

49. Ridgley STP

49.1 Activity and report details

Activity name	Ridgley STP		
Activity address	Circular Road, East Ridgley		
Permit number	Licence to Operate - 3658	Date of issue	8/12/1980
EPN	9187/1	Date of issue	8/07/2015
Treatment level	Secondary Treatment		
Authorised dry weather flows	110 kL/day		
Key influent source	Residential		
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 49-1: Ridgley STP



49.2 Monitoring and compliance summary

49.2.1 Flow data

Table 49-A: Flow monitoring summary

	Influent	Effluent	Reuse
Location name	Inlet	Pet River	No reuse scheme
Coordinates	E 402910 N 5444235	E 403082 N 5444237	NA
Method of measurement	Level sensor	Estimate based on influent	NA
Date of last calibration/validation (if applicable).	25/10/2024	NA – to be installed	NA

Table 49-B: Annual flow and rainfall data

Month	Average Daily Influent Volume (kL/day)	Rainfall (mm/month) BOM Station ID 91304	Discharge to Waters Total Effluent Volume (ML)	Discharge to Reuse Total Effluent Volume (ML)
July 2024	243	142.8	7.52	--
August 2024	324	202.2	10.05	--
September 2024	524	120	15.73	--
October 2024	228	84.8	7.08	--
November 2024	172	117	5.16	--
December 2024	251	95.8	7.77	--
January 2025	132	47.8	4.10	--
February 2025	115	8.6	3.22	--
March 2025	91	32.8	2.83	--
April 2025	95	40	2.86	--
May 2025	107	53.6	3.33	--
June 2025	145	105.8	4.36	--
Annual 2024-25	203	1051.2	74.00	0.00
% of Total Discharge	--	--	100.0%	0.0%

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

49.3 Bypass events

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

49.4 Discharge compliance with permit limits

Table 49-C: Compliance Summary

	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	18	--	10	2	8.5	4	200	24
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	1.6	23.0	0.0	9.9	1.4	7.3	1.6	1289.0	34.0
90th percentile	1.3	22.4	0.0	4.8	1.4	7.1	0.9	288.0	26.5
50th percentile	0.5	11.5	0.0	3.3	1.0	6.9	0.2	44.5	7.5
Minimum	0.1	5.0	0.0	2.6	1.0	6.5	0.1	10.0	4.0
EPN Limit Compliance									
% compliance with Maximum	100%	83%	--	100%	100%	100%	100%	83%	83%
% compliance with 90th percentile	--	--	--	--	--	--	--	--	--
% compliance with 50th percentile	--	--	--	--	--	--	--	--	--
% compliance with pH range	--	--	--	--	--	100%	--	--	--

Table 49-D: Mass loads to the environment

Mass Loads	EPN Limit	Frequency	2024-25 result
Nitrogen (kg)	--	Annual	313.2
Phosphorous (kg)	--	Annual	21.8
Method	Time weighted/Grab sample method		

Table 49-E: Performance analysis (discharge to environment)

Effluent compliance parameter	Date(s) of non-compliance	Reasons for non-compliance	Actions to improve performance
E. coli	14/05/2025	No known process upsets to explain this non-compliance.	No specific actions taken
BOD	9/01/2025 18/03/2025	No known process upsets to explain this non-compliance. However, elevated algal levels could be linked to elevated BOD and TSS in January and March.	
TSS	9/01/2025 18/03/2025		

No other parameters had exceedances in the reporting period.

49.5 Reuse annual reporting

No Recycled Water Scheme associated with this STP.

