Annual Environmental Report





Shanganagh

D0038-02

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1 EXECUTIVE SUMMARY AND INTRODUCTION TO THE 2022 AER

This Annual Environmental Report has been prepared for D0038-02, Shanganagh, in Dublin in accordance with the requirements of the wastewater discharge licence for the agglomeration. Specified reports where relevant are included as an appendix to the AER.

1.1 ANNUAL STATEMENT OF MEASURES

A summary of any improvements undertaken is provided where applicable.

There were no capital works, significant changes or operational changes undertaken in 2022.

1.2 TREATMENT SUMMARY

The agglomeration is served by a wastewater treatment plant(s)

• Shanganagh WWTP with a Plant Capacity PE of 186000, the treatment type is 2 - Secondary treatment.

1.3 ELV OVERVIEW

The overall compliance of the final effluent with the Emission Limit Values (ELVs) is shown below. More detailed information on the below ELV's can be found in Section 2.

| Discharge Point Reference | Treatment Plant | Discharge Type | Compliance Status | Parameters failing if relevant |
|---------------------------|-----------------|----------------|-------------------|---|
| TPEFF1000D0038SW001 | Shanganagh WWTP | Treated | Non-Compliant | BOD, 5 days with Inhibition (Carbonaceous) mg/l Dissolved Inorganic Nitrogen (as N) mg/l |

1.4 LICENCE SPECIFIC REPORTING

Assessment / Report

There are no Licence Specific Reports included in this AER.

2 TREATMENT PLANT PERFORMANCE AND IMPACT SUMMARY

2.1 SHANGANAGH WWTP - TREATED DISCHARGE

2.1.1 INFLUENT MONITORING SUMMARY - SHANGANAGH WWTP

A summary of influent monitoring for the treatment plant is presented below. This monitoring is primarily undertaken in order to determine the overall efficiency of the plant in removing pollutants from the raw wastewater.

| Parameters | Number of Samples | Annual Max | Annual Mean |
|---|-------------------|------------|-------------|
| Ammonia-Total (as N) mg/l | 36 | 58 | 32 |
| Total Nitrogen mg/l | 36 | 75 | 44 |
| COD-Cr mg/l | 36 | 944 | 416 |
| Total Phosphorus (as P) mg/l | 36 | 13 | 7.58 |
| ortho-Phosphate (as P) - unspecified mg/l | 36 | 12 | 4.85 |
| pH pH units | 36 | 7.80 | 7.46 |
| BOD, 5 days with Inhibition (Carbonaceous) mg/l | 34 | 326 | 176 |
| Suspended Solids mg/l | 36 | 453 | 246 |
| Hydraulic Capacity | N/A | 93510 | 33260 |

If other inputs in the form of sludge / leachate are added to the WWTP then these are included in Section 2.1.5 if applicable.

Significance of Results:

The annual mean hydraulic loading is less than the peak Treatment Plant Capacity. The annual maximum hydraulic loading is less than the peak Treatment Plant Capacity. Further details on the plant capacity and efficiency can be found under the sectional 'Operational Performance Summary'. The design of the wastewater treatment plant allows for peak values and therefore the peak loads have not impacted on compliance with Emission Limit Values.

2.1.2 EFFLUENT MONITORING SUMMARY - TPEFF1000D0038SW001

| Parameter | WWDL ELV (Schedule A) | ELV with Condition 2 Interpretation included ^{Note 1} | Interim % reduction from influent concentration | Number of sample results | Number of exceedances | Number of exceedances with Condition 2 Interpretation included | Annual Mean | Overall Compliance (Pass/Fail) |
|--|--------------------------------|---|--|-----------------------------------|--------------------------|--|----------------|--------------------------------------|
| COD-Cr mg/l | 125 | 125 | N/A | 36 | N/A | N/A | 41 | Pass |
| Dissolved Inorganic Nitrogen (as N) mg/l | 45 | 54 | N/A | 36 | 10 | 1 | 31 | Fail |
| Suspended Solids mg/l | 35 | 35 | N/A | 36 | N/A | N/A | 8.60 | Pass |
| BOD, 5 days with Inhibition (Carbonaceous) mg/I | 25 | 25 | N/A | 35 | 1 | 1 | 6.35 | Fail |
| pH pH units | 6.00 | 9.00 | N/A | 36 | N/A | N/A | 7.57 | Pass |
| Total Phosphorus (as P) mg/l | N/A | N/A | N/A | 36 | N/A | N/A | 1.95 | |
| Ammonia-Total (as N) mg/l | N/A | N/A | N/A | 36 | N/A | N/A | 25 | |

