



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: 27-4-2023 To: 26-4-2024

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)

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	6
Water	2
Noise	0
Waste	0
Other	0
Total complaints recorded by the licensee during the reporting period	8

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	26	26	<0.02	0.47	8.83
BOD	milligrams per litre	26	26	<1	1.0	3.3



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Faecal Coliforms	colony forming units per 100 millilitres	26	26	1	348	>6000
Nitrogen (total)	milligrams per litre	26	26	0.58	1.43	9.1
Oil and Grease	milligrams per litre	26	26	<2	1.1	3
pH	pH	26	26	6.4	7.1	7.6
Phosphorus (total)	milligrams per litre	26	26	0.06	0.1	0.21
Total suspended solids	milligrams per litre	26	26	1.8	4.1	8.2

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	26	18	<0.02	0.19	0.70
BOD	milligrams per litre	26	18	<1	2.3	6.3
Faecal Coliforms	colony forming units per 100 millilitres	26	18	<1	18	100
Nitrogen (total)	milligrams per litre	26	18	0.97	1.51	2.31
Oil and Grease	milligrams per litre	26	18	<2	1.1	2
pH	pH	26	18	6.2	7.5	8.6
Phosphorus (total)	milligrams per litre	26	18	0.24	0.48	0.88
Total suspended solids	milligrams per litre	26	18	1.5	13.4	35

B2 Concentration Monitoring Comments

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

B3. Volume or Mass Monitoring Summary

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	366	605	2278	15164

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	366	0	89	1293

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	366	0	2506	16391

C. Statement of Compliance - Licence Conditions

C1. Compliance with Licence Conditions

Were all conditions of the licence complied with (including monitoring and reporting requirements)?	No
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C2. Details of Non-Compliance with Licence

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



Concentration of >6000 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 ▼

22/11/2023

Cause of non-compliance ▼

Investigation concluded that the Dissolved Oxygen sensor in the Bioreactor was not signalling to the blowers to ramp up and consequently the oxygen level was at zero (0) between 16:00 hours on Friday 17 until 16:00 hours Tuesday 21 Nov 2023.

The associated high ammonia level also contributed to settling of solids making the effluent more turbid causing shielding in the UV disinfection process.

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

The sensor failure was rectified, and the oxygen levels were brought up to the usual setpoint of 0.6mg/L. In addition, the UV banks were both set to manual for increased UV intensity. This took some time to achieve with FC levels above the 90th percentile level for the following two EPA sampling days (6/12/23 = 380 cfu/100mL & 20/12/23 = 250 cfu/100mL).

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

Routine daily checks by operators must be carried out to pick up these problems as per protocol. Checking on SCADA by the on-call operator over the weekends also must be done. This requirement was reiterated at toolbox meeting, so all operators are aware of its importance.

Uploaded Document Name ▼

Uploaded Document Description ▼

Licence condition number not complied with ▼

Licence clause L3.4 Concentration Limits – Exceedance of 100th percentile limit for Faecal Coliforms

Summary of particulars of the non-compliance ▼

Concentration of 1030 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 ▼

27/3/2024



Cause of non-compliance ▼

Rainfall for the previous 24 hours had been heavy with Fair View Farm Mullumbimby recording 92 mm at 9 am on 27 Mar 2024. The flow through the UV disinfection channel at the time of sampling was 80 L/second. The high flow rate allowed insufficient time for more complete disinfection. There was no treatment bypass.

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

The UV disinfection system was checked thoroughly for correct operation. EPA 1 was resampled at 10.30am 2 Apr 2024 and the result from Tweed laboratory was 190 cfu/100mL which is back within EPA licence conditions. No further action was taken.

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

Continue to implement inflow and infiltration projects within the catchment.

Uploaded Document Name ▼

Uploaded Document Description ▼

Licence condition number not complied with ▼

Licence clause L3.4 Concentration Limits – Exceedance of the 100th percentile limit for Ammonia

Summary of particulars of the non-compliance ▼

Concentration of 8.83 mg/L Ammonia at EPA P1 exceeding the 100th percentile limit of 4mg/L

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

Number of times occurred ▼

1

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

21/2023

Cause of non-compliance ▼

Investigation concluded that the Dissolved Oxygen sensor in the Bioreactor was not signalling to the blowers to ramp up and consequently the oxygen level was at zero (0) between 16:00 hours on Friday 17 until 16:00 hours Tuesday 21 Nov 2023.

