

## 8. Brighton STP

### 8.1 Activity and report details

Activity name	Brighton STP		
Activity address	William Street, Brighton & Cove Hill Rd, Honeywood Hobart		
Permit number	Licence to Operate - 3612	Date of issue	17/01/1989
EPN	7059/2	Date of issue	6/04/2020
Treatment level	Secondary Treatment		
Authorised dry weather flows	650 kL/day		
Key influent source	Residential/Industrial 1 x Category 3 Customer		
Contact person	Kate Westgate		
Report author	George Fitzgibbon		
Contact details	Environment@taswater.com.au		
Date of submission	30 September 2025		

**Figure 8-1: Brighton Sewage Treatment Plant**



## 8.2. Monitoring and compliance summary

### 8.2.1. Flow data

**Table 8-A: Flow monitoring summary**

	Influent	Effluent	Reuse
<b>Location name</b>	Andrew St PS, Inlet	Green Point STP	Brighton Reuse Scheme
<b>Coordinates</b>	E 521646 N 5272175	E 519482 N 5267582	E 521496 N 5270188
<b>Method of measurement</b>	In Line	Estimate based on influent	Estimate based on influent
<b>Date of last calibration/validation (if applicable)</b>	10/03/2025	NA – to be installed	NA – to be installed

**Table 8-B: Annual flow and rainfall data**

Month	Average daily influent volume (kL/day)	Rainfall (mm/month) BOM Station ID 94233	Discharge to waters total effluent volume (ML)	Discharge to reuse total effluent volume (ML)
July 2024	741	68.4	0.74	22.23
August 2024	651	81.6	0.00	20.18
September 2024	811	51.6	0.00	24.32
October 2024	624	38	0.00	19.35
November 2024	606	18.6	0.00	18.19
December 2024	791	106	0.00	24.53
January 2025	647	48.2	0.00	20.06
February 2025	617	22	0.00	17.27
March 2025	630	14	0.00	19.54
April 2025	615	38.8	0.00	18.44
May 2025	631	41.8	0.00	19.57
June 2025	665	31.8	0.00	19.96
Annual 2024-25	670	560.8	0.74	243.64
% of total discharge	--	--	0.3%	99.7%

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

### 8.3. Bypass events

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

#### 8.4. Discharge compliance with permit limits

This STP does not discharge directly to the environment, when effluent cannot be directed to reuse it is sent through Green Point STP.

#### 8.5. Reuse annual reporting

The Green Point and Brighton STP's supply recycled water for irrigation purposes to twelve properties across the Bridgwater area. The Brighton Recycled Water Scheme is located largely within the Jordan Catchment, crossing slightly into the Pitt-Water Coal River and Derwent Estuary-Bruny catchments.

**Table 8-C: Reuse compliance summary**

	BOD5	pH	E. coli
Permit/EPN limit	mg/L	mg/L	mg/L
Maximum	50	9.0	10,000
90th Percentile	--	--	--
50th Percentile	--	--	1,000
Minimum	--	5.5	--
<b>Samples analysed</b>			
Number required	12	12	12
Number analysed	12	12	12
<b>Statistical summary</b>			
Maximum	191.0	8.0	24,196
90th percentile	112.6	7.8	3,488
50th percentile	60.0	7.3	481
Minimum	20.0	6.9	10
<b>EPN Limit Compliance</b>			
% compliance with Maximum	42%	--	92%
% compliance with 90th percentile	--	--	--
% compliance with 50th percentile	--	--	67%
% compliance with pH range	--	100%	--

\*No recycled water above 2,000 uS/cm was provided to the recycled water scheme.

