

BYRON SHIRE COUNCIL Licence 3404

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 : 3404

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) : BYRON SEWAGE TREATMENT WORKS

Premises : BAYSHORE DRIVE BYRON BAY 2481 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 (Enclosed Water)

Nitrogen (total) (Enclosed Water)

Oil and Grease (Enclosed Water)

Phosphorus (total) (Enclosed Water)

Total suspended solids (Enclosed Water)

B. Monitoring and Complaints Summary

B1. Number of Pollution Complaints

Pollution Complaint Category	Complaints
Air	9
Water	9
Noise	0
Waste	0
Other	0
Total complaints recorded by the licensee during the reporting period	18

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 wetland

Effluent Quality Monitoring, outlet of STP as marked on map #598568 attached to Council's letter dated 2 June 2006

Pollutant	Unit of measure	No. of samples required	No. of samples collected and analysed		Mean of sample	Highest sample value
Biochemical oxygen demand	milligrams per litre	27	27	<1	1.0	5.4



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Faecal Coliforms	colony forming units per 100 millilitres	27	27	<1	20	71
Nitrogen (ammonia)	milligrams per litre	27	27	<0.02	0.51	5.19
Nitrogen (total)	milligrams per litre	27	27	0.76	2.82	8.02
Oil and Grease	milligrams per litre	27	27	<2	1	2
рН	рН	27	27	6.8	7.1	7.3
Phosphorus (total)	milligrams per litre	27	27	0.06	0.11	0.16
Total suspended solids	milligrams per litre	27	27	1.3	3.6	6.6

Discharge & Monitoring Point 3

Effluent Reuse - Volume and Quality Monitoring, Wetland pump station SPS 3028 - as shown on map #598567 attached to Council's letter dated 2 June 2006

Pollutant	Unit of measure	No. of samples required	No. of samples collected and analysed	Lowest sample value	Mean of sample	Highest sample value
BOD	milligrams per litre	27	27	<1	1.0	3.3
Faecal Coliforms	colony forming units per 100 millilitres	27	27	60	3234	35000
Nitrogen (ammonia)	milligrams per litre	27	27	0.06	0.25	0.85
Nitrogen (total)	milligrams per litre	27	27	0.67	1.63	5.74
Oil and Grease	milligrams per litre	27	27	<2	1.0	2.0
рН	pН	27	27	6.5	6.8	7.0
Phosphorus (total)	milligrams per litre	27	27	0.06	0.13	0.68
Total suspended solids	milligrams per litre	27	27	<1	2.6	12.0

Discharge & Monitoring Point 4

Discharge from wetland, Outlet of the constructed wetland as marked on map #598567 attached to Council's letter dated 2 June 2006



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Pollutant	Unit of measure	No. of samples required	No. of samples collected and analysed	Lowest sample value	Mean of sample	Highest sample value
Phosphorus (total)	milligrams per litre	27	27	0.04	0.08	0.23

Discharge & Monitoring Point 5

Discharge to urban re-use pipeline - Volume and Quality Monitoring, Outlet to urban re-use pipeline as marked on map #598570 attached to Council's letter dated 2 June 2006

Pollutant	Unit of measure	No. of samples required	No. of samples collected and analysed	Lowest sample value	Mean of sample	Highest sample value
Chlorine (total residual)	milligrams per litre	27	27	0.29	1.18	3.25

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 2

Total volume monitoring, Magnetic flow meters on the rising mains at the entrance to the plant as marked on map #598570 attached to Council's letter dated 2 June 2006

Unit of measure	Frequency	No. of measurements made	Lowest result	Mean result	Highest result
kilolitres per day	Continuous	365	1166	4714	13831

Discharge & Monitoring Point 3

Effluent Reuse - Volume and Quality Monitoring, Wetland pump station SPS 3028 - as shown on map #598567 attached to Council's letter dated 2 June 2006

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



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Discharge & Monitoring Point 5

Discharge to urban re-use pipeline - Volume and Quality Monitoring, Outlet to urban re-use pipeline as marked on map #598570 attached to Council's letter dated 2 June 2006

Unit of measure	Frequency	No. of measurements made	Lowest result	Mean result	Highest result
kilolitres per day	Continuous	365	215	417	785

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 – EPA1 Nitrogen (Ammonia)

Summary of particulars of the non-compliance ▼

Nitrogen (Ammonia) reading of 5.19 mg/L exceeding the 100th percentile limit of 5 mg/L.

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

Number of times occurred ▼

1

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

6/07/22

Cause of non-compliance ▼

The exceedance is believed to be due to lower than optimal Suspended Solids (SS) in the bioreactor. This SS drop was not picked up by instrumentation and therefore not compensated for.

