

27 Hoblers Bridge STP

27.1 Activity and report details

| Activity name | Hoblers Bridge STP | | |
|---------------------------------|--|---------------|------------|
| Activity address | Hoblers Road, Newstead, Lau | nceston | |
| Permit number | Licence to Operate - 3383 | Date of issue | 26/10/1992 |
| EPN | 8103/1 | Date of issue | 12/06/2013 |
| Treatment level | Secondary Treatment | | |
| Authorised Dry Weather Flows | 4500 kL/day | | |
| Key Influent Source | Residential/Industrial | | |
| Contact person | 2 x Category 2 Customers Kate Westgate | | |
| Report author | George Fitzgibbon | | |
| Contact details | Environment@taswater.com.au | | |
| Date of submission | 30 September 2023 | | |

Figure 27--1: Hoblers Bridge Sewage Treatment Plant





27.2 Monitoring and compliance summary

27.2.1 Flow data

Table 27-A: Flow monitoring summary

| | Influent | Effluent | Reuse |
|--|-------------------------------------|----------------------------|-----------------|
| Location Name | Inlet | North Esk River | No reuse scheme |
| Coordinates | E 514168 N 5412693 | E 514202 N 5412599 | NA |
| Method of Measurement | Flow Meter (continuous measurement) | Estimate based on influent | NA |
| Date of last Calibration/Validation (if applicable). | 28/07/2022 | 28/07/2022 | NA |

Table 27-B: Annual flow and rainfall data

| Month | Average Daily Influent Volume (kL/day) | Rainfall (mm/month) BOM Station ID 91237 | Discharge to Waters Total Effluent Volume (ML) | Discharge to Reuse Total Effluent Volume (ML) |
|----------------------|--|---|--|---|
| July 2022 | 3,111 | 27.6 | 96.45 | |
| August 2022 | 3,111 | 75.5 | 142.53 | |
| September 2022 | 3,256 | 49.2 | 97.69 | |
| October 2022 | 3,425 | 116.2 | 106.18 | |
| November 2022 | 3,055 | 59.8 | 91.64 | |
| December 2022 | 2,619 | 42.6 | 81.20 | |
| January 2023 | 2,555 | 41.2 | 79.22 | |
| February 2023 | 2,655 | 23.3 | 74.35 | |
| March 2023 | 2,996 | 72.0 | 92.89 | |
| April 2023 | 2,885 | 27.6 | 86.54 | |
| May 2023 | 2,825 | 23.5 | 87.56 | |
| June 2023 | 4,061 | 119.0 | 121.84 | |
| Annual 2022-23 | 3,047 | 677.5 | 1,158.08 | |
| % of Total Discharge | | | 100.0% | |

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

27.2.2 Bypass events

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



27.3 Discharge compliance with permit limits

Table 27-C: Compliance Summary

| Parameter | Ammonia | BOD5 | Chlorine | Nitrogen | Oil and grease | рН | 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 | 20 | 1.5 | 40 | 10 | 8.5 | 12 | 1000 | 30 |
| 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 | 7.3 | 18 | 1.46 | 32.8 | 1.9 | 7.0 | 7.2 | 7270 | 15.6 |
| 90th percentile | 4.2 | 17 | 1.29 | 30.1 | 1.5 | 6.9 | 6.5 | 595 | 12.0 |
| 50th percentile | 1.8 | 11 | 1.01 | 24.5 | 1.0 | 6.7 | 5.3 | 26 | 7.9 |
| Min | 0.3 | 5 | 0.72 | 10.4 | 1.0 | 6.4 | 3.0 | 10 | 4.0 |
| EPN Limit Compliance | | | | | | | | | |
| % compliance with Maximum | 100% | 100% | 100% | 100% | 100% | | 100% | 92% | 100% |
| % compliance with 90th percentile | | | | | | | | | |
| % compliance with 50th percentile | | | | | | | | | |
| % compliance with pH range | | | | | | 92% | | | |

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Table 27-D: Mass loads to the environment

| Parameter | EPN Limit | Frequency | 2022-23 result |
|------------------|--------------------------------|-----------|----------------|
| Nitrogen (kg) | | Annual | 26552.4 |
| Phosphorous (kg) | | Annual | 5766.5 |
| Method | Flow weighted/Composite method | | |

Table 27-E: Performance Analysis (Discharge to environment)

| Effluent compliance parameter | Date(s) of non-compliance | Reasons for non-compliance | Actions to improve performance |
|-------------------------------|---------------------------|--|--|
| E. coli | 06/07/2022 | Limitations in the flow paced chlorine control system result in poor performance when dose rates are not automatically adjusted to demand. | Regular monitoring of chlorine residual to ensure sufficient chlorine dose rate. |
| рН | 08/02/2023 | Low effluent pH is due to variable rates denitrification within the process. Variable denitrification causes variable alkalinity and hence pH. Alkalinity is adjusted via manual control of the MHL dose rate causing variable pH performance. | |

No other parameters had exceedances in the reporting period.