| Parameter | WWDL ELV (Schedule A) | ELV with Condition 2 Interpretation included ^{Note 1} | Interim % reduction from influent concentration | Number of sample results | Number of exceedances | Number of exceedances with Condition 2 Interpretation included | Annual Mean | Overall Compliance (Pass/Fail) |
|---|--------------------------------|---|--|-----------------------------------|--------------------------|--|----------------|--------------------------------------|
| Nitrate (as N) mg/l | N/A | N/A | N/A | 36 | N/A | N/A | 5.87 | |
| Total Nitrogen mg/l | N/A | N/A | N/A | 36 | N/A | N/A | 34 | |
| Fats, Oils & Greases mg/l | N/A | N/A | N/A | 4 | N/A | N/A | 9.20 | |
| Total Oxidised Nitrogen (as N) mg/l | N/A | N/A | N/A | 36 | N/A | N/A | 6.20 | |
| Conductivity @20°C μS/cm | N/A | N/A | N/A | 36 | N/A | N/A | 925 | |
| Nitrite (as N) mg/l | N/A | N/A | N/A | 36 | N/A | N/A | 0.329 | |

Notes:

1 - This represents the Emission Limit Values after the Interpretation provided for under Condition 2 of the licence is applied

2 – For pH the WWDA specifies a range of pH 6 - 9

Cause of Exceedance(s):

WWTP not designed for N Removal (INCI023995)

Significance of Results:

The WWTP is non compliant with the ELV's set in the Wastewater Discharge Licence. The impact on receiving waters is assessed further in Section 2.

2.1.3 AMBIENT MONITORING SUMMARY FOR THE TREATMENT PLANT DISCHARGE TPEFF1000D0038SW001

A summary of monitoring from ambient monitoring points associated with the wastewater discharge is provided in the sections below. For discharges to rivers upstream (U/S) and downstream (D/S) location data is provided. For other ambient points in lakes, coastal or transitional waters, monitoring data from the most appropriate monitoring station is selected.

The table below provides details of ambient monitoring locations and details of any designations as sensitive areas.

| Ambient Monitoring Point from WWDL (or as agreed with EPA) | Irish Grid Reference | River Station Code | Bathing Water | Drinking Water | FWPM | Shellfish | WFD Ecological Status |
|---|-------------------------|--------------------|------------------|-------------------|------|-----------|--------------------------|
| Upstream | 327527, 224160 | CW34001016DB6017 | Yes | No | No | No | High |
| Downstream | 327730, 222408 | CW34001016DB6001 | Yes | No | No | No | High |

The results for ambient results and / or additional monitoring data sets are included in the Appendix 7.1 - Ambient monitoring summary.

Significance of Results:

The WWTP discharge was not compliant with the ELV's set in the wastewater discharge licence for the following: Dissolved Inorganic Nitrogen (as N) mg/l, BOD, 5 days with Inhibition (Carbonaceous) mg/l.

The coastal/transitional ambient monitoring results meet the required EQS. The EQS relates to the Oxygenation and Nutrient Conditions set out in the Surface Water Regulations 2009.

The discharge from the wastewater treatment plant does not have an observable impact on the water quality.

The discharge from the wastewater treatment plant does have an observable impact on the coastal/transitional water quality.

The discharge from the wastewater treatment plant does not have an observable impact on the bathing water quality.

The discharge from the wastewater treatment plant does not have an observable negative impact on the Water Framework Directive status.

2.1.4 OPERATIONAL PERFORMANCE SUMMARY - SHANGANAGH WWTP

2.1.4.1 Treatment Efficiency Report - Shanganagh WWTP

Treatment efficiency is based on the removal of key pollutants from the influent wastewater by the treatment plant. In essence the calculation is based on the balance of load coming into the plant versus the load leaving the plant. The efficiency is presented as a percentage removal rate.