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

Initial action was to increase the Dissolved Oxygen in the bioreactor to reduce the Ammonia levels. The SS instrumentation was then cleaned and calibrated.

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

Reviewed the instrumentation planned maintenance schedule and undertook training with operational staff on this instrumentation.

Uploaded Document Name ▼



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Uploaded Document Description ▼

Licence condition number not complied with ▼

M7.1 - Requirement to Monitor Volume - EPA2

Summary of particulars of the non-compliance ▼

Partial loss of inflow data - Inflow is calculated from 4 inlet meters (via a 'virtual meter'). Meter from two of smaller inlets; rising main RM3023 (from 20 Sept 2021) and rising main RM3024 (from 24 January 2022) failed to register flow data.

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

These flows represent approximately 10% of total inflow.

Number of times occurred ▼

1

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

27/04/22 - 12/05/22

Cause of non-compliance ▼

Error alarms had only been set up to inform maintenance staff when the TOTAL inflow data was not registering. As these two meters only represent 10% of total inflows, this loss of data was not noticed for some time.

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

Once issues were noticed, an electrician was sent to repair. The problems were a faulty transmitter (RM3023) and a loose wire (RM3024). Reporting data was revised in line with the Load Calculation Protocol (June 2009) for continuous data missing >30%. Action C Threshold applied - replace missing data with mean of data obtained over previous 12 months plus 30%.

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

SCADA "Partial Blockage" alarms were activated for all Inlet flow meters at the STP. In future so if a low flow is seen after 120 minutes a critical alarm is issued.

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.

Assessable Pollutant				ble	Actual Load	Pollutant Fee	
BOD discharged to Enclo	sed Wate	er	2021.0		2021.0		\$10.63
Load based licence activity	Actual quantity	Actual load (Calmethod)	culation	Weig	ghted Load (Calcula nod)	ition	Agreed load
Sewage treatment processing by small plants	1721	2021 (Source mo Method: APHA 5					
Nitrogen (total) discharge	ed to Enc	losed Water	4318.0		4318.0		\$522.59
Load based licence activity	Actual quantity	Actual load (Calmethod)	Actual load (Calculation method)		Weighted Load (Calculation method)		Agreed load
Sewage treatment processing by small plants	1721	4318 (Source mo					
Oil and Grease discharge	ed to Encl	osed Water	1790.0		1790.0		\$697.00
Load based licence activity	Actual quantity	Actual load (Camethod)	culation	Weig	hted Load (Calcula nod)	ition	Agreed load
Sewage treatment processing by small plants	1721	1790 (Source mo Method: APHA 5					
Phosphorus (total) disch	arged to I	Enclosed Wate	r 183.0	·	183.0		\$654.80
Load based licence activity	Actual quantity	Actual load (Camethod)	culation	Weig meth	l ghted Load (Calcula nod)	ition	Agreed load
Sewage treatment processing by small plants	1721	183 (Source mor Method: APHA 4	0.				

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Total suspended solids d Water	ischarged	to Enclosed	6189.0		6189.0		\$2,540.19
Load based licence activity	Actual quantity	Actual load (Calc method)	Weighted Load (Calculation method)		Agreed load		
Sewage treatment processing by small plants	1721	6189 (Source mon Method: APHA 25					

E. Statement of Compliance - Requirement to Prepare PIRMP

	Incident Response Management Plan (PIRMP) A of the Protection of the Environment	Yes
Is the PIRMP available at the premis	es?	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	nse
Has the PIRMP been tested?		Yes
The PIRMP was last tested on	5-10-2022	
Has the PIRMP been updated?		No
Number of times the PIRMP was act	ivated in this reporting period?	2
The PIRMP was activated on	15/08/22 & 5/10/22	

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? Have you established and implemented an operational maintenance program, including preventative maintenance? 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		
Do you keep records of regular inspections and maintenance of plant and equipment? 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	that have a potential to cause environmental impacts and implemented operational controls	Yes
Do you conduct regular (at least yearly) environmental audits at the premises that are conducted by a competent and independent person? 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	, , , , , , , , , , , , , , , , , , , ,	Yes
Conducted by a competent and independent person? Have you undertaken an independent environmental audit covering documented environmental practices, procedures and systems in place during the annual return period? Have you established and implemented an environmental improvement or management	Do you keep records of regular inspections and maintenance of plant and equipment?	Yes
environmental practices, procedures and systems in place during the annual return period? Have you established and implemented an environmental improvement or management		No
		No
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.