17. Currie STP

17.1 Activity and report details

Activity name	Currie STP		
Activity address	Light House Street, Currie		
Permit number	6259	**Date of issue**	10/09/2003
EPN	NA	**Date of issue**	NA
Treatment level	Secondary Treatment		
Authorised dry weather flows	290 kL/day		
Key influent source	Residential/industrial		
Contact person	Kate Westgate (Manager Environmental Performance)		
Report author	Jake Crisp (Environmental Scientist)		
Contact details	Environment@taswater.com.au		
Date of submission	30 September 2025		

Figure 17-1: Currie Sewage Treatment Plant

17.2 Monitoring and compliance summary

17.2.1. Flow data

Table 17-A: Flow monitoring summary

	Influent*	Effluent	Reuse
Location name	Inlet	Bass Strait	No reuse scheme
Coordinates	E 230107 N 5575062	E 229820 N 5574880	NA
Method of measurement	Estimate based on historical flow volumes	Estimate based on water consumption	NA
Date of last calibration/validation (if applicable).	17/06/2025	NA – There is no effluent flow meter	NA

Table 17-B: Annual flow and rainfall data

Month	Average daily influent volume (kL/day)	Rainfall (mm/month) BOM Station ID 98011	Discharge to waters total effluent volume (ML)	Discharge to reuse total effluent volume (ML)
July 2024	305	142.8	9.45	--
August 2024	305	76.8	9.45	--
September 2024	315	134	9.45	--
October 2024	305	52	9.45	--
November 2024	315	50.6	9.45	--
December 2024	305	91.6	9.45	--
January 2025	305	3.6	9.45	--
February 2025	337	20.2	9.45	--
March 2025	305	14.2	9.45	--
April 2025	315	26.8	9.45	--
May 2025	305	46.2	9.45	--
June 2025	315	105	9.45	--
Annual 2024-25	311	763.8	113.35	0.00
% of total discharge	--	--	100.0%	0.0%

2024-25 monthly flow data was submitted directly to the EPA.

17.3 Bypass events

There were no bypass events associated with the STP during the reporting period.

17.4 Discharge compliance with permit limits

Table 17-C: Discharge compliance with permit limits

Parameter	Ammonia	BOD5	Chlorine	Nitrogen	Oil and grease	pH	Phosphorous	E coli	Total suspended solids
Permit/EPN limit	mg/L	mg/L	mg/L	mg/L	mg/L	Units	mg/L	MPN/100mL	mg/L
Maximum	--	50	--	40	10	8.5	10	2000	50
90th percentile	--	--	--	--	--	--	--	--	--
50th percentile	--	--	--	--	--	--	--	--	--
Minimum	--	--	--	--	--	6.5	--	--	--
Samples analysed/									
Number required	12	12	--	12	12	12	12	12	12
Number analysed	12	12	--	12	12	12	12	12	12
Statistical summary									
Maximum	36.5	66.0	0.0	45.5	2.3	8.1	11.1	14136.0	37.0
90th percentile	32.7	61.9	0.0	37.1	1.5	7.7	10.0	6097.3	16.4
50th percentile	17.0	6.5	0.0	23.9	1.0	7.5	9.3	1971.0	11.8
Minimum	9.0	5.0	0.0	18.3	1.0	7.2	6.6	135.0	4.0
EPN limit compliance									
% compliance with maximum	--	83%	--	92%	100%	100%	92%	50%	100%
% compliance with 90th percentile	--	--	--	--	--	--	--	--	--
% compliance with 50th percentile	--	--	--	--	--	--	--	--	--
% compliance with pH range	--	--	--	--	--	100%	--	--	--

Table 17-D: Mass loads to the environment

Mass Loads	EPN limit	Frequency	2024-25 result
Nitrogen	--	Annual	3023.1
Phosphorous (kg)	--	Annual	1019.1
Method	Time weighted/Grab sample method		

Table 17-E: Performance analysis (discharge to environment)

Effluent compliance parameter	Date(s) of non-compliance		Reasons for non-compliance	Actions to improve performance
E. coli	9/07/2024 13/08/2024 11/02/2025	11/03/2025 13/05/2025 11/06/2025	Absence of a mechanical or chemical disinfection treatment process. Therefore, pathogen removal is reliant upon natural UV light.	No specific actions.
Phosphorus	13/05/2025		The lagoon system is not designed for biological phosphorus removal. There is also no chemical phosphorus removal process.	Ongoing wetlands rehabilitation project. Refer to Section 17.11 for more information.
Nitrogen	9/07/2024		Exceedances in total nitrogen and BOD appear to be associated with the wetlands not consistently achieving optimal treatment performance.	
BOD	13/08/2024			

No other parameters had exceedances in the reporting period.

17.5 Reuse annual reporting

No recycled water scheme at this STP.

