

55. Scamander STP

55.1 Activity and report details

Activity name	Scamander STP		
Activity address	Coach Road, Scamander		
Permit number	Licence to Operate - 5774	Date of issue	1/06/1992
EPN	9243/1	Date of issue	19/07/2016
Treatment level	Secondary Treatment		
Authorised dry weather flows	240 kL/day		
Key influent source	Residential		
Contact person	Kate Westgate		
Report author	Luis Romero (Environmental Scientist)		
Contact details	Environment@taswater.com.au		
Date of submission	30 September 2024		

Figure 55 -1: Scamander Sewage Treatment Plant



55.2 Monitoring and compliance summary

55.2.1 Flow data

Table 55-A: Flow monitoring summary

	Influent	Effluent	Reuse
Location name	Inlet	Wrinklers Lagoon (emergency)	Scamander Golf Course
Coordinates	E 604659 N 5411189	E 605100 N 5409600	E 604836 N 5411096
Method of measurement	In line meter	Influent less reuse	In line meter
Date of last calibration/validation (if applicable).	13/07/2022	NA – to be installed	14/06/2024

Table 55-B: Annual flow and rainfall data

Month	Average daily influent volume (kL/day)	Rainfall (mm/month) BOM Station ID 92014	Discharge to waters total effluent volume (ML)	Discharge to reuse total effluent volume (ML)
July 2023	123	16.2	0.00	3.29
August 2023	109	35.8	0.00	2.38
September 2023	118	8.2	0.00	5.58
October 2023	114	42.6	0.00	2.79
November 2023	129	59.4	0.00	3.00
December 2023	176	108.2	0.00	4.08
January 2024	170	17.6	0.00	4.50
February 2024	134	85.0	0.00	6.07
March 2024	160	47.8	0.00	3.49
April 2024	149	51.8	0.00	2.35
May 2024	164	135.2	0.00	0.66
June 2024	149	35.4	0.00	5.63
Annual 2023–24	142	643.2	0.00	43.81
% of total discharge	--	--	0.0%	100.0%

* No BOM rainfall data available for this month.

2023–24 monthly flow data was submitted directly to the EPA.

55.3 Bypass events

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

55.4 Discharge compliance with permit limits

As this site did not discharge to the environment, no compliance samples were taken.

55.5 Reuse annual reporting

The Scamander STP supplies treated effluent for irrigation proposes to the Scamander recycled water scheme (RWS) located at the Scamander Golf Course and includes an emergency irrigation area.

Table 55-C: Reuse compliance summary

Parameter	BOD5	pH	E coli
Permit/EPN limit	mg/L	Units	MPN/100ml
Maximum	50	9.5	10000
90th percentile	--	--	--
50th percentile	--	--	1000
Minimum	--	5.5	--
Samples analysed			
Number required	12	12	12
Number analysed	12	12	12
Statistical summary			
Maximum	17	10.4	663
90th percentile	17	9.4	376
50th percentile	5	7.7	104
Minimum	5	7.1	10
Summary of results			
% compliance with Maximum	100%	--	100%
% compliance with 90th percentile	--	--	--
% compliance with 50th percentile	--	--	100%
% compliance with pH range	--	92%	--

Table 55-D: Performance analysis (Discharge to reuse)

Reuse compliance parameter	Date(s) of non-compliance	Reasons for non-compliance	Actions to improve performance
pH	5/02/2024	Algae is the primary reason for elevated pH. Algae is a source of oxygen and is fundamental to lagoon treatment. The non-compliant result was during a warmer month when algal blooms typically occur.	No specific actions

No other parameters have had exceedances in the FY period.

Annual soil sampling was completed at two sites (F1 and F2) at the Scamander Golf course, and two sites (EM1 and EM2) at the emergency irrigation area at the RWS in April

2024. The field component of the annual compliance audit was completed in conjunction with the soil sampling with a follow-up phone audit in May 2024. A summary of the findings of the programs is provided in Table 55-E.

