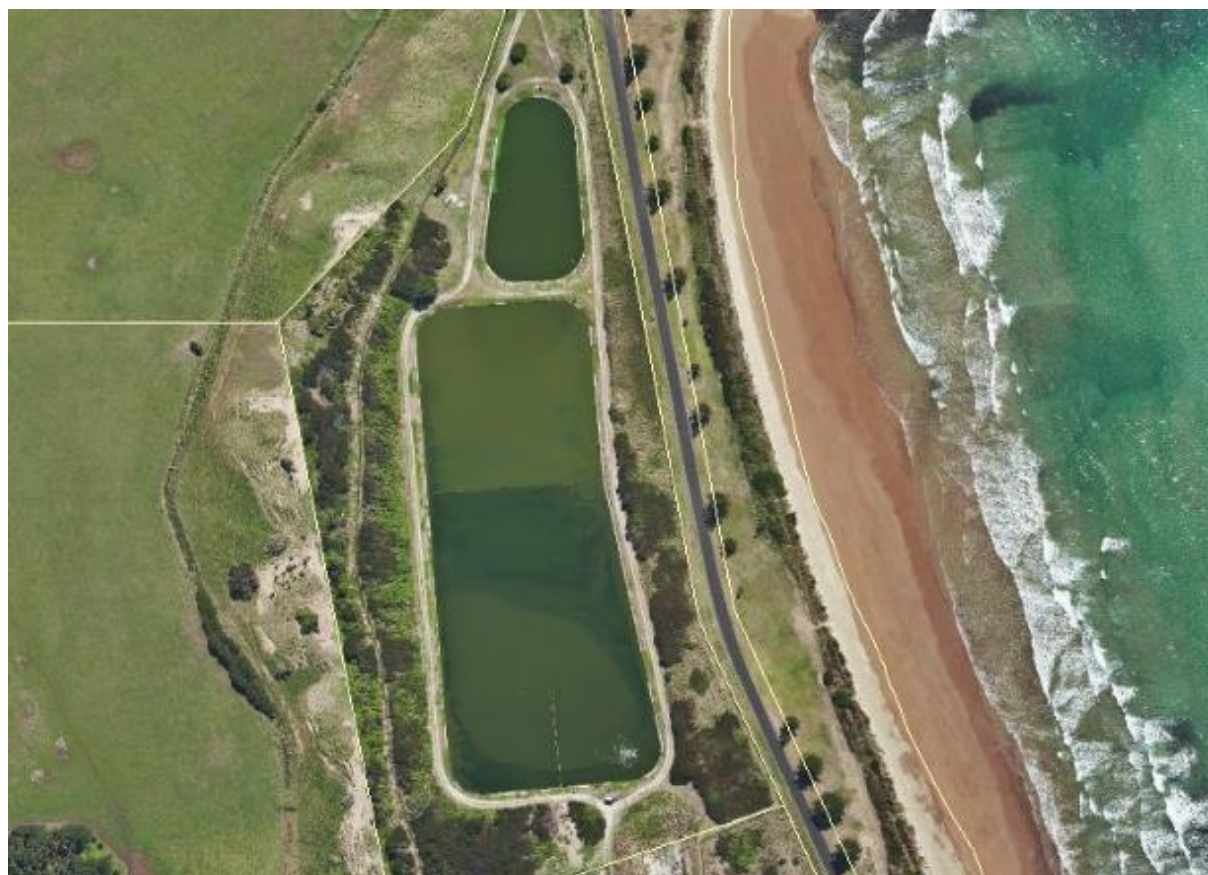


65 Stanley STP

65.1 Activity and report details

Activity name	Stanley STP		
Activity address	Green Hills Rd, Stanley		
Permit number	Licence to Operate - 3303	Date of issue	17/11/1986
EPN	9193/1	Date of issue	19/05/2015
Treatment level	Secondary Treatment		
Authorised Dry Weather Flows	276 kL/day		
Key Influent Source	Residential		
Contact person	Kate Westgate		
Report author	Jayden Taylor		
Contact details	Environment@taswater.com.au		
Date of submission	30 September 2023		

Figure 65-1: Stanley Sewage Treatment Plant



65.2 Monitoring and compliance summary

65.2.1 Flow data

Table 65-A: Flow monitoring summary

	Influent	Effluent	Reuse
Location Name	Plant Influent	Bass Strait	No reuse scheme
Coordinates	E 355916 N 5487049	E 356263 N 5487655	NA
Method of Measurement	In line meter	Estimate based on influent	NA
Date of last Calibration/Validation (if applicable).	17/07/23	NA	NA

Table 65-B: Annual flow and rainfall data

Month	Average Daily Influent Volume (kL/day)	Rainfall (mm/month) BOM Station ID 91034	Discharge to Waters Total Effluent Volume (ML)	Discharge to Reuse Total Effluent Volume (ML)
July 2022	181	64.4	5.61	--
August 2022	230	214.2	7.12	--
September 2022	223	100.8	6.68	--
October 2022	261	198.6	8.08	--
November 2022	248	98.8	7.45	--
December 2022	205	24.4	6.34	--
January 2023	205	17.0	6.35	--
February 2023	201	37.4	5.63	--
March 2023	196	86.2	6.09	--
April 2023	181	77.4	5.42	--
May 2023	164	116.0	5.10	--
June 2023	185	265.6	5.54	--
Annual 2022-23	207	1300.8	75.41	--
% of Total Discharge	--	--	100.0%	--

2022-23 monthly flow data was submitted directly to the EPA.