A summary presentation of the efficiency of the treatment process including information for all the parameters specified in the licence is included below:

| Parameter | Influent mass loading (kg/year) | Effluent mass emission (kg/year) | Efficiency (% reduction of influent load) |
|-----------|---------------------------------|----------------------------------|---|
| SS | 2952938 | 105304 | 96 |
| COD | 4984536 | 507466 | 90 |
| ТN | 529970 | 415883 | 22 |
| ТР | 90872 | 23816 | 74 |
| cBOD | 2104994 | 79850 | 96 |

Note: The above data is based on sample results for the number of dates reported

2.1.4.2 Treatment Capacity Report Summary - Shanganagh WWTP

Treatment capacity is an assessment of the hydraulic (flow) and organic (the amount of pollutants) load a treatment plant is designed to treat versus the current loading of that plant.

| Shanganagh WWTP | | | |
|---|--------|--|--|
| Peak Hydraulic Capacity (m³/day) - As Constructed | 108000 | | |
| DWF to the Treatment Plant (m ³ /day) | | | |
| Current Hydraulic Loading - annual max (m³/day) | 93510 | | |

| Shanganagh WWTP | |
|---|--------|
| Average Hydraulic loading to the Treatment Plant (m³/day) | 33260 |
| Organic Capacity (PE) - As Constructed | 186000 |
| Organic Capacity (PE) - Collected Load (peak week) ^{Note1} | 134529 |
| Organic Capacity (PE) - Remaining | 51471 |
| Will the capacity be exceeded in the next three years? (Yes/No) | No |

Nominal design capacities can be based on conservative design principles. In some cases assessment of existing plants has shown organic capacities significantly higher than the nominal design capacity. Accordingly plants that appear to be overloaded when comparing a collected peak load with the nominal design capacity can be fully compliant due to the safety factors in the original design.

2.1.5 SLUDGE / OTHER INPUTS - SHANGANAGH WWTP

'Other inputs' to the waste water treatment plant are summarised in table below

| Input type | Quantity | Unit | P.E. | % of load to WWTP | Included in Influent Monitoring (Y/N)? | Is there a leachate/sludge acceptance procedure for the WWTP? | Is there a dedicated leachate/sludge acceptance facility for the WWTP? (Y/N) | | |
|---------------|--|------|------|----------------------|---|---|--|--|--|
| There is | There is no Sludge and Other Input data for the Treatment Plant included in the AER. | | | | | | | | |

3 COMPLAINTS AND INCIDENTS

3.1 COMPLAINTS SUMMARY

A summary of complaints of an environmental nature related to the discharge(s) to water from the WWTP and network is included below.

| Number of Complaints | Nature of Complaint | Number Open Complaints | Number Closed Complaints |
|----------------------------------|---------------------------|------------------------|--------------------------|
| There were no relevant environme | ental complaints in 2022. | | |

3.2 REPORTED INCIDENTS SUMMARY

Environmental incidents that arise in an agglomeration are reported on an on-going basis in accordance with our waste water discharge licences. Where an incident occurs and it is reportable under the licence, it is reported to the Environmental Protection Agency through their Environmental Data Exchange Network, or in some instances by telephone. Some incidents which arise in the agglomeration are recorded by Uisce Éireann but may not be reportable under our licence for example where the incident does not have an impact on environmental performance.

A summary of reported incidents is included below.

3.2.1 SUMMARY OF INCIDENTS

| Incident Type | Cause | No. of incident occurrences | Recurring (Y/N) | Closed (Y/N) |
|----------------------|---------------------------------|-----------------------------|-----------------|--------------|
| Breach of ELV | WWTP not designed for N removal | 1 | Yes | No |
| Spillage | Shock load to the WWTP | 1 | No | Yes |
| Uncontrolled release | Blocked Sewer | 1 | No | Yes |

