

BYRON SHIRE COUNCIL Licence 13266

## A. Statement of Compliance - Licence Details

ALL Licence holders must check that the Licence details in Section A are correct.

If there are changes to any of these details, you must advise Environment Protection Authority (EPA) and apply as soon as possible for a variation to your Licence or for a Licence transfer.

Licence variation and transfer application forms are available on the EPA website at: http://www.epa.nsw.gov.au/licensing-and-regulation/licensing or from regional offices of the EPA, or by contacting by telephone 02 9995 5700.

If you are applying to vary or transfer your Licence, you must still complete and submit this Annual Return.

#### A1. Licence holder

Licence number : 13266

Licence holder : BYRON SHIRE COUNCIL

Trading name (if applicable)

**ABN** : 14 472 131 473

ACN :

**Reporting period** : From: 27-4-2022 To: 26-4-2023

#### A2. Premises to which Licence Applies (if applicable)

Common name (if any) : Brunswick Valley Sewage Treatment Plant
Premises : Vallances Road MULLUMBIMBY 2482 NSW

#### A3. Activities to which Licence Applies

Sewage treatment

#### A4. Other Activities (if applicable)

#### A5. Fee-Based Activity Classifications

Note that the fee based activity classification is used to calculate the administrative fee.

Fee-based activity	Activity scale	Unit of measure
Sewage treatment processing by small plants	> 1,000.00 - 5,000.00	ML annual maximum volume of discharge

#### A6. Assessable Pollutants (if applicable)



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**Note** that the identification of assessable pollutants is used to calculate the **load-based fee.** The following assessable pollutants are identified for the fee-based activity classifications in the licence:

#### Sewage treatment processing by small plants

**BOD** (Estuarine Water)

Nitrogen (total) (Estuarine Water)

Oil and Grease (Estuarine Water)

Phosphorus (total) (Estuarine Water)

Total suspended solids (Estuarine Water)

## **B. Monitoring and Complaints Summary**

#### **B1. Number of Pollution Complaints**

Pollution Complaint Category	Complaints
Air	2
Water	2
Noise	0
Waste	0
Other	0
Total complaints recorded by the licensee during the reporting period	4

#### **B2. Concentration Monitoring Summary**

For each concentration monitoring point identified in your licence, details are displayed below. If concentration monitoring is not required by your licence, **no data** will appear below. If data was provided from an uploaded file, the file name will be displayed below instead of any data. **Note** that this does not exclude the need to conduct appropriate concentration monitoring of assessable pollutants as required by load-based licensing (if applicable).

#### **Discharge & Monitoring Point 1**

## Discharge to Waters, Discharge pipe on eastern arm of western billabong of Brunswick River at 550568E and 6842193N

Pollutant	Unit of measure	No. of samples required	No. of samples collected and analysed	Lowest sample value	Mean of sample	Highest sample value
Ammonia	milligrams per litre	27	27	<0.02	0.12	1.35
BOD	milligrams per litre	27	27	<1	0.9	3.0



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Faecal Coliforms	colony forming units per 100 millilitres	27	27	3	202	3250
Nitrogen (total)	milligrams per litre	27	27	0.74	2.18	5.20
Oil and Grease	milligrams per litre	27	27	<2	1.1	3.0
рН	рН	27	27	6.3	7.2	7.6
Phosphorus (total)	milligrams per litre	27	27	0.04	0.09	0.30
Total suspended solids	milligrams per litre	27	27	1.2	4.8	21.0

#### **Monitoring Point 8**

## Effluent Quality Monitoring (Reuse), Tap on Effluent Reuse Line at corner of Main Arm Rd and Johnstones Ln Main Arm. 545057E and 6843676N

Pollutant	Unit of measure	No. of samples required	No. of samples collected and analysed	Lowest sample value	Mean of sample	Highest sample value
Ammonia	milligrams per litre	27	2	1.09	1.19	1.29
BOD	milligrams per litre	27	2	1.8	2.1	2.4
Faecal Coliforms	colony forming units per 100 millilitres	27	2	<1	0.5	<1
Nitrogen (total)	milligrams per litre	27	2	1.55	1.58	1.61
Oil and Grease	milligrams per litre	27	2	<2	1.0	<2
рН	рН	27	2	7.4	7.5	7.5
Phosphorus (total)	milligrams per litre	27	2	0.24	0.25	0.26
Total suspended solids	milligrams per litre	27	2	1.4	2.9	4.4

#### **B2 Concentration Monitoring Comments**

Effluent reuse system was not in use for most of the license year, therefore quality samples could not be taken.

