

BYRON SHIRE COUNCIL Licence 784

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	: 784				
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)	: OCEAN SHORES SEWAGE TREATMENT WORKS
Premises	: PACIFIC HIGHWAY OCEAN SHORES 2483 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	> 219.00 - 1,000.00	ML annual maximum volume of discharge

A6. Assessable Pollutants (if applicable)



BYRON SHIRE COUNCIL

Licence 784

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	13
Water	5
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).

Monitoring Point 3

Effluent quality monitoring, The first concrete chamber located at the outlet pipe of the UV disinfection Unit, approximately 160 metres South East of the STP office.

Pollutant	Unit of measure	No. of samples required	No. of samples collected and analysed	Lowest sample value	Mean of sample	Highest sample value
Biochemical oxygen demand	milligrams per litre	27	27	<1	1.5	4.5
Faecal Coliforms	colony forming units per 100 millilitres	27	27	<1	549	4700



BYRON SHIRE COUNCIL

Licence 784

Nitrogen (ammonia)	milligrams per litre	27	27	0.06	1.12	6.83
Nitrogen (total)	milligrams per litre	27	27	0.76	3.78	8.31
Oil and Grease	milligrams per litre	27	27	<2	1	2
рН	рН	27	27	6.8	7.0	7.3
Phosphorus (total)	milligrams per litre	27	27	0.03	0.08	0.29
Total suspended solids	milligrams per litre	27	27	<1	4.4	16.0

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, On the rising mains at entrance to plant

Unit of measure	Frequency	No. of measurements made	Lowest result	Mean result	Highest result
kilolitres per day	Daily	365	1081	1776	10542

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 – EPA 3 – Faecal Coliforms
Summary of particulars of the non-compliance ▼
There were eight (8) exceedances of the 90th Percentile Limit of 200 cfu/100mL at EPA3, which is 70.4% compliance (27 samples).



BYRON SHIRE COUNCIL

Licence 784

Further details on particulars of non-compliance, if required **V**

Number of times occurred ▼

8

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

Cause of non-compliance ▼

Faecal Coliform (FC) counts in exceedance of the 90th percentile limit were recorded on eight (8) occasions. Four (4) occasions were associated with a large rainfall event resulting in high inflows (One of which was associated with the Reportable Incident EPA ref: 13060). Two (2) cases were associated with mechanical failure within plant and two (2) cases were associated with operator error when collecting samples.

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

Note Applicable - see corresponding 100th Percentile breaches for individual actions.

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

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

Uploaded Document Name V

Uploaded Document Description ▼

Licence condition number not complied with ▼

L3.4 – Concentration Limits – EPA 3 – Faecal Coliforms

Summary of particulars of the non-compliance ▼

Exceedance of 100th Percentile Limit of 600 cfu/100mL - EPA 3, Faecal Coliforms = 730 cfu/100mL.

Further details on particulars of non-compliance, if required **V**

Number of times occurred ▼

1

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

15/03/23

Cause of non-compliance ▼

Mechanical failure at UV treatment process.

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

When result of FC exceedance was identified, staff checked processes and plant equipment and performed retesting for FC. After performing an investigation, it was identified that one of the gates at the UV process was not closing correctly. Whilst parts were organised for this repair, staff attempted to operate the process to limit FC exceedance occurring.



BYRON SHIRE COUNCIL

Licence 784

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

Review and update asset management and planned maintenance schedules for this facility.

Uploaded Document Name ▼

Uploaded Document Description ▼

Licence condition number not complied with ▼

L3.4 – Concentration Limits – EPA 3 – Faecal Coliforms

Summary of particulars of the non-compliance ▼

Exceedance of 100th Percentile Limit of 600 cfu/100mL at EPA 3, Faecal Coliforms = 4,700 cfu/100mL.

Further details on particulars of non-compliance, if required **V**

Number of times occurred ▼

1

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

1/03/23

Cause of non-compliance ▼

Mechanical failure at UV treatment process.

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

When result of FC exceedance was identified, staff checked processes and plant equipment and performed retesting for FC. After performing an investigation, it was identified that one of the gates at the UV process was not closing correctly. Whilst parts were organised for this repair, staff attempted to operate the process to limit FC exceedance occurring.

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

Review and update asset management and planned maintenance schedules for this facility.

Uploaded Document Name ▼

Uploaded Document Description ▼

Licence condition number not complied with ▼

L3.4 – Concentration Limits – EPA 3 – Faecal Coliforms

Summary of particulars of the non-compliance ▼

Exceedance of 100th Percentile Limit of 600 cfu/100mL of EPA 3, Faecal Coliforms = 1,120 cfu/100mL



BYRON SHIRE COUNCIL

Licence 784

Further details on particulars of non-compliance, if required **V**

Number of times occurred ▼

1

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

15/02/23

Cause of non-compliance ▼

High inflows experienced at the Ocean Shores STP due to a weather event with rainfall totalling 132.2 mm between 14 and 15 February 2023. In this event, treatment capacity was not exceeded and no treatment bypass.

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

Staff ensuring plant operating during high inflows, ensuring UV is operating correctly and continually monitoring FC until is falls within License parameter.

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 – EPA 3 – Faecal Coliforms

Summary of particulars of the non-compliance ▼

Exceedance of 100th Percentile Limit of 600 cfu/100mL of EPA 3, Faecal Coliforms = 950 cfu/100mL.

Further details on particulars of non-compliance, if required **V**

Number of times occurred ▼

1

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

4/01/23

Cause of non-compliance ▼

Operator error when collecting sample.

