Report (ACR)

R4.1 The Licensee must complete the Audit and Compliance Report, **Error! Not a valid result for table.**, and provide to the Executive Director at least one month prior to the expiry date of this licence.

END OF LICENCE CONDITIONS

This licence is not valid unless signed below:

 \bigcirc

Matt Darcey Executive Director Environment and Heritage Division Delegate for the Controller of Water Resources

Dated the $\frac{28}{1/2}$ / 2011

DEFINITIONS

'Act'	means the Northern Territory of Australia Water Act.
'Beneficial Use'	has the meaning described in section 4 of the Act.
'Controller of Water Resources' 'the Controller'	has the meaning described in section 4 of the Act.
'Delegate'	is a person who has been delegated powers by the Minster or Controller of Water by an instrument in writing.
'Department of Natural Resources, Environment, the Arts and Sport'	means the Administering Agency of the Water Act
'Executive Director'	is delegate for the Controller of Water of the Administering Agency pursuant to section 19 of the Act.
'Licence'	means a licence granted and in force under the Act.
'Incident'	has the meaning described in section 14 of the Waste Management and Pollution Control Act.
'N.A.T.A'	means the National Association of Testing Authorities, Australia.
'Sites of Conservation Significance'	Sites identified by NRETAS as areas that contain special biodiversity values that need additional protecting as listed on the Department website at: http://www.nt.gov.au/nreta/environment/conservation/list.html.
'Waste'	has the meaning described in section 4 of the Act.
'Waterway'	has the meaning described in section 4 of the Act
'Water'	means water whether or not it contains impurities

APPENDIX 1 SURFACE WATER MONITORING

			Sample Locations Macerator
		Site Code	Sla010
			Frequency
Parameter	Abbreviation	Units	
Dry Weather Flow		kL/day	м
Wet Weather Flow		kL/day	м
рН	pН	pH units	М
Electrical Conductivity	EC	µS/cm	М
Dissolved Oxygen	DO	% saturation	м
Temperature	Т	°C	М
Filterable Reactive Phosphorous	FRP	µg/L	м
Total Phosphorous	TP	mg/L	М
Ammonia	NH ₃ -N	mg/L	
Total N	TN	mg/L	М
Nitrogen Oxides	NOx	μg/L	М
Bacteriological			
Escherichia coli	E. coli	cfu/100mL	F
Enterococci spp		cfu/100mL	F
Heavy Metals			
Multi-element ICPMS		μg/L	A
Environmental Indicators	1		
Biochemical Oxygen Demand	BOD ₅	mg/L	М
Chemical Oxygen Demand	COD	mg/L	М
Total Suspended Solids	TSS	mg/L	М
Volatile Suspended Solids	VSS	µg/L	М

