

## 34. Midway Point STP

### 34.1 Activity and report details

Activity name	Midway Point STP		
Activity address	Lake View Parade, Midway Point		
Permit number	Licence to Operate – 3298	Date of issue	10/01/1992
EPN	9412/2	Date of issue	14/02/2019
Treatment level	Secondary Treatment		
Authorised dry weather flows	810 kL/day		
Key influent source	Residential/Industrial		
Contact person	Kate Westgate		
Report author	George Fitzgibbon		
Contact details	Environment@taswater.com.au		
Date of submission	30 September 2024		

**Figure 34–1: Midway Point Sewage Treatment Plant**



## 34.2 Monitoring and compliance summary

### 34.2.1 Flow data

**Table 34-A: Flow monitoring summary**

	Influent	Effluent	Reuse
<b>Location name</b>	Inlet	Pitt Water via Sorell STP	Penna Reuse Scheme
<b>Coordinates</b>	E 543929 N 5261611	E 546102 N 526002	E 546060 N 5262122
<b>Method of measurement</b>	Level sensor	Estimate based on influent	Estimate based on influent
<b>Date of last calibration/validation (if applicable).</b>	18/05/2024	NA – to be installed	NA – to be installed

**Table 34-B: Annual flow and rainfall data**

Month	Average daily influent volume (kL/day)	Rainfall (mm/month) BOM Station ID 94248	Discharge to waters total effluent volume (ML)	Discharge to reuse total effluent volume (ML)
July 2023	534	3.8	15.86	0.00
August 2023	532	11.7	8.24	8.24
September 2023	545	21.0	8.17	8.17
October 2023	552	50.7	0.00	17.11
November 2023	558	39.3	0.00	16.74
December 2023	563	52.6	0.00	17.46
January 2024	568	25.6	0.00	17.60
February 2024	528	2.6	0.00	15.32
March 2024	538	10.6	0.00	16.69
April 2024	565	56.3	0.00	16.96
May 2024	558	32.3	0.00	17.30
June 2024	588	47.1	0.00	17.64
Annual 2023-24	554	353.6	32.27	169.23
% of total discharge	--	--	16.0%	84.0%

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

### 34.3 Bypass events

No bypass events in the reporting period.

### 34.4 Discharge compliance with permit limits

**Table 34-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	11.0	35	1.0	24.0	5.0	8.5	9.0	750	21.0
90th percentile	--	--	--	--	--	--	--	--	--
50th percentile	--	--	--	--	--	--	--	--	--
Minimum	--	--	--	--	--	6.5	--	--	--
Samples analysed									
Number required	12	12	12	12	12	12	12	12	12
Number analysed	3	3	3	3	3	3	3	3	3
Statistical summary									
Maximum	2.6	37	1.42	9.0	2.8	7.0	6.1	42	117.0
90th percentile	2.6	35	1.31	8.6	2.8	7.0	5.7	36	98.2
50th percentile	2.5	26	0.87	7.2	2.7	7.0	4.3	10	23.2
Minimum	0.7	12	0.13	5.7	2.1	6.9	2.1	10	6.3
EPN limit compliance									
% compliance with maximum	100%	67%	67%	100%	100%	--	100%	100%	33%
% compliance with 90th percentile	--	--	--	--	--	--	--	--	--
% compliance with 50th percentile	--	--	--	--	--	--	--	--	--
% compliance with pH range	--	--	--	--	--	100%	--	--	--

This STP discharges either to the Penna Reuse Lagoons or to environment via the Sorell STP outfall. As the Sorell STP outfall is a combined discharge, specific compliance sampling is only undertaken for Midway Point STP when it is discharging to environment.

**Table 34-D: Mass loads to the environment**

Parameter	EPN limit	Frequency	2023-24 result
<b>Nitrogen (kg)</b>	--	Annual	223.3
<b>Phosphorous (kg)</b>	--	Annual	118.6
<b>Method</b>	Time weighted/grab sample method		

### 34.5 Reuse annual reporting

As this STP discharges to the Penna Reuse Lagoons for reuse, no compliance sampling is taken. Refer to Penna STP Annual Environmental Review for performance to reuse.

### 34.6 Ambient monitoring program

**Table 34-E: Program details**

<b>Program</b>	None
<b>Status</b>	NA
<b>Update</b>	NA
<b>Comments</b>	Discharges to Sorell Rivulet from Midway Point (& Sorell) occurred in July, August and September 2023. No ambient monitoring conducted in the reporting period.

### 34.7 Groundwater monitoring

Site status: Red

Midway point STP groundwater monitoring network consists of two groundwater monitoring bores, ID numbers MPGWI-2 which are located on the eastern boundary of the STP. Bi-annual sampling was completed at both monitoring bores in February 2024 with annual sampling completed in June 2024. Samples from STP Lagoons 1 and 2 and surface water of Orielson Lagoon were also sampled at these times.

The groundwater monitoring report for the 2023-24 sampling event is due September 2024. The 2022-23 report found total nitrogen, total phosphorus, EC, ammonia, and nitrate, above trigger levels as well as showing bacteriological counts. This is consistent with the previous monitoring observations. Based on these results it is apparent the STPs are likely to be discharging to the groundwaters and the receiving environment. The main risks posed are to the ecosystems and any recreational water users in the immediate down gradient vicinity (Orielson Lagoon).

Bi-annual sampling at the extended analytical suite is scheduled to continue at both bores, the STP lagoons and Orielson Lagoon during the 2024-2025 monitoring program to further assist in the determination of the source concentrations and assess more accurately the main driver of the elevated nutrient levels in the monitoring bores.

### 34.8 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 40 out of 108 in priority (high). Actions in the period included:

- CCTV undertaken of 6,300m sewer mains
- Relined 630m of sewer mains

### 34.9 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 is fully compliant with the 2023–24 SSMP.

Liquid sludge is removed regularly from site, no stockpiling occurs. The sludge lagoon has been taken off-line and is no longer operational. Sludge is wasted to tanks and then transferred via tanker to Macquarie Point, Prince of Wales and Rokeby STPs where it receives further treatment.

### 34.10 Non-compliance with other permit requirements

**Table 34--F: EPN non-compliances**

EPN condition	Description of non-conformance	Future actions to be taken
EF2 Effluent Quality Limits	See Table 34-E.	See Table 34-E.

### 34.11 Complaints and incident reporting

No incidents reported during the FY2023–24 reporting period.

**Table 34-G: Complaints reporting**

Date	Category	Details	Mitigation actions
13/09/2024	Odour	Odour identified coming from the STP. Pumps trucks come every Monday to site to take sludge away from the tanks. The removal of sludge from the tanks is likely the cause of the odour.	Pump truck contractor was counselled on taking measures to minimise any odour that occurs during these pumping events.

### 34.12 Any other relevant information

**Table 34--H: Projects or significant operational events that occurred in FY 2023–24:**

Project or significant operational event	Progress
Penna Reuse Expansion Project	The Penna Reuse Expansion Project has been completed in October 2023.

For further information on Midway Pointy STP please contact TasWater on 13 6992

[www.taswater.com.au](http://www.taswater.com.au)