**Table 8-D: Performance analysis (discharge to reuse)**

Reuse compliance parameter	Date(s) of elevated parameter	Reasons	Actions to improve performance
E. coli	11/06/2025	<p>Modelling suggests disinfection capacity is currently marginal. At peak flows the plant can have issues with hydraulic retention time, which can result in non/compliant E. coli.</p> <p>The plant is currently overloaded which results in elevated BOD and TSS. The BOD levels are further escalated due to presence of algae.</p>	<p>Desludging of Lagoon 1 was undertaken in the FY.</p> <p>Desludging of Lagoons 2 and 3 is scheduled for FY26.</p> <p>Brighton STP will be included in the Hobart (Northern) Strategy – currently in development.</p>
BOD	9/09/2024		
	9/10/2024		
	7/11/2024		
	2/12/2024		
Nitrogen	12/2/2025		
	18/03/2025		
	5/05/2025		
	11/06/2025		
	1/08/2024		
Phosphorus	9/09/2024		
	18/03/2025		
	11/06/2025		
TSS	9/10/2024		
	18/03/2025		

Note: Non-compliances only identified for the times STP has discharged to reuse

Annual soil sampling was completed at nineteen sites on eleven properties across the Brighton RWS in July 2024. The distribution of the sampling sites was based on the established sampling program and consideration of the irrigation application rates for the past irrigation and proposed coming irrigation season. One site was removed from the program as no application of recycled water had been or is planned on this site. A new sample site was established based on an increase in volume of recycled water to this area. Annual compliance audits were completed at twelve properties in July, August and September 2024. Mostly completed by phone, field observations were conducted in conjunction with the soil sampling in July. Annual sampling of the nine privately owned customer recycled water storage dams supplied by the scheme was completed in September 2024. This sampling was completed as part of the annual sampling program implemented in 2016, on direction from the EPA. A summary of the findings of the programs is provided in the below table.

**Table 8-E: Annual recycled water scheme compliance audit and soil monitoring report and dam sampling summary**

Program	Compliance audit	Soil monitoring	Dam sampling
Outcomes	<p>Overall compliance Rating: 89% 25% properties fully compliant</p> <p>67% properties recorded minor - non compliances (inadequate signage on property entrance, boundaries and taps).</p> <p>One property had no IEMP however operated in accordance with relevant guidelines.</p> <p>Major non-compliances:</p> <p>Irrigation within buffer zones, in proper use/ management recycled water within storages. Stock not adequately excluded from recycled water storage. Potential inadequate stock withholding times (grain crop).</p>	<p>Average soil salinity and Chloride levels ranged from non-saline (63% sites) to low-level saline (16% slightly saline and 21% saline). With 2024 monitoring program recording slightly higher average soil salinity levels and a decrease in chloride levels. No long-term trend identified.</p> <p>Average ESP levels remain similar to previous years, ranging from non-sodic (95% sites) to borderline sodic (5% sites). No long-term trend identified.</p> <p>Average phosphorous levels remain excessive, potassium levels remain high, and average Sulphur levels remain moderate. Average phosphorous and potassium levels continue to show an increasing long-term trend.</p>	<p>Recycled water quality in all customer dams (as sampled on 26 September 2024) was generally compliant with class B recycled water standards, with exception of one storage that recorded slightly elevated level of BOD. No impact on the landowner is anticipated.</p> <p>Water quality indicators were considered generally satisfactory with nutrient concentrations considered typical of recycled water and soil sodicity risk indicators acceptable</p>
Comments	<p>Outside formal audit stock where accessing land drip irrigated with recycled water and irrigation within buffer zones.</p> <p>Aspects of original Site Management Plans are outdated for numerous properties. Review of Brighton EMP was undertaken during 2024-25 reporting period with provision to EPA for feedback. TasWater will work with customers to address updating customer IEMPs following the EMP review.</p> <p>Recycled water customer of major non-compliance has been advised of requirements.</p>	<p>Overall soil health and fertility do not appear to be adversely impacted through recycled water irrigation.</p> <p>Long-term trends in average Phosphorus and potassium continue to be attributed to sources other than recycled water application. Average levels are strongly influenced by excessive levels at a few sites where known nutrient inputs are significant.</p>	

Key: ESP = Exchangeable sodium percentage.

### RWS Groundwater Status: Amber

The Brighton RWS groundwater monitoring network consists of ten monitoring bores located across eight properties. Five bores (BR-THGW1, BR-HWGW3, BR-STGW1, BR-STGW3 and BR-RIGW1) are associated with recycle water storage dams.

6-Monthly sampling was completed across eight bores in July-August 2024 and January-February 2025. Bore ID numbers BR-ROGW3 and BR-ROGW4 could not be located and where not sampled.