| Incident Type | Cause | No. of incident occurrences | Recurring (Y/N) | Closed (Y/N) |
|----------------------|--|-----------------------------|-----------------|--------------|
| Uncontrolled release | SWO exceptional rainfall and overflow expected | 1 | No | Yes |
| Uncontrolled release | SWO exceptional rainfall and overflow expected | 1 | No | Yes |
| Uncontrolled release | SWO exceptional rainfall and overflow expected | 1 | No | Yes |
| Uncontrolled release | Blocked Sewer | 1 | No | Yes |
| Uncontrolled release | Blocked Sewer | 1 | No | Yes |
| Uncontrolled release | Blocked Sewer | 1 | No | Yes |
| Uncontrolled release | SWO exceptional rainfall and overflow expected | 1 | No | Yes |
| Uncontrolled release | SWO exceptional rainfall and overflow expected | 1 | No | Yes |
| Uncontrolled release | SWO exceptional rainfall and overflow expected | 1 | No | Yes |

3.2.2 SUMMARY OF OVERALL INCIDENTS

| Question | Answer |
|--|--------|
| Number of Incidents in 2022 | 12 |
| Number of Incidents reported to the EPA via EDEN in 2022 | 12 |
| Explanation of any discrepancies between the two numbers above | N/A |

4 INFRASTRUCTURAL ASSESSMENTS AND PROGRAMME OF IMPROVEMENTS

4.1 STORM WATER OVERFLOW IDENTIFICATION AND INSPECTION REPORT

A summary of the operation of the storm water overflows and their significance where known is included below:

4.1.1 SWO IDENTIFICATION

| WWDL Name / Code for Storm Water Overflow (chamber) where applicable | Irish Grid Ref. (outfall) | Included in Schedule of the WWDL | Significance of the overflow(High / Medium / Low) | Assessed against DoEHLG Criteria | No. of times activated in 2022 (No. of events) | Total volume discharged in 2022 (m³) | Monitoring Status |
|---|---------------------------------|--|---|---|---|--|----------------------|
| твс | 322644 226837 | No | Low Significance | Meeting Criteria | Unknown | Unknown | Not Monitored |
| твс | 321686 225600 | No | Low Significance | Meeting Criteria | Unknown | Unknown | Not Monitored |
| твс | 321686 225600 | No | Low Significance | Meeting Criteria | Unknown | Unknown | Not Monitored |
| твс | 321686 225600 | No | Low Significance | Meeting Criteria | Unknown | Unknown | Not Monitored |
| твс | 321686 225600 | No | Low Significance | Meeting Criteria | Unknown | Unknown | Not Monitored |
| твс | 321686 225600 | No | Low Significance | Not Meeting Criteria | Unknown | Unknown | Not Monitored |

| WWDL Name / Code for Storm Water Overflow (chamber) where applicable | Irish Grid Ref. (outfall) | Included in Schedule of the WWDL | Significance of the overflow(High / Medium / Low) | Assessed against DoEHLG Criteria | No. of times activated in 2022 (No. of events) | Total volume discharged in 2022 (m³) | Monitoring Status |
|---|---------------------------------|--|---|---|---|--|----------------------|
| твс | 322071 225515 | No | Low Significance | Meeting Criteria | Unknown | Unknown | Not Monitored |
| твс | 322399 225484 | No | Low Significance | Meeting Criteria | Unknown | Unknown | Not Monitored |
| твс | 323354 225881 | No | Low Significance | Meeting Criteria | Unknown | Unknown | Not Monitored |
| твс | 323613 225495 | No | Low Significance | Meeting Criteria | Unknown | Unknown | Not Monitored |
| твс | 325252 223481 | No | Low Significance | Not Meeting Criteria | Unknown | Unknown | Not Monitored |
| твс | 325328 223502 | No | Low Significance | Not Meeting Criteria | Unknown | Unknown | Not Monitored |
| твс | 321590 225567 | No | Low Significance | Not Meeting Criteria | Unknown | Unknown | Not Monitored |
| твс | 320524 227692 | No | Low Significance | Meeting Criteria | Unknown | Unknown | Not Monitored |
| твс | 326078 224651 | No | Low Significance | Meeting Criteria | Unknown | Unknown | Not Monitored |
| твс | 327548 223736 | No | Low Significance | Meeting Criteria | 41 | 330668 | Monitored |

| WWDL Name / Code for Storm Water Overflow (chamber) where applicable | Irish Grid Ref. (outfall) | Included in Schedule of the WWDL | Significance of the overflow(High / Medium / Low) | Assessed against DoEHLG Criteria | No. of times activated in 2022 (No. of events) | Total volume discharged in 2022 (m³) | Monitoring Status |
|---|---------------------------------|--|---|---|---|--|----------------------|
| твс | 325056 220697 | No | Low Significance | Meeting Criteria | Unknown | Unknown | Not Monitored |

