

61. Somerset STP

61.1 Activity and report details

Activity name	Somerset		
Activity address	Bass Highway, Somerset		
Permit number	Licence to Operate - 3301	Date of issue	8/08/1988
EPN	9186/1	Date of issue	21/07/2015
Treatment level	Secondary Treatment		
Authorised dry weather flows	1200 kL/day		
Key influent source	Residential/Industrial		
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 61-1: Somerset Sewage Treatment Plant



61.2 Monitoring and compliance summary

61.2.1 Flow data

Table 61-A: Flow monitoring summary

	Influent	Effluent	Reuse
Location name	Plant Influent	Bass Strait	No reuse scheme
Coordinates	E 399599 N 5457534	E 399709 N 5457768	NA
Method of measurement	In line meter	Estimation based on influent	NA
Date of last calibration/validation (if applicable).	08/07/2024	NA – to be installed	NA

Table 61-B: Annual flow and rainfall data

Month	Average daily influent volume (kL/day)	Rainfall (mm/month) BOM Station ID 91355	Discharge to waters total effluent volume (ML)	Discharge to reuse total effluent volume (ML)
July 2024	1,356	131.6	54.37	--
August 2024	1,820	192.6	62.94	--
September 2024	1,854	133.8	61.17	--
October 2024	1,395	84	51.43	--
November 2024	1,218	124.8	36.54	--
December 2024	1,372	75	42.53	--
January 2025	961	20.4	29.79	--
February 2025	851	5	23.83	--
March 2025	820	28.6	25.42	--
April 2025	791	38.4	23.73	--
May 2025	865	41.4	26.80	--
June 2025	959	72.2	28.77	--
Annual 2024-25	1,191	947.8	467.32	0.00
% of total discharge	--	--	100.0%	0.0%

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

61.3 Bypass events

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

61.4 Discharge compliance with permit limits

Table 61-C: Compliance summary

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	11	80	--	19	3	8.5	6	1000	60
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	19.8	62.0	0.0	26.3	3.3	7.3	10.5	24196	14.5
90th percentile	17.5	29.4	0.0	22.1	1.0	7.3	8.4	24196	10.5
50th percentile	3.4	5.5	0.0	8.1	1.0	7.0	5.3	24196	4.3
Minimum	0.1	5.0	0.0	3.4	1.0	6.7	0.1	2755	4.0
EPN limit compliance									
% compliance with maximum	83%	100%	--	83%	92%	100%	58%	0%	100%
% compliance with 90th percentile	--	--	--	--	--	--	--	--	--
% compliance with 50th percentile	--	--	--	--	--	--	--	--	--
% compliance with pH range	--	--	--	--	--	100%	--	--	--

Table 61-D: Mass loads to the environment

Mass Loads	EPN limit	Frequency	2024-25 result
Nitrogen (kg)	--	Annual	5045.8
Phosphorous (kg)	--	Annual	2357.3
Method	Time weighted/grab sample method		

Table 61-E: Performance analysis (discharge to environment)

Effluent compliance parameter	Date(s) of non-compliance			Reasons for non-compliance	Actions to improve performance
Ammonia	25/09/2024 9/01/2025			High ammonia and nitrogen on 25/09/2024 are likely attributable to the aerator failure in the south pasveer ditch on 19/09/2024. Fluctuations in influent loading could have resulted in the 9/01/2025 exceedance.	Temporary aerator installed while primary aerator was sent away for repairs. Inflow rate to south pasveer ditch was reduced to 20% while the primary aerator was being repaired.
Nitrogen	25/09/2024 9/01/2025				
E. coli	9/07/2024 22/08/2024 25/09/2024 16/10/2024	21/11/2024 5/12/2024 9/01/2025 6/02/2025	18/03/2025 10/04/2025 14/05/2025	No disinfection process for pathogen removal.	No specific actions.
Oil and Grease	25/09/2024			Fluctuations in influent loading, or trade waste, could have resulted in the OG exceedance.	No specific actions.
Phosphorus	9/07/2024 9/01/2025		10/04/2025 14/05/2025	No chemical or biological phosphorus removal process.	No specific actions.

No other parameters had exceedances in the reporting period.

61.5 Reuse annual reporting

No Recycled Water Scheme associated with this STP.

61.6 Ambient monitoring program

Table 61-F: Program details

Program	NA – No requirement for ambient monitoring in the reporting period.
Status	NA
Update	NA
Comments	NA

61.7 Groundwater monitoring

No groundwater monitoring program associated with the STP.

61.8 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 66 out of 108 in priority.

61.9 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.

Sludge at this STP is captured within the sludge holding lagoon, with sludge frequently transferred via liquid sludge transport to Wynyard STP. The total volume of sludge removed during the reporting period was 1647kL.

No stockpiling occurs at this site.

Table 61-G: Liquid sludge transfers from Somerset STP

Receiving STP	Volume (kL)
Wynyard STP	1647
TOTAL	1647

61.10 Non-compliance with other permit requirements

Table 61-H: EPN non-compliances

EPN condition	Description of non-conformance	Future actions to be taken
Effluent quality limits for discharge to water	Discharge compliance with permit limits.	See section 61.4 Discharge compliance with permit limits and Performance Analysis
EM1, EM2 & EM3 Effluent Management, Reuse Feasibility Study and Discharge Management Plan	Reuse Feasibility Study and Discharge Management Plan overdue.	TasWater acknowledges the non-compliance associated with the DMP 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.
Groundwater Monitoring	Installation of groundwater monitoring bores as per groundwater monitoring plan.	TasWater acknowledges the non-compliance and are working towards the installation of these bores in 2025-26.

61.11 Complaints and incident reporting

There were no complaints received during the reporting period.

Table 61-I: Incident Reporting

Date	Category	Details	Mitigation actions
28/09/2024	Mechanical	WAS pumps were not turned off. Therefore, some septic sludge has mixed in with the RAS / supernatant return system.	Temporarily ceasing decanting to the outfall. Adjusting the plant to 'settle' mode with minimum aeration until septic sludge settles out.
19/09/2024	Mechanical	Aerator offline.	Reduced flow in one SBR while until replacement aerator installed.

61.12 Any other relevant information

Table 61-J: Projects or significant operational events that occurred in FY 2024-25

Project or significant operational event	Progress
Wynyard and Somerset Regional Master Plan	Proposed regional master planning strategic options for Somerset include rationalisation of the STP with transfer of flows to Wynyard.

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

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