The 2024-25 groundwater monitoring event report continued to highlight the bore of concern recording an increasing trend of total nitrogen, with concentrations above the adopted guideline criterion although concentrations have decreased. Chemical characterisation has indicated that the recycled water is chemically different from groundwater, additional monitoring is required. All other

properties recorded no or minor issues. In general, the impact from recycled water irrigation on groundwater quality is likely to be low due to the use ratio of recycled water to other alternate water sources to meet the typical average irrigation demand of the region.

6-monthly sampling across the network is scheduled to continue in the 2025-26 groundwater monitoring program. One private recycled water storage associated will be sampled so that chemical characterisation can be completed to investigate and verify any trends.

Further information regarding groundwater monitoring is provided in section 8.7

## 8.6. Ambient monitoring program

**Table 8-F: Program details**

<b>Program</b>	NA – No requirement for ambient monitoring as no direct discharge to water.
<b>Status</b>	NA
<b>Update</b>	NA
<b>Comments</b>	NA

## 8.7. Groundwater monitoring

Site status: Amber

Brighton STP groundwater monitoring network consists of six monitoring bores. Bore ID's BRGW1-3 are located at the Brighton Lagoons at Cove Hill Road, whilst Bore ID's BRGW4-6 are located at the Primary Lagoon on William Street.

6-Monthly sampling at the extended analytical suite was completed at all six bores in February 2024. The STP lagoons and adjacent unnamed creek to Bore ID's BRGW4-6 were also sampled in February 2024 as per previous report recommendation to investigate potential STP impacts.

The 2024-25 groundwater monitoring event recorded elevated concentrations of several analytes across bore ID numbers BRGW2-6. Total nitrogen concentrations in bore ID's BRGW5-6 indicated an alignment between STP Lagoons 2-4.

6-monthly sampling at the extended analytical suite is planned to continue across the monitoring network during the 2025-26 groundwater sampling program. In addition, surface water sampling of Brighton STP Primary Lagoon, Lagoons 2 and 5 and unnamed stream adjacent to the Primary Lagoon are also scheduled to be sampled.

## 8.8. 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 24 out of 108 in priority.

## 8.9. 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 fully compliant with the 2024-25 SSMP.

Sludge at this STP is captured within the four treatment lagoons, which will be periodically desludged as required.

**Table 8-G: Desludging status and comments**

Desludging status	Comments
High Priority	Desludging of Lagoon 1 was completed in December 2024. Lagoons 2 and 3 are scheduled to be desludged in FY2025-26.

**Table 8-H: Stockpile comments**

Stockpile onsite	Volume of stockpile
Sludge from Lagoon 1 contained in Geobags onsite	Currently 4 full Geobags stored onsite in temporary laydown area. Approximate sludge volume is 900m <sup>3</sup> (Total Solids 15%). Once suitably dried, sludge will be tested, classified and applied to suitable farmland for beneficial reuse – providing biosolid Class 2 requirements are met.

## 8.10. Non-compliance with other permit requirements

**Table 8-I: EPN non-compliances**

EPN condition	Description of non-conformance	Future actions to be taken
EF2 Effluent quality limits for discharge to the Brighton Reuse Scheme	Reuse effluent quality limits	See section 8.5 Reuse Annual Reporting and Performance Analysis

## 8.11. Complaints and incident reporting

No complaints recorded during the period.

**Table 8-J: Incident reporting**

Date	Category	Details	Mitigation actions
15/07/2024	Rainfall Event	Lagoon was close to overtopping.	Operations opened the valve into the creek (flowing into Jordan River). Note this is not a licenced discharged point as per the EPN but is the only emergency option to reduce lagoon levels and prevent impact of the dam wall.

## 8.12. Any other relevant information

**Table 8-K: Projects or significant operational events that occurred in FY 2024-25**

Project or significant operational event	Progress
Derwent Hobart Sewerage Regional Master Plan	The Derwent Hobart Sewerage Regional Master Plan has been completed and includes the short term and long-term considerations for the Brighton STP.

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

[www.taswater.com.au](http://www.taswater.com.au).