9. Round Hill (Burnie) STP

9.1 Activity and report details

Activity name	**Round Hill (Burnie) STP**		
Activity address	Bass Highway, Round Hill, Burnie		
Permit number	Permit Conditions Environmental - 6279	**Date of issue**	20/01/2004
EPN	7297/2	**Date of issue**	24/11/2022
Treatment level	Tertiary (E3) - (Nitrogen + Phosphorus)		
Authorised Dry Weather Flows	9000 kL/day		
Key Influent Source	Residential/Industrial 4 x Category 3 Customers, 4 x Category 4 Customers		
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 9-1: Round Hill (Burnie) Sewage Treatment Plant

9.2. Monitoring and compliance summary

9.2.1. Flow data

Table 9-A: Flow monitoring summary

	Influent	Effluent	Reuse
Location name	Inlet	Bass Strait	No reuse scheme
Coordinates	E 411382 N 5453406	E 411250 N 5453550	NA
Method of measurement	In-line meter	In-line meter	NA
Date of last calibration/validation (if applicable).	22/07/2024	22/07/2024	NA

Table 9-B: Annual flow and rainfall data

Month	Average daily influent volume (kL/day)	Rainfall (mm/month) BOM Station ID 91355	Discharge to waters total effluent volume (ML)	Discharge to reuse total effluent volume (ML)
July 2024	7,479	131.6	235.22	--
August 2024	9,098	192.6	290.09	--
September 2024	10,660	133.8	328.12	--
October 2024	8,370	84.0	259.24	--
November 2024	7,857	124.8	236.69	--
December 2024	8,263	75.0	257.35	--
January 2025	6,486	20.4	203.68	--
February 2025	6,293	5.0	177.71	--
March 2025	6,241	28.6	195.76	--
April 2025	6,177	38.4	187.47	--
May 2025	6,288	41.4	197.16	--
June 2025	6,223	72.2	189.47	--
Annual 2024-25	7,459	947.8	2,757.96	0.00
% of total discharge	--	--	100.0%	0.0%

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

9.3. Bypass events

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

9.4. Discharge compliance with permit limits

Table 9-C: Discharge compliance with permit limits

	Ammonia as N	BOD5	Chlorine	Nitrogen	Oil and Grease	pH	Phosphorus	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	5	20	--	15	5	8.5	5	750	30
90th Percentile	2	15	--	10	2	--	3	500	20
50th Percentile	1	10	--	5	1	--	1	200	10
Minimum	--	--	--	--	--	6.5	--	--	--
Samples analysed									
Number required	52	52	--	52	52	52	52	52	52
Number analysed	52	52	--	52	52	53	52	52	52
Statistical summary									
Maximum	15.0	416.0	0.0	60.0	24.2	7.2	54.5	135	1670.0
90th percentile	7.9	39.1	0.0	20.0	1.9	7.1	2.9	50	30.8
50th percentile	2.4	9.0	0.0	9.0	1.0	7.0	0.7	10	10.7
Minimum	0.5	5.0	0.0	2.4	1.0	6.6	0.2	10	4.0
EPN limit compliance									
% compliance with maximum	83%	81%	--	85%	96%	100%	94%	100%	88%
% compliance with 90th percentile	40%	69%	--	65%	92%	--	92%	100%	75%
% compliance with 50th percentile	6%	56%	--	6%	75%	--	71%	100%	44%
% compliance with pH range	--	--	--	--	--	100%	--	--	--

Table 9-D: Mass loads to the environment

Mass Loads	EPN limit	Frequency	2024-245 result
Nitrogen (kg)	26300	Yearly	30482.0
Phosphorous (kg)	7250	Yearly	5557.8
Method	Flow weighted/composite method		

Table 9-E: Performance analysis (discharge to environment)

