Annual Environmental Report

2023

Drogheda

D0041-01

CONTENTS

1 EXECUTIVE SUMMARY AND INTRODUCTION TO THE 2023 AER

1.1 Annual Statement of Measures

1.2 Treatment Summary

1.3 ELV Overview

1.4 License Specific Report Included in AER

2 TREATMENT PLANT PERFORMANCE AND IMPACT SUMMARY

2.1 Drogheda WWTP - Treated Discharge

2.1.1 Influent Summary - Drogheda WWTP

2.1.2 Effluent Monitoring Summary - Drogheda WWTP

2.1.3 Ambient Monitoring Summary for The Treatment Plant Discharge

2.1.4 Operational Reports Summary for Drogheda WWTP

2.1.5 Sludge/Other Inputs to Drogheda WWTP

3 COMPLAINTS AND INCIDENTS

3.1 COMPLAINTS SUMMARY

3.2 REPORTED INCIDENTS SUMMARY

3.2.1 Summary of Incidents

3.2.2 Summary of Overall Incidents

4 INFRASTRUCTURAL ASSESSMENT AND PROGRAMME OF IMPROVEMENTS

4.1 STORM WATER OVERFLOW IDENTIFICATION AND INSPECTION REPORT

4.1.1 SWO Identification and Inspection Summary Report

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

4.2.1 Specified Improvement Programme Summary

4.2.2 Improvement Programme Summary

4.2.3 Sewer Integrity Risk Assessment

5 LICENCE SPECIFIC REPORTS

5.1 Priority Substances Assessment

6 CERTIFICATION AND SIGN OFF

6.1 Summary of AER Contents

7 APPENDIX

1 EXECUTIVE SUMMARY AND INTRODUCTION TO THE 2023 AER

This Annual Environmental Report has been prepared for D0041-01, Drogheda, in Louth 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.

Uisce Éireann is progressing with plans to replace the anaerobic digesters on a phased basis over the next number of years while the plant remains operational. To safely facilitate these works the digestion process has been switched off, and the digestion of sludge on-site has therefore ceased pending replacement of the digesters.

The replacement of the anaerobic digesters at the site represents a significant investment by Uisce Éireann in the continued upgrade of the plant. The capital upgrade works on these digesters are advancing on site presently and include replacement of 1 no. anaerobic digester under the current programme. While the digester construction is now completed, it will not be brought back into operation until the rest of the sludge farm upgrades have been completed.

Uisce Éireann have also completed a review of the rest of sludge farm for the site, in order to identify any further works that may be deemed necessary and are progressing with procurement and installation of new and advanced (technology) centrifuges for dewatering of sludge which have integrated odour extraction. Uisce Éireann are also advancing with sludge farm odour abatement unit works on the site. It is anticipated that all works to the sludge farm will be completed by Q3 2027.

1.2 TREATMENT SUMMARY

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

- Drogheda WWTP with a Plant Capacity PE of 101600, the treatment type is 3NP - Tertiary N&P removal.

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
TPEFF2100D0041SW001	Drogheda WWTP	Treated	Non-Compliant	Ammonia-Total (as N) mg/l ortho-Phosphate (as P) - unspecified mg/l Total Phosphorus (as P) 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 DROGHEDA WWTP - TREATED DISCHARGE

2.1.1 INFLUENT MONITORING SUMMARY - DROGHEDA 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
Total Nitrogen mg/l	27	115	33
COD-Cr mg/l	27	1365	581
Suspended Solids mg/l	27	847	359
BOD, 5 days with Inhibition (Carbonaceous) mg/l	27	419	173
Total Phosphorus (as P) mg/l	27	30	12
Hydraulic Capacity	N/A	69803	27531

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’.

2.1.2 EFFLUENT MONITORING SUMMARY - TPEFF2100D0041SW001

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	250	N/A	27	N/A	N/A	24	Pass
Suspended Solids mg/l	25	62.5	N/A	27	1	N/A	8.90	Pass
BOD, 5 days with Inhibition (Carbonaceous) mg/l	20	40	N/A	27	N/A	N/A	2.47	Pass
Total Nitrogen mg/l	15	18	N/A	26	1	N/A	9.87	Pass
pH pH units	6	9	N/A	27	N/A	N/A	7.69	Pass
Total Phosphorus (as P) mg/l	2	2.4	N/A	26	2	1	0.540	Fail
Ammonia-Total (as N) mg/l	2	2.4	N/A	27	13	9	2.09	Fail
ortho-Phosphate (as P) - unspecified mg/l	1.5	1.8	N/A	27	2	2	0.402	Fail

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):

Inadequate operational procedures/training, WWTP upgrade required to meet ELVs & WWTP not designed for P removal.

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 TPEFF2100D0041SW001

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	Station Code	Bathing Water	Drinking Water	FWPM	Shellfish	WFD Status
Upstream	311724, 275841	TW21001002BE1005	No	No	No	No	Moderate
Downstream	313053, 276227	TW21001002BE1006	Yes	No	No	No	Moderate

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 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 WWTP discharge was not compliant with the ELV's set in the wastewater discharge licence.