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

The sensor failure was rectified, and the oxygen levels were brought up to the usual setpoint of 0.6mg/L. In addition, the UV banks were both set to manual for increased UV intensity.

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

Routine daily checks by operators must be carried out to pick up these problems as per protocol. Checking on SCADA by the on-call operator over the weekends also must be done. This requirement was reiterated at toolbox meeting, so all operators are aware of its importance.

Uploaded Document Name ▼

Uploaded Document Description ▼



Licence condition number not complied with ▼
Licence clause L3.4 Concentration Limits – Exceedance of the 100th percentile limit for pH
Summary of particulars of the non-compliance ▼
Value of 6.4 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 ▼
18/1/2024
Cause of non-compliance ▼
Cause of non-compliance was due to a high rainfall weather event causing an excessive increase in inflows to the plant. On 16 Jan 2024 flows into the plant reached 15,164 kL (over 11 x ADWF). Although there was no process by-pass, treatment was not optimal resulting in non-compliances for 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 ▼
Action: Treatment was monitored and adjusted until flows reduced.
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 ▼
Licence clause L3.4 Concentration Limits – Exceedance of the 90th percentile limit for Faecal Colifo
Summary of particulars of the non-compliance ▼
The 90th percentile limit for Faecal Coliforms was breached at EPA1. Only 84.6 % of Samples (22 of 26 samples) were below the EPA P1 limit of 200 cfu/100mL.
Further details on particulars of non-compliance, if required ▼
Number of times occurred ▼
4
Date(s) when the non-compliance occurred, if applicable ▼



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22/11/23, 6/12/23, 20/12/23 & 27/3/24

Cause of non-compliance ▼

The 90th percentile limit was breached this year due to two incidents as described above. The wet weather event on 27 Mar 2024 (one non-compliance) and the bioreactor sensor failure in November 2023 (3 non-compliances). 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 ▼

No further action

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

No further action

Uploaded Document Name ▼

Uploaded Document Description ▼

Licence condition number not complied with ▼

M2.2 – Water Monitoring Requirements – Monitoring Frequency - EPA8

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 ▼

Number of times occurred ▼

8

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

10/5,24/5,7/6 2023 & 3/1,17/1,27/3,10/5,24/5 2024

Cause of non-compliance ▼

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

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

No further action.

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

No further action.

Uploaded Document Name ▼

Uploaded Document Description ▼



D. Statement of Compliance - Load Based Fee Calculation

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.

Assessable Pollutant		Assessable Load	Actual Load	Pollutant Fee
BOD discharged to Estuarine Water		700.0	700.0	\$1.88
Load based licence activity	Actual quantity	Actual load (Calculation method)	Weighted Load (Calculation method)	Agreed load
Sewage treatment processing by small plants	834	700 (Source monitoring, Method: APHA 5210B)		
Nitrogen (total) discharged to Estuarine Water		1048.0	1048.0	\$67.57
Load based licence activity	Actual quantity	Actual load (Calculation method)	Weighted Load (Calculation method)	Agreed load
Sewage treatment processing by small plants	834	1048 (Source monitoring, Method: APHA 4500-N)		
Oil and Grease discharged to Estuarine Water		891.0	891.0	\$143.62
Load based licence activity	Actual quantity	Actual load (Calculation method)	Weighted Load (Calculation method)	Agreed load
Sewage treatment processing by small plants	834	891 (Source monitoring, Method: APHA 5520 D)		
Phosphorus (total) discharged to Estuarine Water		90.0	90.0	\$58.03



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Load based licence activity	Actual quantity	Actual load (Calculation method)	Weighted Load (Calculation method)	Agreed load
Sewage treatment processing by small plants	834	90 (Source monitoring, Method: APHA 4500-P)		
Total suspended solids discharged to Estuarine Water		3709.0	3709.0	\$189.32
Load based licence activity	Actual quantity	Actual load (Calculation method)	Weighted Load (Calculation method)	Agreed load
Sewage treatment processing by small plants	834	3709 (Source monitoring, Method: APHA 2540 D)		

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/Services/Water-and-sewer/Sewer/Pollution-Incident-Response	
Has the PIRMP been tested?	Yes
The PIRMP was last tested on	1-7-2023
Has the PIRMP been updated?	No
Number of times the PIRMP was activated in this reporting period?	0
The PIRMP was activated on	

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?	No
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G. Statement of Compliance - Environment Management System and Practices



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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 certified EMS?	No
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

- 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	0266267155



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Licence 13266

Signature	
Name	
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.	