

12. Campania STP

12.1 Activity and report details

Activity name	Campania STP		
Activity address	Colebrook Road, Campania		
Permit number	Licence to Operate - 5025	Date of issue	23/12/1996
EPN	7986/1	Date of issue	7/03/2018
Treatment level	Secondary Treatment		
Authorised dry weather flows	136 kL/day		
Key influent source	Residential		
Contact person	Kate Westgate		
Report author	George Fitzgibbon		
Contact details	Environment@taswater.com.au		
Date of submission	30 September 2025		

Figure 12-1: Campania Sewage Treatment Plant



12.2. Monitoring and compliance summary

12.2.1. Flow data

Table 12–A: Flow monitoring summary

	Influent	Effluent	Reuse
Location name	Wet Well Lagoon	Native Hut Rivulet (Emergency Only)	Effluent Reuse Scheme – Ag Irrigation (Workman Property)
Coordinates	E 535149 N 5276951	E 535193 N 5277065	E 535254 N 5276943
Method of measurement	In Line meter	Influent less Reuse	In Line Meter
Date of last calibration/validation (if applicable).	26/08/2024	NA – To be installed	26/08/2024

Table 12–B: Annual flow and rainfall data

Month	Average daily influent volume (kL/day)	Rainfall (mm/month) BOM Station ID 94212	Discharge to waters total effluent volume (ML)	Discharge to reuse total effluent volume (ML)
July 2024	171	81.2	1.06	4.24
August 2024	149	71.2	0.92	3.69
September 2024	222	49.4	0.00	6.65
October 2024	180	30.4	0.56	5.02
November 2024	104	21.8	0.00	3.12
December 2024	199	122.8	0.62	5.56
January 2025	168	17	0.00	5.21
February 2025	147	29.6	0.00	4.10
March 2025	139	7.4	0.86	3.46
April 2025	144	39.2	0.58	3.75
May 2025	149	44.2	0.00	4.62
June 2025	182	40.2	0.55	4.91
Annual 2024–25	163	554.4	5.15	54.32
% of total discharge	--	--	8.7%	91.3%

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

12.3. Bypass events

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

12.4. Discharge compliance with permit limits

Table 12-C: Discharge compliance with permit limits

	Ammonia as N	BOD ₅	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	--	30	--	40	10	8.5	10	2,000	40
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	30.6	107.0	0.0	49.7	3.8	9.0	9.8	24,196	103.0
90th percentile	26.1	92.6	0.0	46.7	3.3	8.8	9.7	24,196	86.7
50th percentile	19.2	73.0	0.0	35.3	2.1	8.2	8.1	6,019	56.0
Minimum	7.0	18.0	0.0	26.1	1.0	7.1	5.2	327	15.5
EPN limit compliance									
% compliance with maximum	--	8%	--	67%	100%	75%	100%	25%	25%
% compliance with 90th percentile	--	--	--	--	--	--	--	--	--
% compliance with 50th percentile	--	--	--	--	--	--	--	--	--
% compliance with pH range	--	--	--	--	--	75%	--	--	--

Table 12-D: Mass loads to the environment

Mass Loads	EPN limit	Frequency	2024-25 result
Nitrogen (kg)	--	Annual	187.5
Phosphorous (kg)	--	Annual	39.7
Method	Time weighted/Grab sample method		

Table 12-E: Performance analysis (discharge to environment)

Effluent compliance parameter	Date(s) of non-compliance	Reasons for non-compliance	Actions to improve performance
BOD	24/07/2024 23/08/2024 6/09/2024 18/10/2024 13/12/2024	13/01/2025 24/02/2025 20/03/2025 3/04/2025 20/05/2025 11/06/2025	The plant is currently overloaded. Desludging of Lagoon 1 and 2 has been completed in October 2024. Approximately 100 Dry Solid Tonnes removed into geo-bags on site.
E. coli	24/07/2024 6/09/2024 18/10/2024 13/12/2024	24/02/2025 20/03/2025 3/04/2025 20/05/2025 11/06/2025	
pH	24/07/2024 13/01/2025 20/05/2025		
TSS	24/07/2024 6/09/2024 13/12/2024 13/01/2025	24/02/2025 20/03/2025 3/04/2025 20/05/2025	

Effluent compliance parameter	Date(s) of non-compliance	Reasons for non-compliance	Actions to improve performance
	11/06/2025		
Nitrogen	24/07/2024 24/02/2025 3/04/2025 20/05/2025		

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

No other parameters had exceedances in the reporting period.

12.5. Reuse annual reporting

The Campania recycled water scheme is located directly south of the STP and consists of one customer where recycled water is used for pasture irrigation.

Table 12-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			
Max	67.0	9.7	4,214
90th percentile	63.7	9.5	1,551
50th percentile	30.5	7.7	330
Min	5.0	7.1	10
EPN Limit Compliance			
% compliance with Maximum	75%	--	100%
% compliance with 90th percentile	--	--	--
% compliance with 50th percentile	--	--	75%
% compliance with pH range	--	83%	--

Table 12-G: Performance analysis (discharge to reuse)

Reuse compliance parameter	Date(s) of non-compliance	Reasons for non-compliance	Actions to improve performance
BOD	11/06/2025 8:17 20/03/2025 8:25 24/02/2025 10:22	See Table 12-E	See Table 12-E
pH	20/03/2025 8:25 24/02/2025 10:22		

There were no other exceedances in the reporting period when the STP was discharging to reuse.

