16. Cressy STP

16.1 Activity and report details

Activity name	**Cressy STP**		
Activity address	Old Stock Route, off Murfett Street, Cressy		
Permit number	Licence to Operate - 3577	**Date of issue**	22/11/1988
EPN	7264/1	**Date of issue**	27/07/2006
Treatment level	Secondary Treatment		
Authorised dry weather flows	240 kL/day		
Key influent source	Residential		
Contact person	Kate Westgate		
Report author	Luisa Romero (Environmental Scientist)		
Contact details	Environment@taswater.com.au		
Date of submission	30 September 2025		

Figure 16-1: Cressy Sewage Treatment Plant

16.2 Monitoring and compliance summary

16.2.1. Flow data

Table 16-A: Flow monitoring summary

	Influent	Effluent	Reuse
Location name	Inlet	Back Creek	Cressy Reuse Scheme
Coordinates	E505959 N5385487	E506055 N5385672	E504790 N5386503
Method of measurement	In line meter	Estimate based on influent	Estimate based on influent
Date of last calibration/validation (if applicable).	15/11/2024	NA – to be installed	NA – to be installed

Table 16-B: Annual flow and rainfall data

Month	Average daily influent volume (kL/day)	Rainfall (mm/month) BOM Station ID 91375	Discharge to waters total effluent volume (ML)	Discharge to reuse total effluent volume (ML)
July 2024	269	62.6	0.00	8.34
August 2024	257	90.4	0.00	7.97
September 2024	272	67.4	0.00	8.15
October 2024	263	24.8	0.00	8.15
November 2024	200	58.8	0.00	5.99
December 2024	212	66	0.00	6.58
January 2025	185	14.4	0.00	5.72
February 2025	189	16.6	0.00	5.30
March 2025	215	19.4	0.00	6.67
April 2025	192	23	0.00	5.77
May 2025	176	40.8	0.00	5.45
June 2025	235	60	0.00	7.04
Annual 2024-25	222	544.2	0.00	81.13
% of total discharge	--	--	0.0%	100.0%

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

16.3 Bypass events

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

16.4 Discharge compliance with permit limits

Table 16-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	20	50	--	25	10	10	10	--	50
90th percentile	--	--	--	--	--	--	--	--	--
50th percentile	--	--	--	--	--	--	--	1000	--
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	29.5	70.0	0.0	55.0	1.7	9.1	8.1	8164.0	77.0
90th percentile	24.5	54.2	0.0	37.4	1.5	8.9	7.4	1422.0	74.7
50th percentile	13.9	22.5	0.0	25.5	1.1	8.1	6.2	600.0	35.5
Minimum	5.0	5.0	0.0	12.2	1.0	7.3	2.9	10.0	5.5
EPN limit compliance									
% compliance with maximum	75%	83%	--	50%	100%	100%	100%	--	75%
% compliance with 90th percentile	--	--	--	--	--	--	--	--	--
% compliance with 50th percentile	--	--	--	--	--	--	--	75%	--
% compliance with pH range	--	--	--	--	--	100%	--	--	--

Table 16-D: Mass loads to the environment

Mass Loads	EPN limit	Frequency	2024-25 result
Nitrogen	--	Annual	0.0
Phosphorous (kg)	--	Annual	0.0
Method	Time weighted/Grab sample method		

16.4 Discharge compliance with permit limits

No parameters have had exceedances in the FY period as there was no discharge to environment.

16.5 Reuse annual reporting

The Cressy STP supplies treated effluent to the Cressy recycled water scheme (RWS) for irrigation purposes at the Fairbank property.

Table 16-E: Reuse compliance summary

Parameter	BOD5	pH	E coli
Permit/EPN limit	**mg/L**	**Units**	**MPN/100ml**
Maximum	50	10.0	10000
90th percentile	--	--	--
50th percentile	--	--	1000
Minimum	--	5.5	--
Samples analysed			
Number required	12	12	12
Number analysed	12	12	12
Statistical summary			
Maximum	99.0	9.2	1956
90th percentile	88.5	9.1	1072
50th percentile	30.5	7.9	241
Minimum	5.0	7.4	15
Summary of results			
% compliance with maximum	67%	--	100%
% compliance with 90th percentile	--	--	--
% compliance with 50th percentile	--	--	83%
% compliance with pH range	--	100%	--

Table 16-F: Performance analysis (discharge to reuse)

Reuse compliance parameter	Date(s) of elevated parameter	Reasons	Actions to improve performance
BOD	25/06/2025 26/05/2025 6/03/2025 18/02/2025	25/06/2025 decreased lagoon hydraulic retention time and treatment capacity due to wet weather event. Algae is believed to be the primary reason for elevated BOD. Algae is a source of oxygen and is fundamental to lagoon treatment. Most of the non-compliant results were in warmer months when algal blooms occur.	No actions taken

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

Annual soil sampling continued at sites 1D, 2AB and 2D and reestablished in 1C in June 2024 at the Fairbanks property. Sampling ceased at site ID number 1A and continued to not occur due to cessation of irrigation at these paddocks. The field component of the annual compliance audit was completed in conjunction with the soil sampling. A summary of the findings of the two programs is provided in Table 16-H.

