

# WWTP Effluent Monitoring

## Annual Summary

31/03/2012 to 28/02/2025



### \*Notes regarding Licence Limits

A single number denotes a maximum value that should not be exceeded.

Two numbers separated by a slash " / " denote a 90% limit and a maximum limit.

Two numbers separated by a dash " - " denote minimum and maximum limits.

### 90 percentiles explained

Within a licence for each pollutant listed by the EPA, it will have a limit value. This value may be a 100 percentile limit where samples must meet the limit value 100% of the time. Lower limits may also be assigned.

Where there are limit values lower than a 100% limit a sample or samples test results can exceed the limit value. For example, if a 90 percentile limit is assigned to a pollutant, this means 90% of collected samples should meet the limit value. If 10 samples are required in a year only one sample of the ten samples for the year is allowed to exceed the 90 percentile limit value. If more than one sample exceeds this value this would be a non-compliance of the licence conditions.

**Treatment Plant: Banora Point**

**EPA Licence Number: 1411**

**License Year: 01 December to 30 November**

Monitoring Point: BPWWTP/Effluent

EPA Point: Point 1

| Summary Period                               | Pollutant                | Units      | Count | Min   | Max  | Mean | 90% Value | Limits*   | Exceedance |
|--|--------------------------|------------|-------|-------|------|------|-----------|-----------|------------|
| 1/12/2014 to 30/11/2015<br>Published: 14 Dec | Ammonia                  | mg/L       | 52    | <0.02 | 4.68 | 0.16 | 0.14      | 2 / 5     | No         |
|  | BOD5                     | mg/L       | 52    | <1.0  | 79.0 | 2.78 | 1.98      | 10 / 20   | Yes        |
|  | Oil & Grease             | mg/L       | 52    | <2    | 16   | 3    | 2.9       | 5 / 10    | Yes        |
|  | pH                       | pH units   | 52    | 7.2   | 8.9  | 7.69 | 8.19      | 6.5-8.5   | Yes        |
|  | Suspended Solids         | mg/L       | 52    | <1.0  | 17.0 | 2.69 | 4.47      | 15 / 30   | No         |
|  | Thermotolerant Coliforms | cfu/100 ml | 52    | <1    | 1130 | 199  | 502.0     | 200 / 600 | Yes        |
|  | Total Nitrogen           | mg/L       | 52    | 1.48  | 7.5  | 2.49 | 3.474     | 10 / 20   | No         |
|  | Total Phosphorus         | mg/L       | 52    | 0.06  | 1.0  | 0.16 | 0.249     | 0.5 / 1   | No         |
| Summary Period                               | Pollutant                | Units      | Count | Min   | Max  | Mean | 90% Value | Limits*   | Exceedance |
| 1/12/2015 to 30/11/2016<br>Published: 14 Dec | Ammonia                  | mg/L       | 52    | <0.02 | 2.06 | 0.14 | 0.149     | 2 / 5     | No         |
|  | BOD5                     | mg/L       | 52    | <1.0  | 2.4  | 1.13 | 1.49      | 10 / 20   | No         |
|  | Oil & Grease             | mg/L       | 52    | <2.0  | 3.2  | 2.06 | 2.0       | 5 / 10    | No         |
|  | pH                       | pH units   | 52    | 7.1   | 8.6  | 7.55 | 7.8       | 6.5-8.5   | Yes        |
|  | Suspended Solids         | mg/L       | 52    | <1.0  | 6.9  | 1.76 | 3.0       | 15 / 30   | No         |
|  | Thermotolerant Coliforms | cfu/100 ml | 52    | 8     | 1220 | 150  | 366.0     | 200 / 600 | Yes        |
|  | Total Nitrogen           | mg/L       | 52    | 1.5   | 4.49 | 2.23 | 2.753     | 10 / 20   | No         |
|  | Total Phosphorus         | mg/L       | 52    | 0.05  | 0.19 | 0.09 | 0.119     | 0.5 / 1   | No         |

