

52. Rokeby STP

52.1 Activity and report details

Activity name	Rokeby STP		
Activity address	Droughty Point Road, Rokeby, Hobart		
Permit number	Permit Conditions Environmental - 6086	Date of issue	4 April 1997
EPN	7829/1	Date of issue	2 December 2011
Treatment level	Tertiary Treatment		
Authorised dry weather flows	4000 kL/day		
Key influent source	Residential/Tankered		
Contact person	Kate Westgate		
Report author	George Fitzgibbon		
Contact details	Environment@taswater.com.au		
Date of submission	30 September 2025		

Figure 52-1: Rokeby Sewage Treatment Plant



52.2 Monitoring and compliance summary

52.2.1 Flow data

Table 52-A: Flow monitoring summary

	Influent	Effluent	Reuse
Location name	Sewer Inlet	Derwent River	Effluent Reuse Scheme - Coal River
Coordinates	E 535899 N 5249532	E 533174 N 5247967	E 535832 N 5249501
Method of Measurement	In line meter	In line meter	In line meter
Date of last calibration/validation (if applicable)	30/06/2025	30/06/2025	30/06/2025

Table 52-B: Annual flow and rainfall data

Month	Average daily influent volume (kL/day)	Rainfall (mm/month) BOM Station ID 94082	Discharge to waters total effluent volume (ML)	Discharge to reuse total effluent volume (ML)
July 2024	3,068	105.4	39.35	55.76
August 2024	2,783	63.2	34.44	51.83
September 2024	2,866	53.2	73.57	12.41
October 2024	2,430	37	0.00	74.16
November 2024	2,402	30.4	0.05	80.81
December 2024	2,100	122.2	0.00	87.57
January 2025	3,116	22	0.00	96.60
February 2025	3,015	22.4	0.00	84.42
March 2025	3,045	18	0.00	94.38
April 2025	3,108	51.4	0.00	93.25
May 2025	3,262	44.4	0.00	101.14
June 2025	3,275	44.0	0.00	98.25
Annual 2024-25	2,871	613.30	147.41	930.57
% of Total Discharge	--	--	13.7%	86.3%

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

52.3 Bypass events

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

52.4 Discharge compliance with permit limits

Table 52-C: Compliance summary

Parameter	Ammonia	BOD ₅	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	5	30	--	15	5	8.5	5	750	30
90th percentile	3	15	--	10	4	--	2	500	20
50th percentile	1	10	--	5	2	--	1	200	10
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	0.9	89.0	0.0	33.6	5.6	7.2	9.5	24,196	570.0
90th percentile	0.9	5.0	0.0	8.6	1.0	7.0	5.7	10	4.0
50th percentile	0.5	5.0	0.0	6.3	1.0	6.9	1.8	10	4.0
Minimum	0.1	5.0	0.0	4.7	1.0	6.7	0.5	10	4.0
EPN limit compliance									
% compliance with maximum	100%	92%	--	92%	92%	100%	83%	92%	92%
% compliance with 90th percentile	100%	92%	--	92%	92%	--	50%	92%	92%
% compliance with 50th percentile	100%	92%	--	25%	92%	--	25%	92%	92%
% compliance with pH range	--	--	--	--	--	100%	--	--	--

Table 52-D: Mass loads to the environment

Mass Loads	EPN limit	Frequency	2024-25 result
Nitrogen (kg)	13140	Annual	1,828.0
Phosphorous (kg)	3212	Annual	448.7
Method	Flow weighted/composite method		

Table 52-E: Performance analysis (discharge to environment)

Effluent compliance parameter	Date(s) of non-compliance	Reasons for non-compliance	Actions to improve performance
Phosphorus	16/07/2024	The plant achieves some degree of biological phosphorous removal, and the phosphorous limits only apply to effluent discharge to environment. Chemical phosphorous removal is available for use if there were issues with the reuse system availability.	No specific actions undertaken in reporting period
BOD	16/07/2024	No known process upsets. Could be attributable to influent loading variations.	
E. coli	16/07/2024		
Nitrogen	16/07/2024		
Oil and Grease	16/07/2024		

No other parameters had exceedances in the reporting period when the STP discharged to water.