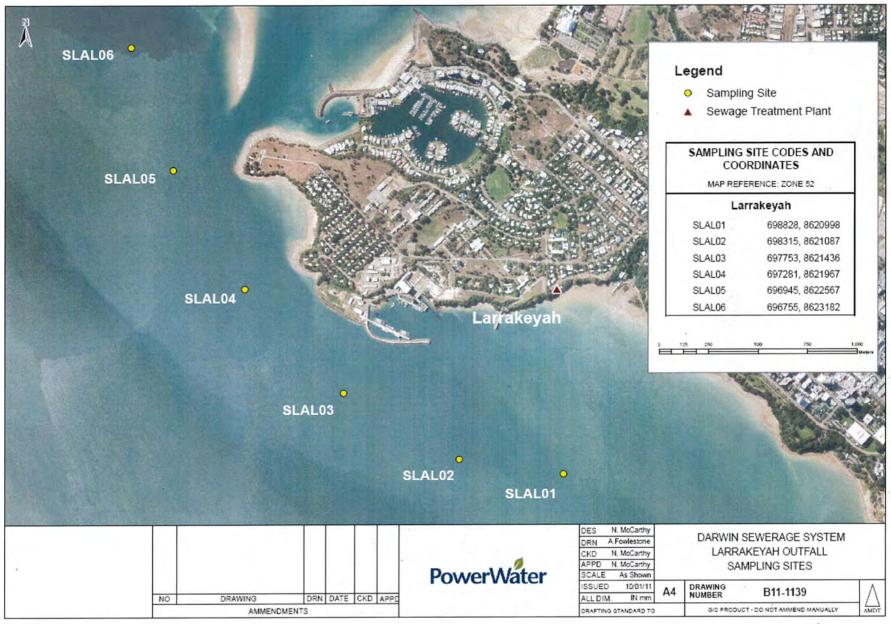
Key

NR: Not Required

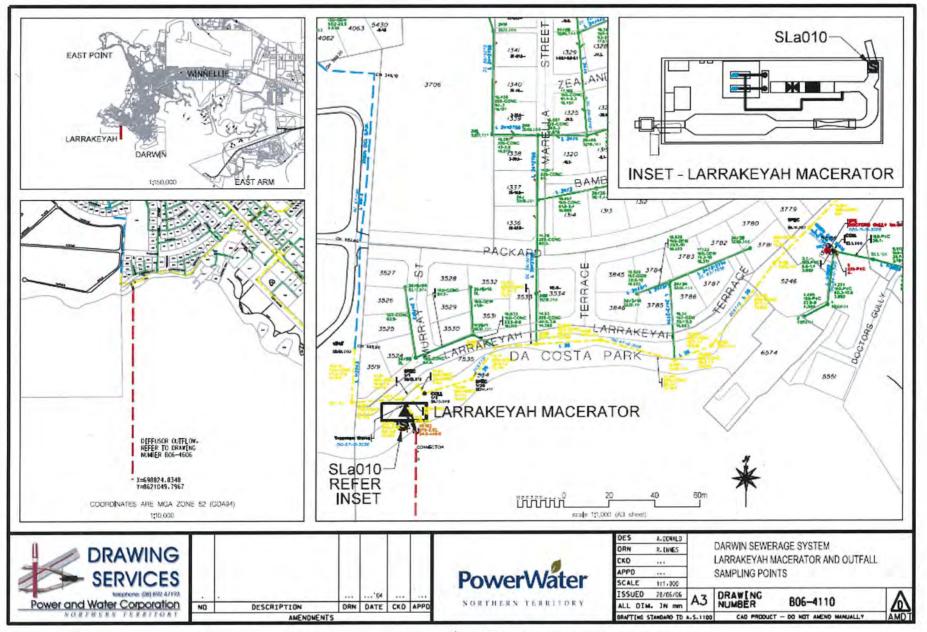
A: Annually or once per licence period

F: Fortnightly

M: Monthly



Page 10 of 12



Page 11 of 12

APPENDIX 2 AUDIT AND COMPLIANCE REPORT

This page has intentionally been left blank.

AUDIT AND COMPLIANCE REPORT WASTE DISCHARGE LICENCE

LICENCE NUMBER	WDL149-01	
REPORTING PERIOD		

Please email a copy of your completed AACR to Environmentops.nretas@nt.gov.au.

ALL licence holders must check their Licence Details are correct.

If there are changes to any of these details you must advise the Executive Director in accordance with the conditions of your Waste Discharge Licence.

Licence	Details

Licence Number: Commencement Date: Expiry Date **WDL149-01** 1 November 2011 31 May 2012

Licensee Details

Legal Entity Name: ABN:

Registered Business Address:

Postal Address:

Contact Person: Position Title: Contact Details: Power and Water Corporation NT BN 008 957 75 15 Iliffe Street, Stuart Park Northern Territory 0820 PO Box 37471 Winnellie NT 0821 Steve McKenzie General Manager Water Services b/h: 08 8985 7135

email: <u>Steve.McKenzie@powerwater.com.au</u>

Name: Larrakeyah Macerator				
Address: Lot No. 5734A, Larrakeyah, Macerator, Town of Darwin				
Telephone Numbers:	c/- Ludmilla WWTP			
b/h	(08) 8941 7218			

24 hour emergency response

Contact Person: Telephone Numbers:

Power Water Corporation Emergency Response Line b/h: 1800 245 090

Compliance with Licence Conditions

	LICENCE CONDITIONS	How	Evidence	When (Date)	Status
	ADMINISTRATIVE (A)				
A1	Obligations to comply				
A1.1	The Licensee must not contravene or fail to comply with the conditions of this licence.				
A2	Change of contact details				
A2.1	The Executive Director must be notified within 24 hours by emailing Environmentops.nretas@nt.gov.au if there are changes to the details of the 24 hour emergency contact person.				
A3	Operational changes	,			
A3.1	 The Licensee must not, without the prior notification to the Executive Director alter or change any of the following, if the changes will, or are likely to, cause or increase the levels of pollutant in waste water discharge, or otherwise result in environmental harm: the components or treatment process of the Licensed Action(s); the nature or quantity of materials dealt with or used or produced in the operation of the Licensed Action(s); or the construction, installation, alteration or removal of any structure or equipment used in the course of the operation of the Licensed Action(s); including the location of monitoring points. 				
A4	Change of Ownership or cessation of operations				
A4.1	The Executive Director must be notified by emailing environmentops.nretas@nt.gov.au within 14 days of: any changes to the Licensee details shown on page one this licence; or the cessation of the operations to which this licence applies.				
A5	Communication				
A5.1	 The Licensee must keep a legible record of each complaint made to the Licensee or any employee or agent of the Licensee in relation to the Licensed Action(s). The record of a complaint must include details of the following: the date and time of the complaint; 		-		
	 the contact details of the complainant if known; the nature of the complaint and events giving rise to the complaint; prevailing weather conditions at the time of the incident; the action taken in relation to the complaint; any conclusions the Licensee made regarding the cause of the complaint; and 				