65.2.2 Bypass events

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

65.3 Discharge compliance with permit limits

Table 65-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	22	50	1.0	35	10	9.0	10	1000	--
90th percentile	--	--	--	--	--	--	--	--	--
50th Percentile	--	--	--	--	--	--	--	--	--
Minimum	--	--	--	--	--	6.5	--	--	--
Samples analysed									
Number required	12	12	12	12	12	12	12	12	12
Number analysed	12	12	0	12	12	12	12	12	12
Statistical summary									
Max	13.7	129	--	30.4	2.7	9.0	8.9	8664	183.0
90th percentile	12.2	122	--	23.3	2.6	8.9	8.5	2478	97.5
50th percentile	4.9	86	--	19.1	1.6	8.4	6.8	883	63.5
Min	0.2	29	--	13.4	1.0	7.4	4.7	253	12.4
EPN Limit Compliance									
% compliance with Maximum	100%	25%	--	100%	100%	--	100%	58%	--
% compliance with 90th percentile	--	--	--	--	--	--	--	--	--
% compliance with 50th percentile	--	--	--	--	--	--	--	--	--
% compliance with pH range	--	--	--	--	--	92%	--	--	--

Table 65-D: Mass loads to the environment

Parameter	EPN Limit	Frequency	2022-23 result
Nitrogen (kg)	--	Annual	1482.0
Phosphorous (kg)	--	Annual	504.7
Method	Time weighted/Grab sample method		

Table 65-E: Performance Analysis (Discharge to environment)

Effluent compliance parameter	Date(s) of non-compliance	Reasons for non-compliance	Actions to improve performance
BOD	2/08/2022	Likely cause of non-compliance is wet weather.	Lagoon assessment completed by external environmental engineering consultant. Investigate options through future strategy.
	8/11/2022	Algae is believed to be the primary reason for elevated pH and BOD. Algae is a source of oxygen and is fundamental to lagoon treatment.	
	7/03/2023		
	13/12/2022		
	18/04/2023		
10/01/2023	23/05/2023		
14/02/2023	13/06/2023		
pH	8/11/2022		
E. coli	5/07/2022	Short lagoon HRT as well as limited control in the chlorine dosing is likely to be the cause of non-compliant E. coli.	
	7/03/2023		23/05/2023
	18/04/2023		13/06/2023

No other parameters had exceedances in the reporting period.

65.4 Reuse Annual Reporting

No Recycled Water Scheme associated with this STP.

65.5 Ambient monitoring program

Table 65-F: Program details

Program	Stanley AMP
Status	No requirement for ambient monitoring in the reporting period.
Update	No ambient monitoring conducted during the reporting period.
Comments	NA

65.6 Groundwater monitoring

Site status: Amber – Potential STP impact

Stanley STP groundwater monitoring network consists of five monitoring bores, ID numbers SYGW2, SYGW3 and STGW5-7. Sampling was completed at all bores during low tide in November 2022.

Limited sign of STP impact as ammonia and total phosphorus concentration have decreased below adopted guideline limits at bore ID SYGW2. Exceedance of nitrate and nitrogen at bore ID SYGW5. Exceedance of total phosphorus at bore ID's SYGW6 and SYGW7. Increasing trends were identified at bore ID SYGW5 for total nitrogen and nitrate analytes.

Biannual sampling at the extended analytical suite across the network at low tide is scheduled for the 2023-24 groundwater monitoring program. Annual sampling of STP is scheduled for completion at low tide in 2023-24.

65.7 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 2022 to prioritise I&I investigation and works state-wide. This catchment was ranked 32 out of 79 in priority.

65.8 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 2022-23 SSMP.

No stockpiling occurs at this site.

Table 65-G: Desludging status and comments

Desludging Status	
Medium Priority	Desludging scheduled to occur in 2026, as per the current prioritisation planning schedule.

65.9 Non-compliance with other permit requirements

Table 65-H: EPN non-compliances

EPN Condition	Description of non-conformance	Future Actions to be taken
EF2 Effluent quality limits for discharge to water	Discharge compliance with permit limits.	See section 65.3 Discharge compliance with permit limits and Performance Analysis.
EM2 Wastewater Reuse EMP Review	No evidence of Wastewater Reuse EMP review submission to EPA.	Desktop RFS study completed and under review by Asset Strategy. No Reuse EMP action planned until SBC decided for Stanley STP.
EM3 Discharge Management Plan & EM1 Effluent Management	Discharge Management Plan overdue.	Plan in development for DMP submission dates following on from agreed format between TasWater and EPA.
OP2 Operational Procedures and Maintenance Manual	No contemporary Operational Procedures Manual.	New SharePoint based solution for OPMMs currently being developed. First version to be implemented by FY24.
WM2 Lagoon Sludge Removal	Lagoons must be desludged within 12 months of the date on which EPN takes effect.	Desludging scheduled to occur in 2026, as per the current prioritization planning schedule.
EF4 WWTP Improvement Works	Inlet screening and aeration equipment installed by 30 November 2016.	Upgrade options currently being investigated. No timeframe for completion.
EF3 Installation and Commissioning of Disinfection Equipment and Bacteriological and Chlorine Effluent Quality Limits.	No ambient monitoring plan provided by 30 June 2016. No implementation plan for the installation and commissioning of effluent disinfection by 1 December 2026.	Ambient monitoring plan submitted to EPA in 2021 with low risk identified to recreational activities in Stanley. To be readdressed in FY2024.

65.10 Complaints and incident reporting

No complaints or incidents reported during the reporting period.

65.11 Any other relevant information

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

www.taswater.com.au