Table 16-G: Annual recycled water scheme compliance audit and soil monitoring

Program	Compliance audit	Soil monitoring
Outcomes	Compliant	Site 1D continues to record elevated salinity levels although lower than previous year. Sodicity remains elevated. Elevated levels of two key analytes were recorded across the property and are likely attributed to fertiliser application and not recycled water irrigation due to low irrigation rates in comparison to fertiliser application.
Comments	Previous 2023-24 audit findings regarding signage requirements had been fixed.	

RWS Groundwater Status: Amber

Cressy RWS groundwater monitoring network consists of three groundwater monitoring bores (CRGW2, CRGW4 and CRGW5). Bore ID: CRGW5 is associated with the recycled water storage dam.

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

The 2024-25 groundwater monitoring event recorded elevated concentrations of key analytes at one bore (ID number CRGW2) above adopted assessment criterion. Given the low application rate of recycled water, it is unlikely elevated levels are attributed to recycled water. Bore ID's CRGW4 and 5 reported no evidence of impact from recycled water activities.

Bi-annual sampling is scheduled to continue at monitoring bore ID CRGW2 for the 2025-26 groundwater monitoring program to further investigate the fluctuating and elevated levels. Sampling at bore ID's CRGW4-5 is scheduled to reduce to an annual frequency. All monitoring will be at the standard analytical site.

16.6 Ambient monitoring program

Table 16-H: Program details

Program	No ambient monitoring required under EPA permit variation 18/01/2024.
Status	No ambient monitoring required under EPA permit variation.
Update	No ambient monitoring undertaken during the reporting period.
Comments	No ambient monitoring undertaken during the reporting period.

16.7 Groundwater monitoring

Site Status: Green

Cressy groundwater monitoring network consists of one bore (ID: CRGW1) located to the north of the STP.

One round of sampling was completed (annual) in May 2025. The scheduled 6-monthly sampling (scheduled November 2025) was unable to be completed due to access restrictions (cropped paddocks and fooding).

The 2024-25 groundwater monitoring event recorded no sign of STP impact to groundwater. A data gap in the monitoring network was identified to the east of the STP.

Bi-annual sampling at the standard analytical suite is scheduled to continue for the 2024-25 groundwater monitoring program.

16.8 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 42 out of 108 in priority. Actions in the period included:

- Field investigations and defect resolution are ongoing.

16.9 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 compliant with the 2024-25 SSMP.

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

Table 16-I: Desludging status and comments

Desludging status	Comments
Low priority	Desludging of Lagoon 1 was completed in 2024. Lagoons 1 and 2 are currently low priority - unlikely to require desludging again for another 10 to 20 years.

16.10 Non-compliance with other permit requirements

Table 16-J: EPN non-compliances

EPN condition	Description of non-conformance	Future actions to be taken
36 Effluent Quality limits	Discharge compliance with the environmental compliance limits	See section 16.4
38 Wastewater Re-use	Discharge compliance with reuse permit limit	See section 16.5 Reuse Annual Reporting and Performance Analysis

16.11 Complaints and incident reporting

No incidents were received during the 2024-25 reporting period.

Table 16-K: Complaints reporting

Date	Category	Details	Mitigation actions
08/10/2024 28/10/2024 29/10/2024 31/10/2024 06/11/2024	Odour	Strong odour from lagoons	A pump and tubing were installed in the outlet reuse pump station wet well. This pump returned the Lagoon 2 effluent to Lagoon 1, increasing circulation/ mixing through the system and increasing the biomass in Lagoon 1.

1.1. Any other relevant information

Table 16-L: Projects or significant operational events that occurred in FY 2024-25

Project or significant operational event	Progress
Meander Tamar Sewerage Regional Master Plan	The Meander Tamar Sewerage Regional Master Plan has been completed and includes the short term and long-term considerations for the Cressy STP with the ultimate decommissioning of the STP and transfer of sewage to the Longford STP.

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

www.taswater.com.au