	LICENCE CONDITION	S		How	Evidence	When (Date)	Status
	any preventativ	ve measure put in place t	o prevent reoccurrence.				
A5.2	The record of a complaint must be kept for at least 1 year after the complaint is made.						
	DISCHARGE (D)						
D1	Discharge regime					a.	-
D1.1	This licence authorises waste water to be discharged for the discharge point (s) identified in Table 1. Table 1 Authorised Discharge Point(s)						
	Authorised	Description	Location				
	Discharge Point						
	Larrakeyah Outfall 01	Larrakeyah Outfall	MGA94, Zone 52 Easting: 698831 Northing: 8621000				
D2	Qualitative discharge						
D2.1	 contain any vis hydrocarbon or cause or gener surrounding wa cause algal blo cause visible coorganisms; cause mortality cause adverse 	organisms;cause mortality of fish or other aquatic organisms; or					
	MONITORING (M)				•		
M1	The Licensee must install, maintain and provide appropriate identification signage at all (terrestrial) sampling points required by this licence so that they are easily identifiable at all times. The Licensee shall attempt to maintain safe access and egress to all sampling points for the duration of the license.						
M2	analysed at a laborator selected analyses.	Il samples for chemical and microbiological assessment must be nalysed at a laboratory with N.A.T.A. accreditation (or equivalent) for t					
М3	standards and methods	All samples must be collected and analysed in accordance with relevar standards and methods e.g Standard Methods for the Examination of Water and Wastewater, 21 st Edition, 2005, American Public Health					

	LICENCE CONDITIONS	How	Evidence	When (Date)	Status
V14	Surface Water Monitoring				-
M4.1	Surface water monitoring must be conducted in accordance with APPENDIX 1.				
M5	Groundwater Monitoring	-			
M5.1	Not required for this licence period.				
M6	Biological Monitoring				
M6.1	Not required for this licence period.				
M7	Sediment Monitoring				
M7.1	Not required for this licence period.				
M8	Site Specific Trigger Values				
M8.1	Not required for this licence period.				
	RECORDING AND REPORTING (R)				
R1	All records required to be kept by this licence must be in a legible format.				
R2	 The following records must be kept in respect of each sample required to be collected by this licence: the date(s) on which the sample was taken; the time(s) at which the sample was collected; the point(s) at which the sample was taken; the name of the person who collected the sample; the chain of custody forms relating to the sample(s); the measured or estimated total daily flow volume of the effluent from which the sample was taken; and the field measurements and/or analytical results for the sample. 				
R1	Incident reporting	1.1			
R1.1	The Licensee must comply with section 14 of the <i>Waste Management and</i> <i>Pollution Control Act</i> in relation to the duty to notify of incidents causing or threatening to cause pollution				
R2	Reporting				
R2.1	 The Licensee must notify the Executive Director in writing by emailing <u>environmentops.nretas@nt.gov.au</u> within 24 hours when: licence parameters exceed the quantitative and qualitative parameters set out in this licence; and /or when the Licensee becomes aware of information or data suggesting that wastewater discharge may result in harm to the environment. The notification must include an assessment of risk posed by the discharge together with details of the actions undertaken to mitigate the risk. 	*			

1.1	LICENCE CONDITIONS	How	Evidence	When (Date)	Status
R2.2	The Licensee must notify the Executive Director in writing within 7 days of the Licensee becoming aware of each actual or anticipated non-compliance with the conditions of this licence.				
R3	Periodic report)			
R3.1	The Licensee must provide to the Executive Director a tabulation of bacteriological results required as a condition of this licence on a monthly basis by emailing: <u>Environmentops.nretas@nt.gov.au</u> and <u>webadmin.nretas@nt.gov.au</u> . These results will be made publicly available on the Department website at: <u>http://www.nt.gov.au/nreta/water_sampling/testing/larrakeyah.html</u>				
R4	Audit and Compliance Report (ACR)				
R4.1	The Licensee must complete the Audit and Compliance Report, APPENDIX 2, and provide to the Executive Director at least one month prior to the expiry date of this licence.				

Recording and Reporting

Complaints Recording

Number of complaints recorded by the Licensee	
during the reporting period	
Summary of complaints	
Summary of outcomes	

Incidents

Number of incidents recorded by the Licensee	
during the reporting period	
Summary of incidents	
Summary of outcomes	

Signature and Certification

		by a person(s) with the legal authority to sign it. The ways in which the beople who may sign the declaration, are set out in the categories below.				
If Licensee is:	Tick	ck The declaration must be signed and certified by one of the following:				
An individual		The individual.				
		The common seal being affixed in accordance with the Corporations Act, or				
		Two directors, or				
A company		A director and a company secretary, or				
		If a proprietary company that has a sole director who is also the sole company secretary – by that director.				
		The Chief Executive Officer (CEO) of the public authority, or				
A public authority		By a person delegated to sign on the public authority's behalf in accordance with its legislation (Please note: a copy of the relevant instrument of delegation must be attached to this report).				
		nation provided in this Annual Audit and Compliance Report and e best of my/our knowledge, true and correct.				
Signature		Signature				
Name (printed)		Name (printed)				
Position		Position				
Date		Date				
Seal (if signing under seal):						