#### **B3. Volume or Mass Monitoring Summary**

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For each volume or mass monitoring point identified in your licence, details are displayed below. If volume or mass monitoring is not required by your licence, **no data** will appear below. If data was provided from an uploaded file, the file name will be displayed below instead of any data. **Note** that this does not exclude the need to conduct appropriate volume or mass monitoring of assessable pollutants are required by load-based licensing (if applicable).

#### **Monitoring Point 5**

Total Volume Monitoring, Two magflow meters on Inlet Works @ 551002E and 6841820N

Unit of measure	Frequency	No. of measurements made	Lowest result	Mean result	Highest result
kilolitres per day	Daily	365	1189	2247	13751

#### **Monitoring Point 6**

Volume Monitoring (Effluent Reuse), Magflow meter on Mainarm reuse pump well at 548984E and 6842320N

Unit of measure	Frequency	No. of measurements made	Lowest result	Mean result	Highest result
kilolitres per day	Daily	365	0	26	479

#### **Monitoring Point 7**

Total Volume Monitoring, Discharge volume monitoring via Magflow meter @ 550856E and 6842333N

Unit of measure	Frequency	No. of measurements made	Lowest result	Mean result	Highest result
kilolitres per day	Daily	312	1029	2493	11942

## C. Statement of Compliance - Licence Conditions

#### C1. Compliance with Licence Conditions

Were all conditions of the licence complied with (including monitoring	No
and reporting requirements)?	

#### C2. Details of Non-Compliance with Licence

Licence condition number not complied with ▼
L3.4 Concentration Limits – Exceedance of the 100th percentile limit for Faecal Coliforms
Summary of particulars of the non-compliance ▼



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Concentration of 750 cfu/100mL Faecal Coliforms at EPA P1 exceeding the 100th percentile limit of 600 cfu/100mL

Further details on particulars of non-compliance, if required ▼

#### Number of times occurred ▼

1

#### Date(s) when the non-compliance occurred, if applicable ▼

25/5/22

#### Cause of non-compliance ▼

Non-compliance was due to a high rainfall weather event causing an excessive increase in inflows to the plant. On 22 May 2022 flows into the plant reached 13751kL (over 10x ADWF). Although there was no process by-pass the UV system is rated for 5x ADWF and therefore the efficacy of the UV system was compromised.

#### Action taken or that will be taken to mitigate any adverse effects of the non-compliance ▼

Treatment was monitored and adjusted until flows reduced. Retesting undertaken on 6 June 2022 illustrated that the treatment system had returned to normal operation.

#### Action taken or that will be taken to prevent a recurrence of the non-compliance ▼

Ongoing investment in reduction of inflow and infiltration in the catchment.

#### Uploaded Document Name ▼

#### **Uploaded Document Description** ▼

#### Licence condition number not complied with ▼

L3.4 Concentration Limits - Exceedance of the 100th percentile limit for Faecal Coliforms

#### Summary of particulars of the non-compliance ▼

Concentration of 3250 cfu/100mL Faecal Coliforms at EPA P1 exceeding the 100th percentile limit of 600 cfu/100mL

#### Further details on particulars of non-compliance, if required ▼

#### Number of times occurred ▼

1

#### Date(s) when the non-compliance occurred, if applicable ▼

15/02/23

#### Cause of non-compliance ▼

Non-compliance was due to a high rainfall weather event on 14 & 15 February 2023, causing high inflows to the plant which impacted the efficacy of the treatment process. There was no process by-pass.

Action taken or that will be taken to mitigate any adverse effects of the non-compliance ▼



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The treatment process was adjusted, and effluent quality was monitored until Faecal Coliform levels had dropped within licence limits, this was achieved by 20 February 2023. Normal plant operation was resumed.

#### Action taken or that will be taken to prevent a recurrence of the non-compliance ▼

Continue to monitor effluent quality as part of routine operation of the plant. Continue to implement inflow and infiltration projects within the catchment.

#### Uploaded Document Name ▼

#### **Uploaded Document Description** ▼

#### Licence condition number not complied with ▼

L3.4 Concentration Limits - Exceedance of the 100th percentile limit for pH

#### Summary of particulars of the non-compliance ▼

Value of 6.3 pH units at EPA P1 falling below the 100th percentile minimum limit of 6.5 cfu/100mL

#### Further details on particulars of non-compliance, if required ▼

#### Number of times occurred ▼

1

#### Date(s) when the non-compliance occurred, if applicable ▼

25/05/22

#### Cause of non-compliance ▼

Non-compliance was due to a high rainfall weather event causing an excessive increase in inflows to the plant. On 22 May 2022 flows into the plant reached 13751kL (over 10x ADWF). Although there was no process by-pass, treatment was not optimal resulting in non-compliances for faecal coliforms (see above) and pH. All other monitored parameters were within licence limits.