Any TBC SWO(s) were identified as part of the on-going National SWO programme and will be updated in subsequent AER(s) once the information is confirmed.

| SWO Summary | |
|---|--------|
| How much sewage was discharged via monitored SWOs in the agglomeration in the year (m ³)? | 330668 |
| Is each SWO identified as not meeting DoEHLG Guidance included in the Programme of Improvements? | Yes |
| The SWO Assessment included the requirements of relevant of WWDL schedules? | Yes |
| Have the EPA been advised of any additional SWOs / changes to Schedule C3 and A4 under Condition 1.7? | No |

4.2 REPORT ON PROGRESS MADE AND PROPOSALS BEING DEVELOPED TO MEET THE IMPROVEMENT PROGRAMME REQUIREMENTS

4.2.1 SPECIFIED IMPROVEMENT PROGRAMME SUMMARY

A wastewater discharge licence may require a number of reports on specific subject areas to be prepared for the agglomeration in question. These reports are submitted to the EPA as part of the Annual Environmental Report. This section provides a list of the various reports required for this agglomeration and a brief summary of their recommendations.

| Specified Improvement Programmes (under Schedule A and C of WWDL) | Description | Licence Schedule | Licence Completion Date | Date Expired? (N/NA/Y) | Status of Works | Timeframe for Completing the Work | Comments |
|---|---|---------------------|-------------------------------|------------------------------|--------------------|--|---|
| D0038-02 SIP:01 | If not in compliance with DoECLG criteria following assessment, upgrade of sewer network to ensure stormwater overflow meets DoECLG criteria: TPEFF3900D0038SW014 | С | 31/12/2025 | No | Completed | | DAP Assessment - SW014 compliant |
| D0038-02 SIP:02 | If not in compliance with DoECLG criteria following assessment, upgrade of sewer network to ensure stormwater overflow meets DoECLG criteria: TPEFF3900D0038SW015 | С | 31/12/2025 | No | At Construction | | DAP Assessment |
| D0038-02 SIP:03 | If not in compliance with DoECLG criteria following assessment, upgrade of sewer network to ensure stormwater overflow meets DoECLG criteria: TPEFF3900D0038SW016 | С | 11/08/2022 | Yes | At Construction | | DAP Assessment |

| Specified Improvement Programmes (under Schedule A and C of WWDL) | Description | Licence Schedule | Licence Completion Date | Date Expired? (N/NA/Y) | Status of Works | Timeframe for Completing the Work | Comments |
|---|---|---------------------|-------------------------------|------------------------------|--------------------|--|-------------------|
| D0038-02 SIP:04 | If not in compliance with DoECLG criteria following assessment, upgrade of sewer network to ensure stormwater overflow meets DoECLG criteria: TPEFF3900D0038SW017 | С | 11/08/2022 | Yes | At Construction | | DAP Assessment |
| D0038-02 SIP:05 | If not in compliance with DoECLG criteria following assessment, upgrade of sewer network to ensure stormwater overflow meets DoECLG criteria: TPEFF3900D0038SW022 | С | 11/08/2022 | Yes | At Construction | | DAP Assessment |
| D0038-02 SIP:06 | If not in compliance with DoECLG criteria following assessment, upgrade of sewer network to ensure stormwater overflow meets DoECLG criteria: TPEFF3900D0038SW023 | С | 31/12/2025 | No | At Construction | | DAP Assessment |
| D0038-02 SIP:07 | If not in compliance with DoECLG criteria following assessment, upgrade of sewer network to ensure stormwater overflow meets DoECLG criteria: TPEFF3900D0038SW024 | С | 31/12/2025 | No | At Construction | | DAP Assessment |
| D0038- 02 SIP:08 | If not in compliance with DoECLG criteria following assessment, upgrade of sewer network to ensure stormwater overflow meets DoECLG criteria: TPEFF3900D0038SW025 | С | 11/08/2022 | Yes | At Construction | | DAP Assessment |

