

ANNUAL RETURN

Information on this form is required in accordance with the conditions of your licence or approval issued under part 5 of the *Waste Management and Pollution Control Act* or part 7 of the *Water Act*.

Failure to provide the information requested on this form and/or the provision of false or misleading information is an offence under the legislation and you may be liable to heavy penalties.

LICENCE/APPROVAL NO.	323
REPORTING PERIOD	25/02/2024 to 25/02/2025

Section 1. Licence/Approval Holder Details

Please check your business details and contact details including 24 hour emergency response in NT EPA online and/or on page one of your licence.

Are these details correct?

☒ Yes Go to Section 2

☐ No Please correct your details by updating in NT EPA Online or complete the table below.

Licence holder	
Legal Entity Name:	Barramundi Adventures Darwin
ABN:	80 611 685 459
Registered Business Address:	1612 William rd Berry Springs
Postal Address:	Po Box 206 Berry Springs N.T 0838
Contact Person:	Dorian Rondot
Position Title:	Director
Contact Details:	0400772122
b/h:	89322221
mobile:	0400772122
email:	dorian@darwinbarra.com.au
Location of premises	
Address:	1612 William rd Berry Springs
24 hour emergency response	
Position Title:	Director
phone:	89322221
mobile:	0400772122

Section 2. Statement of Compliance

Were all conditions of the licence/approval complied with during the reporting period?

☐ Yes Proceed to Section 4.

☒ No Complete details below (add more rows if required)

Details of Non-compliance				
Condition number	Date of non-compliance (dd/mm/yy)	Was NT EPA notified? (Yes / No)	If yes, date NT EPA notified (dd/mm/yy)	If yes, how was NT EPA notified? (e.g. phone, email, Pollution Hotline)
		If no, complete Section 3		
36.2	09/04/2024	no		

Section 3. Report of Non-compliance

Please supply the following details for each non-compliance not reported to the NT EPA identified in Section 2. Use a separate page for each non-compliance.

The date and time of the non-compliance.
09/04/2024
When the non-compliance was detected and by whom.
05/03/2025
The actual and potential causes and contributing factors to the non-compliance.
The non-compliances recorded on 9 April 2024 at the downstream compliance site (G8150369) were: • Ammonia (0.11 mg/L) – exceeded SSTV by a factor of 4.23 • Total Suspended Solids (TSS) (108 mg/L) – exceeded SSTV by a factor of 10.8 • Total Phosphorus (TP) (0.12 mg/L) – exceeded SSTV by a factor of 4.0 Actual Causes & Contributing Factors TSS & TP Exceedances – Potential Tidal Influence or Sediment Resuspension • TSS at the compliance site (G8150369) (108 mg/L) was significantly elevated compared to discharge sites (DPA <5 mg/L, DPB 8 mg/L). • The increase in TSS did not correspond with site discharge, suggesting an external influence. • Total Phosphorus (TP) often binds to suspended solids—its exceedance aligns with the TSS increase, indicating potential sediment resuspension due to tidal mixing or riverbed disturbance. Ammonia Exceedance – Possibly linked to Discharge • Ammonia was higher at the discharge points (DPA: 1.04 mg/L, DPB: 0.82 mg/L) than at the compliance site (0.11 mg/L). • This suggests that site discharge did contribute to Ammonia in the receiving waters; however, the concentration had reduced by the time it reached G8150369. • Possible dilution, dispersion, or biological uptake processes may have influenced Ammonia levels between the discharge points and the compliance site.

Elevated NTU (Turbidity) & EC (Electrical Conductivity) at Compliance Site

- Turbidity (NTU) was significantly higher at G8150369 compared to upstream and discharge sites, suggesting that additional particulate material entered the system downstream.
- EC was also elevated at the compliance site, indicating a potential additional saline or mineral input, possibly from tidal intrusion.
- These patterns do not align with the discharge characteristics, further supporting a potential external factor influencing water quality at G8150369.

Timing of Sampling & Harvest Discharge Relationship

Harvest activities had already concluded before laboratory results were received, meaning no immediate corrective action was possible.

Limited data is available to accurately determine the relationship between the farm's discharge and the exceedances.

The risk of environmental harm arising from the non-compliance.

Based on the available data, there is no evidence to suggest that the exceedances recorded on 9 April 2024 resulted in environmental harm. While Ammonia, TSS, and Total Phosphorus exceeded the Site-Specific Trigger Values (SSTVs) at the downstream compliance site (G8150369), the broader environmental context must be considered when assessing risk.