The soil sampling was completed at the two long-term soil monitoring sites (Site 1 and Site 2) in December 2024. The field component of the annual compliance audit was completed in conjunction with the soil monitoring. A summary of the findings is provided in Table 12-H.

Table 12-H: Annual recycled water scheme compliance audit and soil monitoring

Program	Compliance audit	Soil monitoring
Compliance status / summary	Non-compliant: No IEMP Historic ongoing non-compliance issues regarding buffer zones, inadequate barriers and signage.	All analytes similar to previous years' levels. Median salinity and SAR levels of the recycled water supplied to the scheme indicate a slight to moderate risk of soil permeability loss from recycled water irrigation.
Comments	TasWater currently reviewing options regarding sustainability of the scheme.	

Notes: IEMP = Irrigation Environmental Management Plan, SAR = sodium adsorption ratio

RWS Groundwater Site Status: Amber

The Campania RWS groundwater monitoring network consists of one bore (ID # CATGW1) which is located up-gradient of the STP and down-gradient to the recycled water irrigation area.

Annual sampling at the standard analytical suite was completed at bore ID CATGW1 in March 2025 as scheduled. The 2024-25 groundwater monitoring event report recorded increasing concentrations of nitrate (N) and total nitrogen but are unlikely linked to recycled water irrigation due to the low application of recycled water.

Annual sampling at the standard analytical suite is scheduled to continue in the 2025-26 sampling program.

12.6. Ambient monitoring program

Table 12-I: Program details

Program	Seasonal ambient monitoring as required under EPA permit variation (18/01/2024).
Status	Ambient monitoring completed.
Update	Monitoring conducted as required by EPA.
Comments	Ambient water quality monitoring occurred during discharges to the Native Hut Rivulet receiving environment. Discharge to the environment occurred in 6 months of the year however the monitoring is only completed between July-December and again in May and June annually so some of the discharge events were not monitored. Key findings from the ambient water quality data review were: <ul style="list-style-type: none"> The toxicant default guideline value (tDGV) for ammonia was exceeded at the downstream sample site on two monitoring occasions during discharge events in May and June.

- Total nitrogen was significantly elevated downstream compared to upstream in June and exceeded the DGV of the Pittwater – Coal catchment. Other than June, there was no obvious difference between upstream and downstream nitrogen levels.
- Except for total phosphorus levels in December and June, all results, both upstream and downstream exceeded the DGV. The downstream site significantly exceeded the DGV during June.
- Enterococci results at all sites exceeded the EPA low risk guideline value for recreational contact. Enterococci concentrations downstream generally follow the upstream fluctuations. In October and November enterococci levels were high at the upstream site (>24,196 and 3,448 MPN/100mL respectively) indicating that pathogens are entering the rivulet from other sources. The downstream result from June was high (2,553 MPN/100mL) and the effluent result was also high (6,867 MPN/100mL) indicating that the effluent was having an impact during that discharge event.

12.7. Groundwater monitoring

Site status: Green

The Campania STP groundwater monitoring network consists of three monitoring bores. Bore ID's CATGW2 and CATGW3 are located immediately north of the lagoons. Bore ID CATGW4 is located immediately east. All bores are downgradient of the STP.

6-monthly sampling, at the standard analytical suite was completed at all three monitoring bores (ID's CATGW2-4) in October 2024 and February 2025 as scheduled.

The 2024-25 groundwater monitoring event recorded increasing trends in the concentrations of total phosphorous and nitrogen analytes was recorded within the network during the 2024-25 monitoring event.

6-monthly sampling, at the standard analytical suite is scheduled to continue across all three monitoring bores (ID's CATGW2-4) in the 2025-26 sampling program.

12.8. 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 2022 to prioritise I&I investigation and works state-wide. This catchment was ranked 69 out of 108 in priority.

12.9. 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 two treatment lagoons, which will be periodically desludged as required.

Table 12-J: Desludging status and comments

Desludging status	Comments
Low Priority	Desludging of Lagoons 1 and 2 was completed in October 2024. These lagoons will not require desludging for another 10-20 years.

Table 12-K: Stockpile comments

Stockpile onsite	Volume of stockpile
Sludge from Lagoons 1 and 2 is contained in a Geobag onsite	Currently one full Geobag of sludge is stored onsite in a temporary laydown area. Approximate volume of sludge contained in the Geobag is 450m ³ . Once suitably dried, the sludge will be tested, classified and applied to farmland – providing biosolids meet Class 2 requirements.

12.10. Non-compliance with other permit requirements

Table 12-L: EPN non-compliances

EPN condition	Description of non-conformance	Future actions to be taken
EF4 Effluent quality limits for discharge to Native Hut Rivulet	Discharge compliance with permit limits	See section 12.4 Discharge compliance with permit limits and Performance Analysis
EF2 Effluent quality limits for discharge to a reuse scheme	Discharge compliance with reuse permit limits	See section 12.5 Reuse Annual Reporting and Performance Analysis

12.11. Complaints and incident reporting

No complaints or incidents received during 2024–25 reporting period.

12.12. Any other relevant information

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

www.taswater.com.au