52.5 Reuse annual reporting

The Rokeby, Rosny, Cambridge and Richmond STP's supply recycled water for irrigation purposes to the Clarence recycled water scheme (RWS). Currently twenty-six properties in the Coal Valley and Seven Mile Beach area connected to the recycled water scheme. The scheme operates under the current 2019-2024 Environmental Management Plan.

Table 52-F: Reuse Compliance Summary

	BOD5	pH	E. coli
Permit/EPN limit	mg/L	Units	MPN/100ml
Maximum	50	9.0	10,000
90th Percentile	--	--	--
50th Percentile	--	--	1,000
Minimum	--	5.5	--
Samples analysed			
Number required	12	12	12
Number analysed	12	12	12
Statistical summary			
Maximum	50.0	10.3	1,624
90th percentile	39.6	9.4	860
50th percentile	16.5	8.9	228
Minimum	7.0	7.3	20
EPN Limit Compliance			
% compliance with Maximum	100%	--	100%
% compliance with 90th percentile	--	--	--
% compliance with 50th percentile	--	--	92%
% compliance with pH range	--	58%	--

Annual soil sampling was completed at forty-one sites on twenty-three properties across the Clarence 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. Four sites (44MOR, 46LAZ, 51Low, 61GRI, and 62CRA) were added to the 2024-25 soil sampling program. No sites were removed. Annual compliance audits were completed at twenty-four properties during the 2024-25 reporting period. The field component of the audits were completed in conjunction with the soil monitoring program and follow-up correspondence in September 2024. A summary of the findings of the programs is provided in the below table.

Table 52-G: Annual recycled water scheme compliance audit and soil monitoring report summary

Program	Compliance audit	Soil monitoring
Outcomes	<p>Overall compliance level: 86%</p> <p>25% properties fully compliant - 6 out of 24 properties (down from 7).</p> <p>Minor Non-compliance: 66% properties recorded minor non-compliances (up from 49%) - inadequate signage)</p> <p>Seven properties recorded recycled water irrigation outside IEMP requirements (withholding times and/or buffer zones and inadequate fencing of nominated recycled water storage)</p>	<p>Overall, soil health and fertility do not appear to be adversely impacted through recycled water irrigation. From a soil structure perspective, sodicity is the main soil concern, In 2024 average ECse were slightly lower and average Cl levels slightly decreased. Average ECse and Cl levels continue to fluctuate between sampling events. 7% Sites considered saline, 20% considered slightly saline and 73% sites within the recommended range. Average ESP levels in 2024 remained similar to previous years. 29% sites considered sodic, 12% slightly sodic and 59% within the recommended range. No long-term trends have been identified. A review of recycled water quality (salinity and SAR) indicates a very slight risk of soil permeability loss resulting from the application of recycled water and highly unlikely future sodicity issues will develop due to recycled water application.</p> <p>The increasing long-term trend in average P and K continues however average P levels has stabilised in recent years. In 2024 average P was classed high, with average K levels moderate and average S levels considered low-moderate across the scheme. The elevated nutrient levels (average P and K) have been assessed as not directly attributed to the application of recycled water but correlate to other nutrient sources</p>
Comments	<p>Inadequate signage remains the main non-compliance across the scheme.</p> <p>The nine inoperable recycled water supply meters were replaced in 2024-25.</p> <p>TasWater will continue replacing faulty meters in 2025-26. Clarence RWS EMP 2019-2025 is planned for review in and submission 2025-26.</p>	

Key: ECse = Electrical Conductivity at saturation extent, Cl = Chloride, ESP = Exchangeable sodium percentage, P = Phosphorous, K = Potassium, S = Sulphur

RWS Groundwater Status: Amber

The Clarence RWS groundwater monitoring network currently consists of thirty-six monitoring bores across sixteen properties. Four bores (ID's CL-RRPGW9, CL-SHGW2, CL-TGCGW3 and CL-RHCGW4 are associated with recycled water storage dams.