| Specified Improvement Programmes (under Schedule A and C of WWDL) | Description | Licence Schedule | Licence Completion Date | Date Expired? (N/NA/Y) | Status of Works | Timeframe for Completing the Work | Comments |
|---|---|---------------------|-------------------------------|------------------------------|--------------------|--|---|
| D0038- 02 SIP:09 | If not in compliance with DoECLG criteria following assessment, upgrade of sewer network to ensure stormwater overflow meets DoECLG criteria: TPEFF3900D0038SW026 | С | 11/08/2022 | Yes | Completed | | DAP Assessment - SW026 compliant |
| D0038-02 SIP:10 | If not in compliance with DoECLG criteria following assessment, upgrade of sewer network to ensure stormwater overflow meets DoECLG criteria: TPEFF3900D0038SW027 | С | 11/08/2022 | Yes | Completed | | DAP Assessment - SW027 compliant |
| D0038- 02 SIP:11 | If not in compliance with DoECLG criteria following assessment, upgrade of sewer network to ensure stormwater overflow meets DoECLG criteria: TPEFF3900D0038SW028 | С | 11/08/2022 | Yes | At Construction | | DAP Assessment |
| D0038-02 SIP:12 | Upgrade of sewer network to ensure stormwater overflow meets DoECLG criteria: TPEFF1000D0038SW003 | С | 31/12/2025 | No | Completed | | DAP Assessment - SW003 compliant |
| D0038-02 SIP:13 | Upgrade of sewer network to ensure stormwater overflow meets DoECLG criteria: TPEFF3900D0038SW020 | С | 31/12/2025 | No | At Construction | | DAP Assessment |
| D0038-02 SIP:14 | Upgrade of sewer network to ensure stormwater overflow meets DoECLG criteria: TPEFF3900D0038SW021 | С | 31/12/2025 | No | At Construction | | DAP Assessment |

A summary of the status of any other improvements identified by under Condition 5 assessments- is included below.

4.2.2 IMPROVEMENT PROGRAMME SUMMARY

| Improvement | Improvement Description / or any Operational | Improvement | Expected Completion | Comments |
|-----------------------|--|-------------|---------------------|----------|
| Identifier | Improvements | Source | Date | |
| No additional improve | ments planned at this time. | | | |

4.2.3 SEWER INTEGRITY RISK ASSESSMENT

The utilisation of multiple capital maintenance programmes and the outputs of the workshops with the Local Authority Operations Staff held under the programme can be used to satisfy the requirements of Condition 5 regarding network integrity. Improvement works identified by way of these programmes and workshops will be included in the Improvements Summary Tables 4.2.1 and 4.2.2.

5 LICENCE SPECIFIC REPORTS

A wastewater discharge licence may require a number of reports on specific subject areas to be prepared for the agglomeration in question. These reports are submitted to the EPA as part of the Annual Environmental Report. This section provides a list of the various reports required for this agglomeration and a brief summary of their recommendations.

| Licence Specific Report | Required by licence | Year included in AER | Included in this AER |
|--|-----------------------------------|----------------------|----------------------|
| There is no Licence Specific Report Re | quired in this AER Annual Review. | | |

6 CERTIFICATION AND SIGN OFF

6.1 SUMMARY OF AER CONTENTS

| Parameter | Answer |
|--|--------|
| Does the AER include an Executive Summary? | Yes |
| Does the AER include an assessment of the performance of the Waste Water Works (i.e. have the results of assessments been interpreted against WWDL requirements and or Environmental Quality Standards)? | Yes |
| Is there a need to advise the EPA for Consideration of a Technical Amendment/Review of the Licence? | No |
| List reason e.g. additional SWO identified | N/A |
| Is there a need to request/advise the EPA of any modification to the existing WWDL with respect to condition 4 changes to monitoring location, frequency etc | No |
| List reason e.g. changes to monitoring requirements | N/A |
| Have these processes commenced? | N/A |
| Are all outstanding reports and assessments from previous AERs included as an appendix to this AER | N/A |

I certify that the information given in this Annual Environmental Report is truthful, accurate and complete:

Date: 31/05/2023

This AER has been produced by Uisce Éireann's Environmental Information System (EIMS) and has been electronically signed off in that system for and on behalf of,

Eleanor Roche

Acting Head of Environmental Regulation.