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| Summary Period  | Pollutant                | Units      | Count | Min   | Max   | Mean   | 90% Value | Limits*   | Exceedance |
|---|--------------------------|------------|-------|-------|-------|--------|-----------|-----------|------------|
| <b>1/12/2015 to 30/11/2016</b><br><br>Published: 25 Jan | Ammonia                  | mg/L       | 52    | 0.03  | 12.97 | 0.39   | 0.295     | 2 / 5     | Yes        |
|   | BOD5                     | mg/L       | 52    | <1.0  | 29.0  | 1.68   | 1.59      | 10 / 20   | Yes        |
|   | Oil & Grease             | mg/L       | 52    | <2.0  | 4.0   | 2.07   | 2.0       | 5 / 10    | No         |
|   | pH                       | pH units   | 52    | 7.1   | 8.0   | 7.56   | 7.7       | 6.5-8.5   | No         |
|   | Suspended Solids         | mg/L       | 52    | <1.0  | 17.0  | 1.87   | 2.69      | 15 / 30   | No         |
|   | Thermotolerant Coliforms | cfu/100 ml | 52    | <1    | 69000 | 132782 | 255.0     | 200 / 600 | Yes        |
|   | Total Nitrogen           | mg/L       | 52    | 1.68  | 15.18 | 2.59   | 2.658     | 10 / 20   | No         |
|   | Total Phosphorus         | mg/L       | 52    | 0.07  | 2.47  | 0.15   | 0.15      | 0.5 / 1   | Yes        |
| <b>1/12/2017 to 30/11/2018</b><br><br>Published: 13 Dec | Ammonia                  | mg/L       | 52    | <0.02 | 0.37  | 0.07   | 0.12      | 2 / 5     | No         |
|   | BOD5                     | mg/L       | 52    | <1.0  | 4.6   | 1.35   | 1.98      | 10 / 20   | No         |
|   | Oil & Grease             | mg/L       | 52    | <2.0  | 4.0   | 2.12   | 2.543     | 5 / 10    | No         |
|   | pH                       | pH units   | 52    | 7.6   | 9.0   | 7.88   | 8.19      | 6.5-8.5   | Yes        |
|   | Suspended Solids         | mg/L       | 52    | <1.0  | 12.0  | 2.06   | 4.19      | 15 / 30   | No         |
|   | Thermotolerant Coliforms | cfu/100 ml | 52    | <1    | 630   | 116    | 258.0     | 200 / 600 | Yes        |
|   | Total Nitrogen           | mg/L       | 52    | 1.59  | 4.95  | 2.24   | 2.628     | 10 / 20   | No         |
|   | Total Phosphorus         | mg/L       | 52    | 0.05  | 0.45  | 0.09   | 0.11      | 0.5 / 1   | No         |
| <b>1/12/2018 to 30/11/2019</b><br><br>Published: 11 Dec | Ammonia                  | mg/L       | 52    | <0.02 | 0.36  | 0.07   | 0.157     | 2 / 5     | No         |
|   | BOD5                     | mg/L       | 52    | <1.0  | 5.1   | 1.34   | 1.8       | 10 / 20   | No         |
|   | Oil & Grease             | mg/L       | 52    | <2.0  | 4.25  | 2.13   | 1.8       | 5 / 10    | No         |
|   | pH                       | pH units   | 52    | 7.2   | 8.6   | 7.86   | 8.39      | 6.5-8.5   | Yes        |
|   | Suspended Solids         | mg/L       | 52    | <1.0  | 11.0  | 2.61   | 6.54      | 15 / 30   | No         |
|   | Thermotolerant Coliforms | cfu/100 ml | 52    | <1    | 610   | 109    | 266.5     | 200 / 600 | Yes        |
|   | Total Nitrogen           | mg/L       | 52    | 1.45  | 2.72  | 2.08   | 2.579     | 10 / 20   | No         |
|   | Total Phosphorus         | mg/L       | 52    | 0.04  | 0.11  | 0.07   | 0.11      | 0.5 / 1   | No         |
| <b>1/12/2019 to 30/11/2020</b><br><br>Published: 21 Jun | Ammonia                  | mg/L       | 52    | <0.02 | 0.17  | 0.06   | 0.099     | 2 / 5     | No         |
|   | BOD5                     | mg/L       | 52    | <1.0  | 5.2   | 1.35   | 1.98      | 10 / 20   | No         |
|   | Oil & Grease             | mg/L       | 52    | <2    | 6     | 2      | 3.0       | 5 / 10    | No         |