27.4 Reuse Annual Reporting

No Recycled Water Scheme associated with this STP.

27.5 Ambient monitoring program

Table 27-F: Program details

| Program | NA - No requirement for ambient monitoring in the reporting period. |
|----------|---|
| Status | ΝΑ |
| Update | ΝΑ |
| Comments | ΝΑ |

27.6 Groundwater monitoring

No groundwater monitoring network for this site.

27.7 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 11 out of 79 in priority.

27.8 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 is fully compliant with the 2022-23 SSMP.

Biosolids are removed regularly from site, no stockpiling occurs.

| Month | Number of Samples | Maximum (mg/kg) | Mean (mg/kg) | Minimum (mg/kg) | BACC (mg/kg) | Contaminant Classification |
|----------|----------------------|--------------------|--------------|--------------------|--------------|-------------------------------|
| Arsenic | 12 | 4.1 | 3.7 | 3.1 | 4.3 | А |
| Cadmium | 12 | 1.3 | 1.1 | 0.8 | 1.4 | В |
| Chromium | 12 | 45.9 | 36.8 | 26.5 | 50.2 | В |
| Copper | 12 | 420.0 | 367.6 | 309 | 431.5 | В |
| Lead | 12 | 41.0 | 34.4 | 30.6 | 40.9 | А |
| Mercury | 12 | 1.5 | 0.9 | 0.26 | 1.6 | В |
| Nickel | 12 | 57.0 | 41.9 | 31.4 | 56.2 | A |
| Zinc | 12 | 1190.0 | 1067.9 | 928 | 1230.6 | В |

Table 27-G: Biosolids sludge classification summary



Table 27-H: Volume and disposal destination

| Quantity (DST) | Average solids content | Stabilisation method | Stabilisation Grade | Contamination Grade | Biosolids Classification | End use destination |
|-------------------|---------------------------|------------------------|------------------------|------------------------|-----------------------------|------------------------|
| 78.48 | 14.8% | Anaerobic digestion | В | В | 2 | Evandale Farm |
| 55.01 | 14.8% | Anaerobic digestion | В | В | 2 | Dulverton compost |

Notes: DST = Dry solid tonne.

27.9 Non-compliance with other permit requirements

Table 27-I: EPN non-compliances

| EPN Condition | Description of non-conformance | Future Actions to be taken |
|--------------------------------------|--|---|
| EM2 Effluent reuse feasibility study | Effluent reuse feasibility study not yet submitted to EPA. | Dependant on outcome of LSIP strategy. |
| EM3 Discharge Management Plan | Discharge Management Plan overdue | Submission timeframe TBC. Plan in development for DMP submission dates following on from agreed format between TasWater and EPA. |
| OP2 Operational Procedures Manual | No contemporary Operational Procedures Manual | New SharePoint based solution for OPMMs currently being developed. First version to be implemented in FY24. |

27.10 Complaints and incident reporting

Table 27-J: Complaints Reporting

| Date | Category | Details | Mitigation Actions |
|------------|----------|---|---|
| 10/05/2023 | Odour | Communication received from complainant regarding offensive odour emanating beyond the STP boundary. | Service Delivery investigated and found no specific process upsets attributable to the odour complaint. Unfavourable wind conditions were the likely explanation at the time. |

27.11 Any other relevant information

Table 27-L: Projects or significant operational events that occurred in FY 2022-23:

| Project or significant operational event | Progress |
|--|---|
| Launceston Sewerage Improvement Program (LSIP) | Hoblers Bridge is currently being investigated for rationalisation to Ti-Tree Bend within LSIP. |
| Chlorine System Safety Upgrade | Completed |
| Dewatering Conveyor Replacement | Completed |

For further information on Hobblers Bridge STP please contact TasWater on 13 6992

www.taswater.com.au.