7 APPENDIX

Appendix

Appendix 7.1 - Ambient Monitoring Summary

Shanganagh 2022 Ambient Monitoring

| Ambient Monitoring Point from WWDL (or as agreed with EPA) | Irish Grid Reference | EPA Feature Coding Tool code | Bathing Water | Drinking Water | FWPM | Shellfish | Current WFD Status |
|--|-------------------------|---------------------------------|------------------|-------------------|------|-----------|-----------------------|
| Upstream | 327527, 224160 | CW34001016DB6017 | Yes | No | No | No | High |
| Downstream | 327730, 222408 | CW34001016DB6001 | Yes | No | No | No | High |

Ambient Sampling Results 2022

| Sampling Point | Sampled Date | Ammonia | B.O.D. | Colour (Visual) | DIN | Dissolved Oxygen | E. coli | Enterococci | Enterococci | Odour | рН | TON | Total Coliforms |
|--|------------------|-----------|--------|--------------------|------|---------------------|-----------|-------------|-------------|--------|-----|-----------|-----------------|
| | | μg/l as N | mg/l | | μg/l | % Sat. | MPN/100ml | CFU/100ml | CFU/100ml | | рН | μg/l as N | MPN/100ml |
| (40630) Receiving Water1 Shanganagh STW, Killiney Bay. | 12/01/2022 10:45 | <10 | <1 | Normal | 111 | 94 | 31 | | 1 | Normal | 8 | 111 | 31 |
| (40630) Receiving Water1 Shanganagh STW, Killiney Bay. | 23/02/2022 09:10 | 34 | <1 | Normal | 139 | 99 | 63 | | 76 | Normal | 8 | 105 | 393 |
| (40630) Receiving Water1 Shanganagh STW, Killiney Bay. | 23/03/2022 09:20 | 24 | <1 | Normal | 187 | 104 | <20 | | 3 | Normal | 8 | 163 | 62 |
| (40630) Receiving Water1 Shanganagh STW, Killiney Bay. | 20/04/2022 10:05 | 195 | 2 | Normal | 195 | 110 | <10 | | 1 | Normal | 8.1 | <40 | <10 |
| (40630) Receiving Water1 Shanganagh STW, Killiney Bay. | 25/05/2022 08:07 | 80 | <1 | Normal | 80 | 101 | 10 | <1 | | Normal | 8.1 | <40 | 52 |
| (40630) Receiving Water1 Shanganagh STW, Killiney Bay. | 22/06/2022 08:09 | 20 | <1 | Normal | 20 | 99 | <10 | | 2 | Normal | 8 | <40 | 10 |
| (40630) Receiving Water1 Shanganagh STW, Killiney Bay. | 20/07/2022 07:50 | 24 | <1 | Normal | 24 | 101 | <10 | <1 | | Normal | 8 | <40 | <10 |
| (40630) Receiving Water1 Shanganagh STW, Killiney Bay. | 24/08/2022 08:01 | <10 | <1 | Normal | < 50 | 101 | 135 | | 280 | Normal | 8 | <40 | 148 |
| (40630) Receiving Water1 Shanganagh STW, Killiney Bay. | 28/09/2022 09:48 | 52 | <1 | Normal | 52 | 101 | 10 | <1 | | Normal | 8 | <40 | 10 |
| (40630) Receiving Water1 Shanganagh STW, Killiney Bay. | 26/10/2022 09:22 | <10 | <1 | Normal | 82 | 102 | 109 | | 64 | Normal | 8 | 82 | 839 |
| (40630) Receiving Water1 Shanganagh STW, Killiney Bay. | 23/11/2022 12:00 | <10 | <1 | Normal | 117 | 99 | 10 | | 9 | Normal | 8 | 117 | 98 |
| (40630) Receiving Water1 Shanganagh STW, Killiney Bay. | 14/12/2022 09:40 | 16 | <1 | Normal | 16 | 100 | 10 | | 8 | Normal | 7.9 | <40 | 63 |
| | | | | | | | | | | | | | |
| (40632) Receiving Water2 Shanganagh STW, Killiney Bay. | 12/01/2022 11:05 | 42 | <1 | Normal | 154 | 91 | <10 | | 1 | Normal | 8 | 112 | 10 |
| (40632) Receiving Water2 Shanganagh STW, Killiney Bay. | 23/02/2022 09:25 | 41 | <1 | Normal | 171 | 99 | 20 | | 13 | Normal | 8 | 130 | 131 |
| (40632) Receiving Water2 Shanganagh STW, Killiney Bay. | 23/03/2022 09:20 | 21 | <1 | Normal | 145 | 103 | <20 | | 2 | Normal | 8 | 124 | 20 |
| (40632) Receiving Water2 Shanganagh STW, Killiney Bay. | 20/04/2022 10:20 | 237 | 2 | Normal | 237 | 109 | <10 | <1 | | Normal | 8.1 | <40 | 10 |
| (40632) Receiving Water2 Shanganagh STW, Killiney Bay. | 25/05/2022 07:56 | 49 | <1 | Normal | 49 | 101 | <10 | | 2 | Normal | 8.1 | <40 | 10 |
| (40632) Receiving Water2 Shanganagh STW, Killiney Bay. | 22/06/2022 08:01 | 222 | >6 | Normal | 222 | 100 | <10 | | 1 | Normal | 8 | <40 | 10 |
| (40632) Receiving Water2 Shanganagh STW, Killiney Bay. | 20/07/2022 07:40 | 15 | <1 | Normal | 15 | 100 | <10 | <1 | | Normal | 8 | <40 | 10 |
| (40632) Receiving Water2 Shanganagh STW, Killiney Bay. | 24/08/2022 08:08 | <10 | <1 | Normal | < 50 | 100 | <10 | | 4 | Normal | 8 | <40 | <10 |
| (40632) Receiving Water2 Shanganagh STW, Killiney Bay. | 28/09/2022 10:03 | 85 | <1 | Normal | 85 | 100 | 10 | <1 | | Normal | 8 | <40 | 10 |
| (40632) Receiving Water2 Shanganagh STW, Killiney Bay. | 26/10/2022 09:10 | <10 | <1 | Normal | 95 | 101 | 97 | | 43 | Normal | 8 | 95 | 754 |
| (40632) Receiving Water2 Shanganagh STW, Killiney Bay. | 23/11/2022 11:40 | 11 | <1 | Normal | 149 | 98 | 20 | | 6 | Normal | 8 | 138 | 108 |
| (40632) Receiving Water2 Shanganagh STW, Killiney Bay. | 14/12/2022 10:10 | 14 | <1 | Normal | 14 | 101 | 10 | | 13 | Normal | 8 | <40 | 31 |