Table 55-E: Annual recycled water scheme compliance audit and soil monitoring summary

Program	Compliance audit	Soil monitoring
Compliance status	Partial compliance Inadequate restriction of public access to irrigation areas (Golf Course and emergency irrigation area)	Soil salinity increased at site F1 which is now slightly above the recommended range. All sites remain within the recommended range. Soil sodicity remains elevated at all sites and within the previously observed ranges. Nutrient levels remain low across all sites and consistent with historical levels.
Comments	Emergency irrigation area is not accurately represented in the Irrigation and Environmental Management Plan and is not fenced but is well signed. No barrier on along Coach Road at golf course, (IEMP suggests a roped fence and signage installed at likely entry points to the golf course) and was considered a very low risk in compliance audit	Soil sodicity remains main concern across the scheme though the risk of soil degradation is considered limited due to the presence of sandy soils which sodium readily leaches.

Groundwater RWS site status: Amber

The Scamander RWS groundwater monitoring network consists of 5 bores, ID numbers SCRGW1-3, and SCRGW5 and SCRGW6. The second (annual) sampling round was not completed. TasWater has put measures in place for the 2024-25 sampling program to address scheduling and resourcing delays experienced in recent years.

Previous monitoring has noted increasing trends across several parameters at bore ID SCRGW6 and above concentrations adopted guideline criterion. Groundwater sampling methodology remains a concern at this site if trends are to be assessed adequately.

Sampling is scheduled to increase to biannual sampling during the 2024-25 groundwater monitoring program.

55.6 Ambient monitoring program

Table 55-F: Program details

Program	No requirement for ambient monitoring in the reporting period
Status	No discharge occurred during reporting period.
Update	No discharge occurred during reporting period.
Comments	NA

55.7 Groundwater monitoring

Site status: Amber – (2022-23 report)

Scamander STP groundwater monitoring network consists of one monitoring bore, ID number SCGW1, located to the east of the STP. One round of sampling (6-monthly) was completed in May 2024. The second (annual) sampling round was not completed. TasWater has put measures in place for the 2024–25 sampling program to address scheduling and resourcing delays experienced in recent years.

Following delays, the 2023–24 report will be finalised and available in October 2024. Any actions to address identified potential issues will be determined following the hydrogeological review. Previous monitoring has identified signs of STP impact to groundwater through elevated concentrations of ammonia and total nitrogen above the adopted guideline criterion though no trends have been identified in key analytes. Addressing the spatial gap in the groundwater monitoring network and increased monitoring frequency has been highlighted as actions to add confidence to the dataset and trend analysis.

Biannual sampling is scheduled to resume in the 2024–25 groundwater monitoring program.

55.8 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. Update to the actions completed will be provided in the next revision due September 2024.

A Multi Criteria Assessment was undertaken by TasWater in 2024 to prioritise I&I investigation and works state-wide. This catchment was ranked 103 out of 108 in priority.

55.9 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 2023–24 SSMP.

Table 55–G Desludging status and comments

Desludging status	Comments
High Priority	Dried sludge in lagoon 1 has been tested and classified as Class 2 biosolids and is scheduled to be disposed of to farmland in 2024–25.

Table 55H: Stockpile comments

Stockpile onsite	Volume of stockpile
Stockpile in lagoon 1 (currently offline)	Dried sludge stored in lagoon 1 has been tested and classified as Class 2 biosolids and is scheduled to be disposed of to farmland in 2024–25. Estimated sludge volume is 1500m ³ .

55.10 Non-compliance with other permit requirements

Table 55I-: EPN non-compliances

EPN condition	Description of non-conformance	Future actions to be taken
G8 Wastewater Reuse EMP	No evidence of Wastewater Reuse EMP review submission to EPA since 2014.	Reuse EMP scheduled for review FY2024-25.

55.11 Complaints and incident reporting

No Incidents and complaints were reported during the FY2023-24.

55.12 Any other relevant information

For further information on the Scamander STP please contact TasWater on 13 6992 www.taswater.com.au