

37.Oatlands STP

37.1 Activity and report details

Activity name	Oatlands STP		
Activity address	Church Street, Oatlands		
Permit number	Licence to Operate – 6254	Date of issue	4/03/1977
EPN	7972/1	Date of issue	7/03/2018
Treatment level	Secondary Treatment		
Authorised dry weather flows	136 kL/day		
Key influent source	Residential/Industrial 1 x Category 3 Customers		
Contact person	Kate Westgate		
Report author	George Fitzgibbon		
Contact details	Environment@taswater.com.au		
Date of submission	30 September 2025		

Figure 37-1: Oatlands Sewage Treatment Plant



37.2 Monitoring and compliance summary

37.2.1 Flow data

Table 37-A: Flow monitoring summary

	Influent	Effluent	Reuse
Location name	Inlet	Dulverton Rivulet, via Reuse Storage Dam	Oatlands Golf Club and Bennett property
Coordinates	E 530366 N 5317462	E 530204 N 5317506	E 530244 N 5317394
Method of measurement	Level Sensor	Influent less Reuse	In line meter
Date of last calibration/validation (if applicable)	12/09/2024	NA – to be installed	12/09/2024

Table 37-B: Annual flow and rainfall data

Month	Average daily influent volume (kL/day)*	Rainfall (mm/month) BOM Station ID 93014	Discharge to waters total effluent volume (ML)	Discharge to reuse total effluent volume (ML)
July 2024	881	70	9.69	17.63
August 2024	916	60.6	2.75	25.64
September 2024	873	48.7	7.85	18.33
October 2024	829	24.6	0.00	25.72
November 2024	752	41.8	0.00	22.55
December 2024	734	63.8	0.00	22.77
January 2025	700	27.3	0.00	21.70
February 2025	487	23.2	0.00	13.62
March 2025	470	22.2	0.00	14.58
April 2025	672	22.4	0.00	20.17
May 2025	595	33.6	0.00	18.46
June 2025	392	44	0.00	11.76
Annual 2024-25	694	482.2	20.30	232.91
% of total discharge	--	--	8.0%	92.0%

*Known Inlet Flow meter fault. To be rectified (approximately around 200 kL)

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

37.3 Bypass events

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

37.4 Discharge compliance with permit limits

Table 37-C: Compliance summary

Parameter	Ammonia	BOD ₅	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	--	30	--	40	10	8.5	10	2,000	40
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	2.6	138.0	0.0	24.4	8.1	8.6	7.6	4,352	361.0
90th percentile	2.2	103.4	0.0	22.7	5.3	8.4	5.8	1,628	181.2
50th percentile	0.8	27.0	0.0	16.6	1.5	7.7	3.7	57.5	56.5
Minimum	0.1	5.0	0.0	8.5	1.0	7.2	1.0	10	4.0
EPN limit compliance									
% compliance with maximum	--	50%	--	100%	100%	92%	100%	92%	50%
% compliance with 90th percentile	--	--	--	--	--	--	--	--	--
% compliance with 50th percentile	--	--	--	--	--	--	--	--	--
% compliance with pH range	--	--	--	--	--	92%	--	--	--

Table 37-D: Mass loads to the environment

Mass Loads	EPN limit	Frequency	2024-25 result
Nitrogen (kg)	--	Annual	432.5
Phosphorous (kg)	--	Annual	35.1
Method	Time weighted/grab sample method		

No parameters had exceedances in the reporting period when discharging to water.

37.5 Reuse annual reporting

The Oatlands STP supplies treated effluent for irrigation purposes to the Oatlands recycled water scheme (RWS) which consists of two properties; Weedings Lagoon Golf Course (referred to as the Oatlands Golf Club) and one property on Interlaken Road for emergency purposes. No recycled water has been supplied for emergency irrigation during the reporting period.

Table 37-E: Reuse compliance summary

Parameter	BOD5	pH	E. coli
Permit/EPN limit	mg/L	Units	MPN/100ml
Maximum	50	9.0	10,000
90th Percentile	--	--	--
50th Percentile	--	--	1,000
Minimum	--	5.5	--
Samples analysed			
Number required	12	12	12
Number analysed	12	12	12
Statistical summary			
Maximum	138.0	8.6	4,352
90th percentile	103.4	8.4	1,628
50th percentile	27.0	7.7	58
Minimum	5.0	7.2	10
EPN Limit Compliance			
% compliance with Maximum	67%	--	100%
% compliance with 90th percentile	--	--	--
% compliance with 50th percentile	--	--	83%
% compliance with pH range	--	100%	--

Table 37-F: Performance analysis (discharge to reuse)

Reuse compliance parameter	Date(s) of non-compliance	Reasons for non-compliance	Actions to improve performance
BOD	23/10/2024 13/11/2024 17/12/2024 16/01/2025	26/02/2025 25/03/2025	High algal growth in lagoons can increase suspended solids in the effluent, contributing to elevated TSS and higher BOD as the algae die and decompose. Algal activity can also raise pH through photosynthesis, while excessive biomass and organic loading can reduce disinfection efficiency, leading to elevated E. coli levels.
TSS	23/10/2024 13/11/2024 17/12/2024	16/01/2025 26/02/2025 10/04/2025	
<i>E. coli</i>	10/04/2025		
pH	16/01/2025		

Note: Non-compliances only identified for the times STP has discharged to reuse

No other non-compliances were identified for the times the STP discharged to reuse.