6-monthly sampling was completed at thirty-three bores in July 2024 with annual sampling completed in February 2025 at thirty bores. Three bores across two properties could not be accessed during the annual sampling round. No sampling was completed during the 2024-25 groundwater monitoring event at one property as the bore could not be located.

The 2024-25 groundwater monitoring event report found groundwater chemistry appears to be generally consistent with previous years. The review of the data and recycled water use suggests that overall, the irrigation of recycled water is having no definitive impact on groundwater quality. Of the fifteen properties sampled, two properties recorded no exceedances above the adopted guideline criterion for key analytes. Four properties recorded evidence of an increasing trend (Mann-Kendall test) of at least one key analyte in at least one monitoring bore. Six monitoring bores require repair or maintenance activities. Two bores associated with storages require additional sampling and or maintenance work to investigate trends.

6-monthly sampling will continue at all monitoring bores during the 2025-26 monitoring program. Additional surface water monitoring will be completed at Clarence Recycled Water Storage (Duckhole Dam) to allow for further chemical classification.

52.6 Ambient monitoring program

Table 52-H Program details

Program required	NA – No requirement for ambient monitoring in the reporting period
Status (e.g. commenced, not yet commenced)	NA
Update	NA
Comments	NA

52.7 Groundwater monitoring

No groundwater monitoring program associated with the STP.

52.8 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 79 out of 108 in priority.

52.9 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 assessed as compliant with the 2024-25 SSMP.

Biosolids are removed regularly from site, no stockpiling occurs.

Liquid sludge was received at this site from Midway Point STP during the reporting period. The total sludge volume received at Rokeby STP was 32kL.

Table 52-I: Biosolids sludge classification

Parameter	Number of samples	Maximum (mg/kg)	Mean (mg/kg)	Minimum (mg/kg)	BACC (mg/kg)	Contaminant classification
Arsenic	12	2.3	1.7	1.4	2.2	A
Cadmium	12	0.7	0.6	0.3	0.8	A
Chromium	12	56.6	15.5	9.0	41.7	A
Copper	12	127.0	85.5	55.2	125.3	B
Lead	12	10.2	8.1	6.7	10.7	A
Mercury	12	0.3	0.2	0.0	0.3	A
Nickel	12	21.1	17.3	12.7	22.2	A
Zinc	12	515.0	408.4	287.0	550.5	B

BACC = biosolids adjusted contaminant concentration

Table 52-J: Volume and disposal destination

Quantity (DST)	Average solids content (%)	Stabilisation method	Stabilisation grade	Contamination grade	Biosolids classification	End use destination
342.3	17.3	Hydrated Lime	B	B	2	Whitemarsh Farm, Blue Hills Farm, Coronation Hotel, Thorpe Farm

Notes: DST = Dry solid tonne.

Table 52-K: Liquid sludge transfers received at Rokeby STP

STP transferred from	Volume received (kL)
Midway Point STP	32
TOTAL	32

52.10 Non-compliance with other permit requirements

Table 52-L: EPN non-compliances

EPN condition	Description of non-conformance	Future actions to be taken
EF2 Effluent quality limits for discharge to River Derwent	Discharge compliance with permit limits.	See section 52.4 Discharge compliance with permit limits and Performance Analysis

52.11 Complaints and incident reporting

No complaints were reported during the FY2024-25 reporting period.

Table 52-M: Incident reporting

Date	Category	Details	Mitigation actions
24/12/2024	Odour	Strong sewer odour identified from member of public.	Crews have inspected. Checked surrounding manholes and spoke to neighbouring residents. Checked pump station and investigated. No odour was detected.

52.12 Any other relevant information

Table 52-N: 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 outlines both short- and long-term considerations for the Rokeby STP.

For further information on the Rokeby STP please contact TasWater on 13 6992

www.taswater.com.au