Effluent compliance parameter	Date(s) of non-compliance		Reasons for non-compliance	Actions to improve performance
Ammonia	27/11/2024 9/04/2024 4/12/2024	11/12/2024 18/12/2024 22/12/2024 11/06/2025	This could be linked to reduced aeration in the SBR, or to overloading or changes in trade waste that may have led to elevated ammonia.	SBR 2 aeration blower sent away for maintenance. No other specific actions.
Nitrogen	11/12/2024 18/12/2024 22/12/2024	9/04/2025 14/05/2025 4/06/2025	There were no known process upsets directly attributable to the effluent non-compliances. However, some overloading, changes in trade waste, or ongoing issues with the SBR 2 blower could have contributed to elevated BOD, TSS, nitrogen, phosphorus, and oil and grease.	Ongoing investigation to determine the root cause of these exceedances. SBR 2 aeration blower sent away for maintenance.
BOD	3/07/2024 21/08/2024 27/11/2024 11/12/2024	18/12/2024 14/05/2024 21/05/2025 4/06/2025		
TSS	19/02/2025 14/05/2025	21/05/2025 4/06/2025		
Phosphorus	14/05/2025	04/06/2025		
O&G	4/06/2025			

No other parameters had exceedances in the reporting period.

9.5. Reuse annual reporting

No Recycled Water Scheme associated with this STP

9.6. Ambient monitoring program

Table 9-F: Program details

Program	Burnie (Round Hill) Ambient Monitoring Program in accordance with EPN Conditions, as varied by EPA, February 2024.
Status	Routine biennial water quality and biological monitoring.
Update	Monitoring not required during the reporting period. Monitoring is scheduled for the FY25-26 reporting period.
Comments	NA

9.7. Groundwater monitoring

No groundwater monitoring program associated with this STP.

9.8. 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 was ranked 33 out of 108 in priority.

9.9. Sludge and biosolids

The latest revision to the Sewage Sludge Management Plan (SSMP) includes full details of the actions undertaken during the reporting period.

This STP was deemed compliant with the 2024-25 Sewage Sludge Management Plan.

Biosolids are removed regularly from site, no stockpiling occurs.

Table 9-G: Biosolids sludge classification summary

Parameter	Number of samples	Maximum (mg/kg)	Mean (mg/kg)	Minimum (mg/kg)	BACC (mg/kg)	Contaminant classification
Arsenic	12	5.9	4.2	2.1	6.6	A
Cadmium	12	1.8	0.7	0.4	1.5	B
Chromium	12	30.3	24.0	14.7	33.8	A
Copper	12	262.0	216.3	140.0	282.4	B
Lead	12	56.3	36.8	18.4	56.3	A
Mercury	12	1.2	0.7	0.4	1.3	B

Parameter	Number of samples	Maximum (mg/kg)	Mean (mg/kg)	Minimum (mg/kg)	BACC (mg/kg)	Contaminant classification
Nickel	12	49.4	34.0	22.2	49.5	A
Zinc	12	820.0	540.4	344.0	826.7	B

Table 9-H: Volume and disposal destination

Quantity (DST)	Average solids content	Stabilisation method	Stabilisation grade	Contamination grade	Biosolids classification	End use destination
418.6	15.8	None	U/C	B	U/C	Dulverton composting

Notes: DST = Dry solid tonne. U/C = Unclassified

9.10. Non-compliance with other permit requirements

Table 9-I: EPN non-compliances

EPN condition	Description of non-conformance	Future actions to be taken
E5 Effluent Quality Limits	Discharge compliance with permit limits	See section 9.4 Discharge compliance with permit limits

9.11. Complaints and incident reporting

Table 9-J: Complaints reporting

Date	Category	Details	Mitigation actions
21/10/2024	Odour	Odour from the STP	There were no known process issues at the plant. No mitigation actions implemented. Attributed to seaweed on beach.

Table 9-K: Incident reporting

Date	Category	Details	Mitigation actions
18/11/2024	Mechanical	Aeration blower in SBR 2 offline, leading to reduced aeration.	TasWater sent the aeration blower for repairs. No odour complaints received. Monitoring effluent quality parameters.

9.12. Any other relevant information

For further information on Round Hill (Burnie) STP please contact TasWater on 13 6992

www.taswater.com.au