Annual soil sampling was completed at two sites (Site 5 and 6) at the Oatlands Golf Club, and one site (Site 7) at the agricultural property in December 2024. The annual compliance audits at both properties were completed in conjunction with the soil sampling with additional phone audit in January 2024. A summary of the findings of the programs in

Table 37-G.

Table 37-G: Annual recycled water scheme compliance audit and soil monitoring summary – Oatlands Golf Club

Program	Compliance audit	Soil monitoring
Outcomes	Compliant With a potential non-compliance (see comments)	Soil salinity and sodicity remain within historical range at both properties.
Comments	Potential non-compliance at Agricultural property as no Site Irrigation and Environment Management Plan. No recycled water has been provided to the property in recent years and therefore is considered compliant.	Phosphorous levels are elevated and comparable or relatively unchanged to historical levels.

RWS Groundwater Status: Amber

Oatlands RWS groundwater monitoring network consists of one bore (ID OATGW2) located at the Oatlands Golf Course.

Annual sampling at the standard analytical suite was completed at bore ID OATGW2 in February 2025 as scheduled.

The 2024-25 groundwater monitoring event continued to record fluctuations in one analyte (total Phosphorous) and a data gap within the monitoring network downgradient of the irrigation area. It is unlikely recycled water is impacting groundwater quality due to historically low recycled water application rates. Maintenance and repair activities are required at this site.

The sampling frequency is scheduled to increase to 6-Monthly at bore ID OATGW2 and remain at the standard analytical suite during the 2025-26 groundwater monitoring program.

37.6 Ambient monitoring program

Table 37-H: Program details

Program	Seasonal ambient monitoring as required under EPA permit variation 18/01/2024.
Status	Ambient monitoring completed during seasonal discharge events within the reporting period.
Update	Ambient water quality monitoring from July - December 2024 and May – June 2025 completed during the reporting period. Ongoing ambient monitoring during seasonal discharge events.
Comments	<p>Ambient water quality monitoring occurred in Dulverton Rivulet during the discharge events in July, August and September 2024. Key findings from the ambient water quality data review were:</p> <ul style="list-style-type: none"> • The toxicant Default Guideline Value (tDGV) for ammonia was exceeded at the downstream sample site during the September discharge event. The result from the upstream site was low. Effluent levels were well below the level recorded at the downstream site. • Total nitrogen levels were elevated downstream compared to upstream during August and September. The rivulet was dry upstream in July. In October, when the STP was not discharging, the nitrogen result upstream was high (5.2mg/L) and elevated compared to downstream. • Nitrate levels were less than detection at the upstream monitoring location but elevated above the DGV downstream in September. • The total phosphorous levels downstream were elevated regardless of whether the STP was discharging or not. • High enterococci levels (529 MPN/100ml) were recorded in the downstream sample in July 2024 however there is no upstream result for comparison. The levels in the effluent were low (75 MPN/100mL), suggesting the effluent discharge is not the only source of contamination.

37.7 Groundwater monitoring

Site status: Green

Oatlands STP groundwater monitoring network consists of one groundwater monitoring bore, OATGW1 located between the STP lagoons and recycled water storage on the western boundary.

6-Monthly sampling at the standard analytical suite was completed at the monitoring bore in August 2024 and February 2025 as scheduled.

The 2024-25 groundwater monitoring event identified a monitoring network data gap due to the limited number of monitoring sites. A data gap for the STP was also noted. Mann-Kendal trend analysis indicating an increasing trend in total phosphorous and total nitrogen with concentrations remain well below the adopted assessment criteria.

Annual sampling at the standard analytical suite is scheduled to proceed at bore ID OATGW1 during the 2025-26 groundwater monitoring program.

37.8 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 38 out of 108 in priority.

37.9 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 assessed as compliant with the 2024-25 SSMP.

Sludge at this STP is captured within the three treatment lagoons, which will be periodically desludged as required. No stockpiling occurs at this site.

Table 37-I: Desludging status and comments

Desludging status	Comments
Medium priority	Desludging of Lagoon 2 likely to be required within next 5 to 10 years.

37.10 Non-compliance with other permit requirements

Table 37-J: EPN non-compliances

EPN condition	Description of non-conformance	Future actions to be taken
EF3 Effluent quality limits for discharge to the Dulverton Rivulet	Discharge compliance with reuse permit limits	See section 37-E Discharge compliance with permit limits and Performance Analysis.
Q1 Regulatory Limits	ADWF exceeds EPN limit.	No future actions underway.

37.11 Complaints and incident reporting

There were no complaints or incidents recorded in the reporting period.

37.12 Any other relevant information

Table 37-J: Projects or significant operational events that occurred in FY 2024-25

Project or significant operational event	Progress
Highlands Midlands Sewerage Regional Master Plan	The Highlands Midlands Sewerage Regional Master Plan has been completed and includes the short term and long-term considerations for the Oatlands STP.

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

www.taswater.com.au