There were no recorded fish kills, algal blooms, or visible signs of environmental degradation in the Blackmore River following the sampling event. No known reports from stakeholders or the community indicated any adverse environmental effects.

Ammonia concentrations at the discharge points (DPA: 1.04 mg/L, DPB: 0.82 mg/L) were higher than at the compliance site (0.11 mg/L), suggesting dilution and natural attenuation occurred. The recorded Ammonia level at G8150369, while exceeding the SSTV, remained below concentrations known to cause acute toxicity to aquatic organisms. (The estimated un-ionized ammonia concentration at the compliance site (G8150369) on 9 April 2024 ranged from 0.0022 to 0.0055 mg/L NH_3 , which is well below the U.S. EPA chronic toxicity threshold of 0.035 mg/L NH_3 and the alternative criterion of 0.081 mg/L NH_3 proposed by Hall et al. (2000). Given that toxicity thresholds for marine organisms are significantly higher than the recorded levels, the ammonia exceedance at G8150369 does not present a risk of toxicity to marine life. Additionally, the observed ammonia reduction from the discharge points (DPA: 1.04 mg/L, DPB: 0.82 mg/L) to the compliance site (0.11 mg/L) suggests dilution and natural attenuation before reaching the downstream site. No visible environmental impacts, such as fish kills or algal blooms, were recorded, further supporting that the ammonia levels did not pose a toxicological risk in the receiving environment (U.S. EPA, 1999; Hall et al., 2000).

Total Suspended Solids (TSS) at the compliance site (108 mg/L) was significantly higher than at the discharge points (<5 mg/L & 8 mg/L), suggesting that external influences, such as tidal movement or sediment resuspension, contributed to the exceedance. Total Phosphorus (TP) is often sediment-bound, meaning its exceedance is likely linked to TSS fluctuations rather than direct nutrient enrichment from the site.

Turbidity (NTU) and Electrical Conductivity (EC) were also elevated at G8150369, further supporting the hypothesis that natural environmental processes influenced water quality. These findings indicate that the exceedances at the compliance site may not be directly attributable to farm operations.

The non-compliance was identified through a single sampling event and does not indicate an ongoing or chronic issue. Water quality parameters fluctuate naturally in estuarine and tidal systems, and single-event exceedances do not necessarily equate to environmental harm.

Conclusion

Based on the absence of observed ecological impacts, the likelihood of natural influences on water quality, and the short-term nature of the exceedances, there is no evidence to suggest that environmental harm occurred as a result of the non-compliances recorded on 9 April 2024.

The action(s) that have or will be undertaken to mitigate any environmental harm arising from the non-compliance.

The Non compliance was discovered too late to implement changes and all discharge had occurred before laboratory results were received.

Corrective actions that have or will be undertaken to ensure the non-compliance does not reoccur.

It is hard to assess that the non-compliance was due to site operations as there is conflicting data - however the reporting of the non-compliance can be improved and Protocols and procedures have been put in place.

If no action was taken, why no action was taken.

non - compliance discovered too late

Section 4. Signature and Certification

This declaration must only be signed by a person(s) with the legal authority to sign it. The ways in which the application may be signed, and the people who may sign the application, are set out in the categories below.			
If the licence holder is:	Tick	The application must be signed and certified by one of the following:	
An individual	☐	The individual.	
A partnership	☐	A partner.	
A company	☐	The common seal being affixed in accordance with the <i>Corporations Act</i> , or	
	☐	Two directors, or	
	☐	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.	
A public authority	☐	The Chief Executive Officer (CEO) of the public authority, or	
	☐	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 application).	
I/We hereby declare that the information provided in this Annual Return and accompanying documents is to the best of my/our knowledge, true and correct.			
Signature		Signature	
Name (printed)	Dorian	Name (printed)	
Position	Director	Position	
Date	5/03/25	Date	
Seal (if signing under seal):			

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If the licence holder is:	Tick	The application must be signed and certified by one of the following:
An individual	☐	The individual.
A partnership	☐	A partner.
A company	☐	The common seal being affixed in accordance with the Corporations Act, or
	☐	Two directors, or
	☐	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.
A public authority	☐	The Chief Executive Officer (CEO) of the public authority, or
	☐	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 application).

I/We hereby declare that the information provided in this Annual Return and accompanying documents is to the best of my/our knowledge, true and correct.

Signature		Signature	
Name (printed)	Dorian	Name (printed)	
Position	Director	Position	
Date	5/03/25	Date	
Seal (if signing under seal):			