#### Action taken or that will be taken to mitigate any adverse effects of the non-compliance ▼

Treatment was monitored and adjusted until flows reduced. Retesting undertaken on 6 June 2022 illustrated that the treatment system had returned to normal operation.

#### Action taken or that will be taken to prevent a recurrence of the non-compliance ▼

Ongoing investment in reduction of inflow and infiltration in the catchment.

#### Uploaded Document Name ▼

#### Uploaded Document Description ▼

#### Licence condition number not complied with ▼

L3.4 Concentration Limits - Exceedance of the 90th percentile limit for Faecal Coliforms



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#### Summary of particulars of the non-compliance ▼

The 90th percentile limit for Faecal Coliforms was breached at EPA1. Only 88.9% of Samples (24 of 27 samples) were below the EPA P1 limit of 200 cfu/100mL.

#### Further details on particulars of non-compliance, if required ▼

#### Number of times occurred ▼

3

#### Date(s) when the non-compliance occurred, if applicable ▼

25/05/22, 1/02/23 & 15/02/23

#### Cause of non-compliance ▼

The 90th percentile limit was breached very slightly this year due to a few significant rainfall events which impacted the efficacy of the treatment process on three occasions. There was no process by-pass. These instances were not related and not representative of a trend.

#### Action taken or that will be taken to mitigate any adverse effects of the non-compliance ▼

On each occasion, the treatment process was adjusted, and effluent quality was monitored until Faecal Coliform levels had dropped within licence limits, Normal plant operation was resumed.

#### Action taken or that will be taken to prevent a recurrence of the non-compliance ▼

Continue to monitor effluent quality as part of operation Continue to implement inflow and infiltration projects within the catchment.

#### Uploaded Document Name ▼

#### **Uploaded Document Description** ▼

#### Licence condition number not complied with ▼

M2.2 - Water Monitoring Requirements - Monitoring Frequency

#### Summary of particulars of the non-compliance ▼

Breach of 'Special Frequency 1' monitoring frequency due to Failure to take the effluent water quality samples at monitoring point EPA8.

#### Further details on particulars of non-compliance, if required ▼

NOTE: These are only technical non-compliances as the effluent re-use system was not in operation for most of this licence year, therefore no samples could be taken.

#### Number of times occurred ▼

25

#### Date(s) when the non-compliance occurred, if applicable ▼

27/04/22 - 22/06/22 & 3/08/22-22/04/23

#### Cause of non-compliance ▼

The effluent re-use system was not in operation for most of this licence year, therefore no sample could be taken.



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Action taken or that will be taken to mitigate any adverse effects of the non-compliance ▼

Not Applicable

Action taken or that will be taken to prevent a recurrence of the non-compliance ▼

Not Applicable

**Uploaded Document Name** ▼

**Uploaded Document Description** ▼

#### Licence condition number not complied with ▼

M7.1 - Requirement to Monitor Volume

#### Summary of particulars of the non-compliance ▼

Breach of Daily Frequency monitoring requirement sampling at Monitoring Point EPA7.

Further details on particulars of non-compliance, if required ▼

#### Number of times occurred ▼

1

#### Date(s) when the non-compliance occurred, if applicable ▼

27/04/22 - 18/06/22

#### Cause of non-compliance ▼

EPA7 monitoring meter not reading correctly between 27 April 2022 and 18 June 2022. Flood conditions in February and March 2022 damaged the sensor resulting in inaccurate volume totals.

#### Action taken or that will be taken to mitigate any adverse effects of the non-compliance ▼

Once flows reduced the meter was cleaned and level sensor reset. However, the sensor failed to read correctly so meter was replaced.

#### Action taken or that will be taken to prevent a recurrence of the non-compliance ▼

Regular planned maintenance on the meter. Sensor, transmitter and flow verification checks are also undertaken annually. This meter was last verified November 2022.

#### Uploaded Document Name ▼

#### Uploaded Document Description ▼

## D. Statement of Compliance - Load Based Fee Calculation



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If you are not required to monitor assessable pollutants by your licence, no data will appear below.

If assessable pollutants have been identified on your licence, the following worksheets for each assessable pollutant will determine your load based fee for the licence fee period to which this Annual Return relates.

Loads of assessable pollutants must be calculated using any of the methods provided in EPA's Load Calculation Protocol for the relevant activity. A Load Calculation Protocol would have been already sent to you with your licence. If you require additional copies, you can download the Protocol from the EPA's website or you can contact us on telephone 02 9995 5700.

You are required to keep all records used to calculate licence fees for four years after the licence fee was paid or became payable, whichever is the later date.