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

When result of FC exceedance was identified, staff checked processes and plant equipment and performed retesting for FC. No issues were identified with plant or process and the results of retest indicated that FC were within acceptable levels. The exceedance was therefore determined to be caused due to improper sample collection.

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



BYRON SHIRE COUNCIL

Licence 784

Undertake training and review of sample collection process with staff.

Uploaded Document Name ▼

Uploaded Document Description ▼

Licence condition number not complied with ▼

L3.4 - Concentration Limits - EPA 3 - Faecal Coliforms

Summary of particulars of the non-compliance ▼

Exceedance of 100th Percentile Limit of 600 cfu/100mL at EPA 3, Faecal Coliforms = 3,640 cfu/100mL

Further details on particulars of non-compliance, if required **V**

Number of times occurred ▼

1

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

26/10/22

Cause of non-compliance ▼

High inflows experienced at the Ocean Shores STP due to a weather event with rainfall totalling 223 mm between 21 and 24 October 2022. In this event, treatment capacity was not exceeded and no treatment bypass.

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

Staff ensuring plant operating during high inflows, ensuring UV is operating correctly and continually monitoring FC until is falls within License parameter.

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 – EPA 3 – Faecal Coliforms

Summary of particulars of the non-compliance ▼

Exceedance of 100th Percentile Limit of 600 cfu/100mL - EPA 3, Faecal Coliforms = 2,840 cfu/100mL

Further details on particulars of non-compliance, if required **V**

Environment Protection Authority - NSW 4 Parramatta Square, 12 Darcy Street Parramatta NSW 2150



BYRON SHIRE COUNCIL

Licence 784

Number of times occurred ▼

1

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

25/5/22

Cause of non-compliance ▼

High inflows due to a weather event with rainfall totalling 197.6 mm between 21 and 25 May 2022. The stormwater system capacity was exceeded, which resulted in inflow and infiltration into the sewerage network beyond the capacity of the STP.

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

By-passing of the treatment process occurred between 23 and 26 May 2022. During this time all flows underwent primary screening and passed through the UV. This was a reportable event (EPA Ref 13060).

1. During and after the incident, operators monitored and adjusted treatment to correct high faecal coliform, nitrate and ammonia levels in effluent.

2. Council operators carried out additional sampling at the effluent discharge point (EPA3) and in addition;

monitoring of water quality of the Brunswick River upstream and downstream of the STP outfall at:

Upstream of Ocean Shores STP at Federation bridge Mullumbimby

• Downstream of Ocean Shores STP at Massey Greene Boat Ramp, Ocean Shores

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

1. Carried out an incident review process in line with the Pollution Incident Response Management Plan to ensure all procedures were adhered to and amended if required to prevent future deviations from procedure.

2. Perform Inflow and Infiltration investigation of Ocean Shores sewerage system.

3. Review SOP's associated with wet weather events for OSSTP.

Uploaded Document Name V

Uploaded Document Description ▼

Licence condition number not complied with ▼

L4.1 – Volume Limit – Inflow Volume EPA 2

Summary of particulars of the non-compliance ▼

Inflow of 10,542 kL/day, in exceedance of the 8,000 kL/day limit.

Further details on particulars of non-compliance, if required **V**

Number of times occurred ▼

1

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

24/02/23

Cause of non-compliance ▼



BYRON SHIRE COUNCIL

Licence 784

A rainfall event exceeded stormwater system capacity which resulted in inflow and infiltration into the sewerage network.

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

In this event, treatment capacity was not exceeded and no treatment bypass occurred. No further action taken.

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

Continue to invest in Inflow and Infiltration reduction in the Ocean Shores sewerage system.

Uploaded Document Name V

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			Assessat Load	ble	Actual Load	Po	llutant Fee
BOD discharged to Estua	arine Wate	ər	1105.0		1105.0		\$2.91
Load based licence activity	Actual quantity	Actual load (Calc method)	ulation	Weig met	ghted Load (Calcu nod)	lation	Agreed load
Sewage treatment processing by small plants	648	1105 (Source mor Method: APHA 52					
Nitrogen (total) discharge	ed to Estu	iarine Water	2521.0		2521.0		\$159.19



BYRON SHIRE COUNCIL

Licence 784

Load based licence activity	Actual quantity	Actual load (Cale method)	culation	Weighted Load (Calculation method)	on Agreed load
Sewage treatment processing by small plants	648	2521 (Source mo Method: APHA 45			
Oil and Grease discharge	ed to Estu	arine Water	672.0	672.0	\$106.08
Load based licence activity	Actual quantity	Actual load (Cald method)	culation	Weighted Load (Calculation method)	on Agreed load
Sewage treatment processing by small plants	648	672 (Source mon Method: APHA 55			
Phosphorus (total) discha	Actual quantity	Actual load (Calo		61.0 Weighted Load (Calculation method)	\$38.52
Sewage treatment processing by small plants	648	61 (Source monito APHA 4500-P)	oring, Method:		
Total suspended solids d Water	lischarge	d to Estuarine	3033.0	3033.0	\$151.62
Load based licence activity	Actual quantity	Actual load (Cald method)	culation	Weighted Load (Calculation method)	on Agreed load
Sewage treatment processing by	648	3033 (Source mo	nitoring,		

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?		
Is the PIRMP available at the premis	ses?	Yes
Is the PIRMP available in a promine	nt 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	23-5-2022	
Has the PIRMP been updated?		No
Number of times the PIRMP was ac	tivated in this reporting period?	2
The PIRMP was activated on	23/05/22 & 3/9/22	



BYRON SHIRE COUNCIL Licence 784

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

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 certified EMS?	Νο
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?	

H. Signature and Certification



BYRON SHIRE COUNCIL

Licence 784

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.

l/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.

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.