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|  |                          |              |              |            |            |             |                  |                |                   |
|--|--------------------------|--------------|--------------|------------|------------|-------------|------------------|----------------|-------------------|
| <b>Summary Period</b><br>1/12/2019 to<br>30/11/2020<br><br>Published: 21 Jun | pH                       | pH units     | 52           | 7.1        | 9.1        | 7.78        | 8.56             | 6.5-8.5        | Yes               |
|  | Suspended Solids         | mg/L         | 52           | <1.0       | 7.4        | 2.04        | 4.58             | 15 / 30        | No                |
|  | Thermotolerant Coliforms | cfu/100 ml   | 53           | 22         | 1610       | 262         | 486.4            | 200 / 600      | Yes               |
|  | Total Nitrogen           | mg/L         | 52           | 1.55       | 3.14       | 2.3         | 2.666            | 10 / 20        | No                |
|  | Total Phosphorus         | mg/L         | 52           | 0.04       | 0.43       | 0.09        | 0.149            | 0.5 / 1        | No                |
| <b>Summary Period</b><br>1/12/2011 to<br>30/11/2012<br><br>Published: 25 Jan | <b>Pollutant</b>         | <b>Units</b> | <b>Count</b> | <b>Min</b> | <b>Max</b> | <b>Mean</b> | <b>90% Value</b> | <b>Limits*</b> | <b>Exceedance</b> |
|  | Ammonia                  | mg/L         | 52           | <0.02      | 1.73       | 0.18        | 0.279            | 2 / 5          | No                |
|  | BOD5                     | mg/L         | 87           | <1.0       | 5.4        | 1.59        | 2.68             | 15 / 35        | No                |
|  | Oil & Grease             | mg/L         | 87           | <2         | 5          | 2           | 2.4              | 10             | No                |
|  | pH                       | pH units     | 87           | 6.9        | 9.2        | 7.55        | 7.84             | 6.5-8.5        | Yes               |
|  | Suspended Solids         | mg/L         | 87           | <1.0       | 25.0       | 2.52        | 3.88             | 20 / 40        | No                |
|  | Thermotolerant Coliforms | cfu/100 ml   | 86           | 1          | 5900       | 430         | 670.0            | 200 / 600      | Yes               |
|  | Total Nitrogen           | mg/L         | 87           | 0.99       | 16.0       | 3.04        | 5.742            | 10 / 20        | No                |
| Total Phosphorus   | mg/L                     | 87           | 0.04         | 3.41       | 0.48       | 1.186       | 0.5 / 1          | Yes            |                   |
| <b>Summary Period</b><br>1/12/2012 to<br>30/11/2013<br><br>Published: 07 Dec | <b>Pollutant</b>         | <b>Units</b> | <b>Count</b> | <b>Min</b> | <b>Max</b> | <b>Mean</b> | <b>90% Value</b> | <b>Limits*</b> | <b>Exceedance</b> |
|  | Ammonia                  | mg/L         | 53           | <0.02      | 14.1       | 0.6         | 0.376            | 2 / 5          | Yes               |
|  | BOD5                     | mg/L         | 105          | <1.0       | 9.9        | 1.92        | 3.18             | 15 / 35        | No                |
|  | Oil & Grease             | mg/L         | 105          | <2         | 3          | 2           | 2.0              | 10             | No                |
|  | pH                       | pH units     | 105          | 6.9        | 9.2        | 7.73        | 8.3              | 6.5-8.5        | Yes               |
|  | Suspended Solids         | mg/L         | 105          | <1.0       | 22.0       | 3.55        | 8.84             | 15 / 30        | No                |
|  | Thermotolerant Coliforms | cfu/100 ml   | 102          | <1         | 8400       | 478         | 602.0            | 10000          | No                |
|  | Total Nitrogen           | mg/L         | 105          | 1.09       | 14.8       | 2.28        | 3.022            | 10 / 20        | No                |
| Total Phosphorus   | mg/L                     | 105          | 0.04         | 4.33       | 0.24       | 0.402       | 0.5 / 1          | Yes            |                   |