49.6 Ambient monitoring program

Table 49-F: Program details

Program	Ridgley STP Ambient Monitoring Plan (AMP) in accordance with EPN 9187/1 conditions and commitments.
Status	Annual, seasonal ambient water quality and biennial seasonal biological monitoring within the Pet River receiving environment.
Update	Annual, seasonal ambient water quality and biennial seasonal biological monitoring completed during the reporting period.
Comments	<p>Ambient water quality monitoring within the Pet River receiving environment was completed in spring (October 2024), summer (January and February 2025) and in autumn (April 2025). Biological (AUSRIVAS macroinvertebrates and algae) monitoring was completed in spring (October 2024) and autumn (March 2025). An Ambient Monitoring Report (AMR) and Biological Monitoring Report (BMR) detailing the results of ambient monitoring have been provided to the EPA. The summarised findings of the AMR and BMR were:</p> <ul style="list-style-type: none"> Physical parameters (temperature, DO, pH) varied between sampling events, but not among sampling sites. Electrical conductivity of the water increased in the vicinity of the outfall and was elevated up to 20 m and sometimes 75 m downstream of the outfall. Minor elevations in turbidity and total suspended solids were noted close to the outfall on occasion. The Ridgley STP effluent discharge did not significantly influence the concentration of pathogen indicator organisms in the receiving environment. Both <i>E. coli</i> and enterococci concentrations were occasionally elevated at the outfall site, but these elevations were minor in comparison to elevations upstream of the outfall and/or at 75 m downstream at other times. It is highly likely that cattle accessing the riverbanks have a significant impact on the pathogen load in the river. The freshwater toxicants ammonia and nitrate were elevated on occasion within the receiving environment (January 2025 and October 2024 respectively) but did not exceed the relevant ANZG toxicant default guideline values (tDGVs) at any time. Nutrient-related ecosystem stressors including ammonia, total nitrogen and total phosphorus were frequently elevated above EPA DGVs for the Emu Catchment at the outfall site, up to 20 m downstream and occasionally to 75 m downstream. The Ridgley STP effluent discharge impacted on nitrate, nitrite and dissolved reactive phosphorus concentrations (above EPA DGVs) in the vicinity of the outfall (at the outfall and up to 20 m downstream) on most sampling occasions. Biological monitoring of sites upstream and downstream of the outfall recorded an increase in macroinvertebrate density and chlorophyll-a biomass downstream compared to upstream, which aligns with the nutrient elevations in the Pet River from the STP effluent discharge. However, no impact from the STP effluent discharge on the diversity and abundance of macroinvertebrate species was evident immediately downstream of the outfall. <p>Ambient monitoring results were similar to those previously undertaken, with nutrient-related ecosystem stressors (nitrate, total nitrogen, total phosphorus) were elevated at the STP outfall and downstream, and BGA was detected downstream of the outfall site. The concentration of pathogen indicator organisms appears unrelated to the quantity and quality of the Ridgley STP effluent discharge, with possible inputs attributed to the local livestock. The Ridgley STP effluent discharge may compromise the Protected Environmental Values within the Pet River especially relating to aquatic ecosystems and livestock drinking water.</p>

49.7 Groundwater monitoring

Site Status: Green (2023-24)

Ridgley groundwater monitoring network consists of two bores. Bore ID RGGW1 is located to the north-east whilst RCGGW2 is located to the east of the STP ponds.

Bi-annual sampling at the standard analytical suite was completed across the network in December 2024 and June 2025 as scheduled.

The 2024-25 groundwater monitoring event report is due in September 2025. Any actions required following a review of the report will be provided by 21 January 2026 in the groundwater Summary Actions Report (SAR).

Sampling is scheduled to reduce to an annual frequency and remain at the standard analytical suite at both bores in the 2025-26 groundwater monitoring program.

49.8 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 57 out of 108 in priority.

49.9 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 assessed as non-compliant with the 2024-25 SSMP due to discrepancies between sludge management details for the AER and SSMP.

There are no longer sludge/biosolids dewatering facilities at this site, with sludge transferred via liquid sludge transport to Wynyard STP. The total volume of sludge removed during the reporting period was 800kL.

Stockpiling no longer occurs at this site.

Table 49-G: Liquid sludge transfers from Ridgley STP

Receiving STP	Volume (kL)
Wynyard STP	800
TOTAL	800

49.10 Non-compliance with other permit requirements

Table 49-G: EPN non-compliances

EPN condition	Description of non-conformance	Future actions to be taken
Q1 Regulatory limits	AWDF limit exceeded during reporting period.	No specific actions planned, Ridgley will be considered under the North West Master Plan.
WM2 Sewage Sludge Management Plan	AER notes sludge dewatered in Geobags, SSMP only refers to transfer to Wynyard. This requires clarification. Ridgley spelt incorrectly	Geobags were a historical component of the plant. Liquid sludge is now transferred to Wynyard and was documented in Table 3-D of the 2024-25 SSMP.

EPN condition	Description of non-conformance	Future actions to be taken
	in Table 22 and Table 3-D – makes searching document difficult	
EM1, EM2 and EM3 Effluent Management: Discharge Management Plan and Reuse Feasibility Study	Discharge Management Plan (DMP) and Reuse Feasibility Study (RFS) overdue.	TasWater acknowledges the non-compliance associated with the DMP & RFS condition. We are working towards the intent of the EPN condition to prioritise discharge risk reduction projects in line with our EPA endorsed Wastewater Risk Management Plan and Price and Service Plan process.
EF2 Effluent quality limits for discharge to water	Discharge compliance with permit limits	See section 49.4 Discharge compliance with permit limits and Performance Analysis
G6 Annual Environmental Review	Found to be non-compliant due to complaints received not reported	All complaints detail to be included in AER 2024-2025

49.11 Complaints and incident reporting

No complaints reported during the reporting period.

Table 49-I: Incident reporting

Date	Category	Details	Mitigation actions
20/08/2024	Disinfection	The UV system went offline due to an electrical issue.	Power restored and UV system online after 8 hours.

49.12 Any other relevant information

Table 49-J Projects or significant operational events that occurred in FY24-25.

Project or significant operational event	Progress
North West Sewerage Master Plan	The North West Sewerage Regional Master Plan has been completed. and outlines both short- and long-term considerations for the Ridgely STP.

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

www.taswater.com.au