17.6 Ambient monitoring program

Table 17-F: Program details

Program	Ambient water quality monitoring in accordance with PCE 6259.
Status	Ambient water quality monitoring within the Bass Strait receiving environment.
Update	Quarterly ambient water quality monitoring completed during the reporting period.
Comments	Quarterly (July, October 2024, January, April 2025) ambient water quality monitoring was conducted during the monitoring reporting period north and south of the STP effluent discharge into the Bass Strait receiving environment. Key findings from the ambient water quality monitoring data review were: • The ANZG toxicant Default Guideline Value (tDGV) for ammonia was not exceeded at any of the ambient monitoring locations. • Ambient levels of nitrate were within the EPA Otway Bioregion DGVs for Coastal & Marine Waters at the southern monitoring location and exceeded the EPA DGV at the northern location in October 2024. • Total nitrogen levels were elevated at both ambient monitoring locations with levels likely impacted by STP effluent discharges. • Total phosphorus levels were also elevated at both ambient monitoring locations with levels likely impacted by STP effluent discharges. Dissolved reactive phosphorus levels were generally within EPA Otway Bioregion DGVs but did exceed the DGV at both ambient locations in July 2024. • Both enterococci and *E. coli* levels were within the EPA low risk recreational guideline values for pathogens at both monitoring locations on all monitoring occasions. In summary, the STP effluent discharge is likely having a localised impact on nutrient levels within the Bass Strait receiving environment with elevations in total nitrogen and phosphorous occasionally detected around the outfall.

17.7 Groundwater monitoring

There is no groundwater monitoring program in place for Currie STP.

17.8 Inflow and infiltration (I&I)

The latest revision to the TasWater Inflow and Infiltration Management Plan includes details of the actions undertaken statewide to address I&I issues.

A Multi Criteria Assessment was undertaken by TasWater in 2024 to prioritise I&I investigation and works state-wide. This catchment ranked 80 out of 108 in priority.

17.9 Sludge and biosolids

The latest revision to the Sewage Sludge Management Plan (SSMP) includes full details of the actions undertaken during the reporting period, the most recent sludge profiling results, and upcoming annual desludging program. This STP was deemed as non-

compliant with the 2024-25 SSMP due to lack of information on use of biosolids for quarry rehabilitation.

Sludge at this STP is captured within the seven treatment lagoons, which will be periodically desludged as required. No stockpiling occurs at this site.

Table 17-G: Biosolids sludge classification summary

Parameter	Number of samples	Maximum (mg/kg)	Mean (mg/kg)	Minimum (mg/kg)	BACC (mg/kg)	Contaminant classification
Arsenic	3	14.7	12.1	8.8	15.1	A
Cadmium	3	1.3	0.9	0.4	1.4	B
Chromium	3	34.2	27.5	16	37.4	A
Copper	3	347	261.3	97.9	402.9	B
Lead	3	29.8	19.4	10.1	29.3	A
Mercury	3	0.61	0.4	0.14	0.7	A
Nickel	3	17.2	14.3	9.6	18.4	A
Zinc	3	1080	733.0	222	1184.9	B

Table 17-H: Volume and disposal destination

Quantity (DST)	Average solids content (%)	Stabilisation method	Stabilisation grade	Contamination grade	Biosolids classification	End use destination
35.6	12.5	Anaerobic digestion	B	B	2	Pearshape Quarry - rehabilitation

Notes:
DST = Dry solid tonne. U/C = Unclassified
BACC = Biosolids Adjusted Contaminant Concentration

Table 17-I: Desludging status and comments

Desludging status	Comments
Low Priority	Lagoon 1 was desludged in June 2025, with approximately 285m^3 (35.6 DST) of sludge removed. Lagoons 2-7 are considered low priority; however, there is a wetland lagoons rehabilitation project commencing in September 2025 which will involve some further sludge removal as part of the works.

17.10 Non-compliance with other permit requirements

Table 17-J: EPN non-compliances

EPN condition	Description of non-conformance	Future actions to be taken
SW2 Effluent quality limits for discharge to water	Discharge compliance with permit limits.	See section 17.4 Discharge compliance with permit limits and Performance Analysis.
VM1 &VM2 Vegetation and Weed management	Lagoon vegetation overgrown and degraded in areas due to lack of maintenance.	Lagoon maintenance and revegetation project to be commenced in September 2025 (Stage 1). Stages 2 and 3 to follow in 2026 and 2027.
C8 Linear construction	Rotting vegetation, dominant bullrush in final lagoons, thick stems	Wetland to be re-established and maintained.

EPN condition	Description of non-conformance	Future actions to be taken
	through lagoon walls impacting lagoon lining integrity	

17.11 Complaints and incident reporting

There were no complaints or incidents during the reporting period.

17.12 Any other relevant information

Table 17-K: Projects or significant operational events that occurred in FY2024-25

Project or significant operational event	Overview
Northwest Sewerage Master Plan	The North West Sewerage Regional Master Plan has been completed and outlines both short- and long-term considerations for the Currie STP.
Currie STP Wetland Rehabilitation Project	Scheduled to commence in September 2025: • Remove existing vegetation and replant native species as per EPN and the condition assessment. • Conduct testing, commissioning, and performance optimisation assessments upon revegetation. • Assess the condition and amount of sludge in all lagoons. • Remove sludge from required lagoons.
Currie STP Inlet Works Improvement	• Completed 17/06/2025 with replacement flow meter installed. Full link to SCADA. • Macerator installed at the inlet.

For further information on Currie STP please contact TasWater on 13 6992

www.taswater.com.au