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| Summary Period  | Pollutant                | Units      | Count | Min   | Max  | Mean | 90% Value | Limits*   | Exceedance |
|---|--------------------------|------------|-------|-------|------|------|-----------|-----------|------------|
| <b>1/12/2013 to 30/11/2014</b><br><br>Published: 07 Dec | Ammonia                  | mg/L       | 53    | <0.02 | 3.14 | 0.17 | 0.298     | 2 / 5     | No         |
|   | BOD5                     | mg/L       | 105   | <1.0  | 7.8  | 1.63 | 3.12      | 15 / 35   | No         |
|   | Oil & Grease             | mg/L       | 105   | <2    | 6    | 2    | 2.6       | 10        | No         |
|   | pH                       | pH units   | 105   | 7.2   | 9.3  | 7.98 | 8.9       | 6.5-8.5   | Yes        |
|   | Suspended Solids         | mg/L       | 105   | <1.0  | 34.0 | 5.22 | 13.6      | 20 / 40   | No         |
|   | Thermotolerant Coliforms | cfu/100 ml | 102   | <9    | 1690 | 329  | 778.0     | 10000     | No         |
|   | Total Nitrogen           | mg/L       | 105   | 1.19  | 4.61 | 2.18 | 3.252     | 10 / 20   | No         |
|   | Total Phosphorus         | mg/L       | 105   | 0.04  | 0.68 | 0.14 | 0.288     | 0.5 / 1   | No         |
| <b>1/12/2023 to 30/11/2024</b><br><br>Published: 09 Dec | Ammonia                  | mg/L       | 52    | <0.02 | 0.94 | 0.12 | 0.28      | 2 / 5     | No         |
|   | BOD5                     | mg/L       | 52    | <1.0  | 4.2  | 1.26 | 1.77      | 10 / 20   | No         |
|   | Oil & Grease             | mg/L       | 52    | <2    | 3    | 2    | 0.0       | 5 / 10    | No         |
|   | pH                       | pH units   | 52    | 7.2   | 8.9  | 7.65 | 8.09      | 6.5-8.5   | Yes        |
|   | Suspended Solids         | mg/L       | 52    | <1.0  | 6.0  | 1.52 | 2.27      | 15 / 30   | No         |
|   | Thermotolerant Coliforms | cfu/100 ml | 52    | <10   | 1080 | 255  | 519.0     | 200 / 600 | Yes        |
|   | Total Nitrogen           | mg/L       | 52    | 1.3   | 2.65 | 1.91 | 2.199     | 10 / 20   | No         |
|   | Total Phosphorus         | mg/L       | 52    | 0.07  | 0.5  | 0.11 | 0.167     | 0.5 / 1   | No         |
| <b>1/12/2024 to 30/11/2025</b><br><br>Published: 10 Feb | Ammonia                  | mg/L       | 13    | 0.04  | 1.49 | 0.38 | 0.994     | 2 / 5     | No         |
|   | BOD5                     | mg/L       | 13    | <1.0  | 3.9  | 1.65 | 2.82      | 10 / 20   | No         |
|   | Oil & Grease             | mg/L       | 13    | <2    | <2   | <2   | 0.0       | 5 / 10    | No         |
|   | pH                       | pH units   | 13    | 7.1   | 7.6  | 7.44 | 7.6       | 6.5-8.5   | No         |
|   | Suspended Solids         | mg/L       | 13    | <1.0  | 15.0 | 2.42 | 4.04      | 15 / 30   | No         |
|   | Thermotolerant Coliforms | cfu/100 ml | 13    | 60    | 940  | 343  | 614.0     | 200 / 600 | Yes        |
|   | Total Nitrogen           | mg/L       | 13    | 0.96  | 3.64 | 1.86 | 3.268     | 10 / 20   | No         |
|   | Total Phosphorus         | mg/L       | 13    | 0.06  | 0.27 | 0.1  | 0.128     | 0.5 / 1   | No         |