56 Scottsdale STP

56.1 Activity and report details

Activity name	Scottsdale STP		
Activity address	Bridport Road, Scottsdale		
Permit number	License to Operate - 3504	**Date of issue**	17/04/1989
EPN	448/2	**Date of issue**	16/07/2021
Treatment level	Secondary Treatment		
Authorised Dry Weather Flows	3200 kL/day		
Key Influent Source	Residential/Industrial/Tankered 1 x Category 3 Customer		
Contact person	Kate Westgate		
Report author	Jayden Taylor		
Contact details	Environment@taswater.com.au		
Date of submission	30 September 2023		

Figure 56-1: Scottsdale Sewage Treatment Plant

56.2 Monitoring and compliance summary

56.2.1 Flow data

Table 56-A: Flow monitoring summary

	Influent	Effluent	Reuse
Location Name	Inlet	Cox's Creek	No reuse scheme
Coordinates	E 543052 N 5445098	E 543086 N 5445415	NA
Method of Measurement	In line meter	Estimate based on influent	NA
Date of last Calibration/Validation (if applicable).	08/05/23	NA	NA

Table 56-B: Annual flow and rainfall data

Month	Average Daily Influent Volume (kL/day)	Rainfall (mm/month) BOM Station ID 91219	Discharge to Waters Total Effluent Volume (ML)	Discharge to Reuse Total Effluent Volume (ML)
July 2022	410	47.4	12.71	--
August 2022	410	152.6	13.15	--
September 2022	424	61.2	12.71	--
October 2022	486	204.2	15.06	--
November 2022	410	104.6	12.30	--
December 2022	410	22.0	12.71	--
January 2023	410	19.6	12.71	--
February 2023	424	40.4	11.88	--
March 2023	424	68.8	13.15	--
April 2023	419	77.2	12.57	--
May 2023	442	72.2	13.71	--
June 2023	469	158.2	14.08	--
Annual 2022-23	428	1028.4	156.75	--
% of Total Discharge	--	--	100.0%	--

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

56.2.2 Bypass events

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

56.3 Discharge compliance with permit limits

Table 56-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	15	30	1.0	50	10	8.5	10	200	10
90th percentile	--	--	--	--	--	--	--	--	--
50th Percentile	--	--	--	--	--	--	--	--	--
Minimum	--	--	--	--	--	6.5	--	--	--
Samples analysed									
Number required	12	12	12	12	12	12	12	12	12
Number analysed	12	12	12	12	12	12	12	12	12
Statistical summary									
Max	3.8	38	1.48	42.0	3.1	8.1	8.7	14136	29.0
90th percentile	2.8	7	0.98	40.8	1.8	7.6	7.8	602	7.9
50th percentile	0.9	5	0.62	33.9	1.7	7.1	7.4	10	5.9
Min	0.1	5	0.12	27.0	1.2	6.7	5.2	10	4.0
EPN Limit Compliance									
% compliance with Maximum	100%	92%	92%	100%	100%	--	100%	83%	92%
% compliance with 90th percentile	--	--	--	--	--	--	--	--	--
% compliance with 50th percentile	--	--	--	--	--	--	--	--	--
% compliance with pH range	--	--	--	--	--	100%	--	--	--

Table 56-D: Mass loads to the environment

Parameter	EPN Limit	Frequency	2022-23 result
Nitrogen (kg)	--	Annual	5392.7
Phosphorous (kg)	--	Annual	1110.0
Method	Flow weighted/Composite method		

Table 56-E: Performance Analysis (Discharge to environment)

Effluent compliance parameter	Date(s) of non-compliance	Reasons for non-compliance	Actions to improve performance
E. coli	15/09/2022 8/12/2022	The site lacks automated chlorine control, which creates difficulty in achieving consistent disinfection. The variability of effluent quality from the secondary treatment process is also believed to impact consistency in disinfection performance.	Daily monitoring of total and residual chlorine along with review of operator adjusted dose set point.
BOD	9/11/2022	Trickling filter effluent contains high particulate solids (biofilm accumulation on the media surface) which is difficult to control and capture in the humus tank. These solids contribute to elevated BOD and TSS.	No specific actions
TSS	9/11/2022		
Chlorine	18/05/2023	No automated chlorine control. The dose rate is manually adjusted, and chlorine residual is manually tested.	Normal operational dose adjustment

No other parameters had exceedances in the reporting period.

56.4 Reuse Annual Reporting

No Recycled Water Scheme associated with this STP.

56.5 Ambient monitoring program

Table 56-F: Program details

Program	Scottsdale STP ambient monitoring in accordance with EPN
Status	Ambient monitoring completed during the reporting period.
Update	Ambient water quality and biological monitoring has been undertaken within the Cox's Creek and Cox's Rivulet during the reporting period.
Comments	Water quality monitoring was conducted on a monthly basis between November and April and quarterly for the remainder of the year. Biological monitoring has been undertaken within the Cox's Creek and Cox's Rivulet receiving environment during the reporting period in accordance with EPN requirements and recommendations within the Scottsdale STP Receiving Environment Monitoring Report (REMR), August 2022. As per EPN requirements, an updated REMR will be submitted separately in late 2023 describing the outcomes of ambient monitoring completed during the reporting period.

56.6 Groundwater monitoring

No groundwater monitoring program associated with the STP.

56.7 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 FY2024.

A Multi Criteria Assessment was undertaken by TasWater in 2022 to prioritise I&I investigation and works state-wide. This catchment was ranked 58 out of 79 in priority.

56.8 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 56-G: Desludging status and comments

Desludging Status	Comments
Low Priority	Desludging is outside of the current prioritisation planning schedule.

56.9 Non-compliance with other permit requirements

Table 56-H: EPN non-compliances

EPN Condition	Description of non-conformance	Future Actions to be taken
EF2 Effluent quality limits for discharge to Cox's Creek	Discharge compliance with permit limits	See table 56.3 Discharge compliance with permit limits and Performance Analysis
OP2 Operational Procedures Manual	No contemporary Operational Procedures Manual	New SharePoint based solution for OPMMs currently being developed. First version to be implemented by FY24.

56.10 Complaints and incident reporting

No complaints or incidents were received during the 2022-23 reporting period.

56.11 Any other relevant information

Table 56-I: Projects or significant operational events that occurred in FY 2022-23

Project or significant operational event	Progress
Scottsdale STP Effluent Management Project	The initial strategic site plan investigation has now been completed and will not proceed to a Detailed Business Case. The strategic direction of the STP will be re-considered as part of the Bridport & Scottsdale Strategic Options investigation.
Bridport (& Scottsdale) Sewerage Strategy	A Strategic Options Report is being developed to consider the preferred outcome for the Bridport and Scottsdale STPs upgrade requirements and disposal options considering rationalisation and a recycled water scheme (RWS). Investigation is anticipated to be completed in August 2024.

For further information on the Scottsdale STP please contact TasWater on 13 6992

www.taswater.com.au