7.100000010101			Assessab Load	le	Actual Load	Pol	lutant Fee
BOD discharged to Estua	rine Wate	r	766.0		766.0		\$2.02
Load based licence activity	Actual quantity	Actual load (Calc method)	ulation	Weig	ghted Load (Calcula nod)	ation	Agreed load
Sewage treatment processing by small plants	820	766 (Source monit Method: APHA 52					
Nitrogen (total) discharge	d to Estua	arine Water	2109.0		2109.0		\$133.17
Load based licence activity	Actual quantity	Actual load (Calc method)	ulation	Weighted Load (Calculation method)		ation	Agreed load
Sewage treatment processing by small plants	820	2109 (Source mon Method: APHA 450					
Oil and Grease discharge	d to Estua	rine Water	919.0		919.0		\$145.07
Load based licence activity	Actual quantity	Actual load (Calc method)	ulation	Weig meth	ghted Load (Calcula nod)	ation	Agreed load
Sewage treatment processing by small plants	820	919 (Source monit Method: APHA 552					
Phosphorus (total) discha	arged to E	stuarine Water	94.0		94.0		\$59.36
Load based licence activity	Actual quantity	Actual load (Calc method)	ulation	Weig meth	ghted Load (Calcula nod)	ation	Agreed load
Sewage treatment processing by small plants	820	94 (Source monito APHA 4500-P)	ring, Method:				



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Total suspended solids discharged to Estuarine Water		5242.0		5242.0		\$262.04	
Load based licence activity	Actual quantity	Actual load (Calculation method)		Weig meth	hted Load (Calcula od)	ation	Agreed load
Sewage treatment processing by small plants	820	5242 (Source mon Method: APHA 25					

## E. Statement of Compliance - Requirement to Prepare PIRMP

Have you prepared a Pollution Incident Response Management Plan (PIRMP) as required under section 153A of the Protection of the Environment Operations (POEO) Act 1997?		Yes
Is the PIRMP available at the premises?		Yes
Is the PIRMP available in a prominent position on a publicly accessible website?		Yes
Address of the web page where the	PIRMP can be accessed ▼	
https://www.byron.nsw.gov.au/Se	rvices/Water-and-sewer/Sewer/Pollution-Incident-Respo	onse
Has the PIRMP been tested?		Yes
The PIRMP was last tested on	2-3-2023	
Has the PIRMP been updated?		No
Number of times the PIRMP was activated in this reporting period?		1
The PIRMP was activated on	2/03/2023	

# **F. Statement of Compliance - Requirement to Publish Pollution Monitoring Data**

Are there any conditions attached to your licence that require pollution monitoring to be undertaken as required under section 66(6) of the Protection of the Environment Operations (POEO) Act 1997?		lo
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# **G. Statement of Compliance - Environment Management System and Practices**

Do you have an ISO 14001 certified Environmental Management System (EMS) OR any other system that EPA considers is equivalent to the accountability, procedures, documentation and record keeping requirements of an ISO 14001	No
certified EMS?	



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Have you conducted an assessment of your activities and operations to identify the aspects that have a potential to cause environmental impacts and implemented operational controls to address these aspects?	Yes
Have you established and implemented an operational maintenance program, including preventative maintenance?	Yes
Do you keep records of regular inspections and maintenance of plant and equipment?	Yes
Do you conduct regular (at least yearly) environmental audits at the premises that are conducted by a competent and independent person?	No
Have you undertaken an independent environmental audit covering documented environmental practices, procedures and systems in place during the annual return period?	No
Have you established and implemented an environmental improvement or management plan?	No
Do you train staff in environmental issues that may arise from your activities and operations at the premises and keep records of this?	Yes

## H. Signature and Certification

This Annual Return may only be signed by person(s) with legal authority to sign it as set out in following categories: an Individual, a Company, a Public authority or a Local council.

It is an offence under section 66 of the Protection of the Environment Operations Act 1997 to supply any information in this form that is false or misleading in a material respect, or to certify a statement that is false or misleading in a material respect. There is a maximum penalty of \$250,000 for a corporation and \$120,000 for an individual.

I/We

Name

- declare that the information in the Monitoring and Complaints Summary in Section B of this Annual Return application is correct and not false or misleading in a material respect, and
- certify that the information in the Statement and Compliance in sections A, C, D, E, F, G and H and any other pages attached to Section C is correct and not false or misleading in a material respect.

Signed by: General Manager		
Name	Mark Arnold	
Position	General Manager	
Email Address	marnold@byron.nsw.gov.au	
Phone Number	0439607246	
Signature		



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Position			
Date	/	/	

#### Declaration

I declare that the information in the Monitoring and Complaints Summary in section B of this Annual Return is correct and not false or misleading in a material respect, and

I certify that the information in the Statement of Compliance in section A,C,D,E,F and G and any pages attached to Section C is correct and not false or misleading in a material respect.