Killiney Beach Bathing Water Monitoring Results 2022:

| Date | E-Coli (cfu/100ml) | Intestinal Enterococci (cfu/100ml) | EPA Classification Standard | | |
|------------|-----------------------|--|-----------------------------------|--|--|
| 04/01/2022 | 75 | 6 | Excellent | | |
| 17/01/2022 | 10 | 21 | Excellent | | |
| 31/01/2022 | 10 | 1 | Excellent | | |
| 14/02/2022 | 10 | 8 | Excellent | | |
| 28/02/2022 | <10 | 19 | Excellent | | |
| 14/03/2022 | 31 | 10 | Excellent | | |
| 28/03/2022 | <10 | 5 | Excellent | | |
| 11/04/2022 | <10 | <1 | Excellent | | |
| 25/04/2022 | <10 | <1 | Excellent | | |
| 10/05/2022 | 10 | 2 | Excellent | | |
| 21/09/2022 | <10 | 5 | Excellent | | |
| 26/09/2022 | <10 | 50 | Excellent | | |
| 10/10/2022 | <10 | 7 | Excellent | | |
| 24/10/2022 | 63 | 15 | Excellent | | |
| 08/11/2022 | 145 | 100 | Excellent | | |
| 22/11/2022 | 85 | 49 | Excellent | | |
| 06/12/2022 | 10 | 27 | Excellent | | |
| 19/12/2022 | 20 | 66 | Excellent | | |

Source: Beaches.ie