Based on ambient monitoring results a deterioration in BOD, TON, Dissolved Oxygen, TSS and Ortho-P concentrations downstream of the effluent discharge is noted.

A deterioration in water quality has been identified, however it is not known if it or is not caused by the WWTP.

Agriculture & the Drogheda WWTP are cited as significant pressures impacting the Boyne Estuary transitional waterbody in the 3rd Cycle Draft Boyne Catchment Report (HA 07).

Based on the effluent compliance results, the discharge from the wastewater treatment plant may be having an observable negative impact on the Water Framework Directive status downstream of the WWTP. It should be noted however that the current WFD status is Moderate both upstream and downstream of the WWTP.

It is not considered that the discharge from the wastewater treatment plant is having an observable negative impact on any downstream bathing water areas.

2.1.4 OPERATIONAL PERFORMANCE SUMMARY - DROGHEDA WWTP

2.1.4.1 Treatment Efficiency Report - Drogheda 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)
TP	112391	5301	95
COD	5553171	228263	96
cBOD	1657304	23907	99
TN	319397	96850	70
SS	3429923	86237	97

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

2.1.4.2 Treatment Capacity Report Summary - Drogheda 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.

Drogheda WWTP	
Peak Hydraulic Capacity (m^3/day) - As Constructed	84550
DWF to the Treatment Plant (m^3/day)	67288
Current Hydraulic Loading - annual max (m^3/day)	69803
Average Hydraulic loading to the Treatment Plant (m^3/day)	27531
Organic Capacity (PE) - As Constructed	101600
Organic Capacity (PE) - Collected Load (peak week)[Note1]	86817
Organic Capacity (PE) - Remaining	14783
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 - DROGHEDA WWTP

'Other inputs' to the waste water treatment plant are summarised in the 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)
Industrial / Commercial Sludge	20670.6	Volume (m^3)	251.7	0.2	Yes	Yes	Yes
Landfill Leachate (delivered by tanker)	14067.7	Volume (m^3)	171.3	0.14	Yes	Yes	Yes
Domestic /Septic Tank Sludge	1585.2	Volume (m^3)	19.3	0.02	Yes	Yes	Yes

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 environmental complaints in 2023.			

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	Recurring (Y/N)	Closed (Y/N)
Breach of ELV	WWTP upgrade required to meet ELV	Yes	No
Abatement equipment off-line	Plant or equipment breakdown at WWTP	No	No
Spillage	Plant or equipment breakdown at WWTP	No	No

Incident Type	Cause	Recurring (Y/N)	Closed (Y/N)
Abatement equipment off-line	Plant or equipment breakdown at WWTP	No	No
Abatement equipment off-line	Screen maintenance issue	No	No
Uncontrolled release	Broken Sewer Pipe	No	Yes
Abatement equipment off-line	Plant or equipment breakdown at WWTP	No	Yes
Abatement equipment off-line	Plant or equipment breakdown at WWTP	No	Yes
Abatement equipment off-line	Plant or equipment breakdown at WWTP	No	Yes
Abatement equipment off-line	Plant or equipment breakdown at WWTP	No	Yes
Abatement equipment off-line	Plant or equipment breakdown at WWTP	No	Yes
Breach of ELV	WWTP not designed for P removal	Yes	Yes
Abatement equipment off-line	Plant or equipment breakdown at WWTP	No	Yes
Uncontrolled release	SWO exceptional rainfall and overflow expected	Yes	Yes
Uncontrolled release	Emergency overflow caused by power failure	No	Yes
Uncontrolled release	Emergency overflow caused by power failure	No	Yes
Breach of ELV	Inadequate Operational Procedures/Training	Yes	Yes

3.2.2 SUMMARY OF OVERALL INCIDENTS

Question	Answer
Number of Incidents in 2023	17
Number of Incidents reported to the EPA via EDEN in 2023	17
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 2023 (No. of events)	Total volume discharged in 2023 (m^3)	Monitoring Status
SW10	308818,274957	Yes	Low Significance	Not Meeting Criteria	Unknown	Unknown	Not Monitored
SW15	316415,275275	Yes	Low Significance	Meeting Criteria	Unknown	Unknown	TBC
SW3	309266,275160	Yes	Low Significance	Meeting Criteria	Unknown	Unknown	Not Monitored
SW4	309037,275017	Yes	Low Significance	Meeting Criteria	Unknown	Unknown	Not Monitored
SW5	308774,274990	Yes	Low Significance	Meeting Criteria	Unknown	Unknown	Not Monitored
SW6	308583,275086	Yes	Low Significance	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 2023 (No. of events)	Total volume discharged in 2023 (m^3)	Monitoring Status
SW7	308134,275363	Yes	Medium Significance	Meeting Criteria	Unknown	Unknown	Not Monitored
SW8	307637,275457	Yes	Low Significance	Meeting Criteria	Unknown	Unknown	Not Monitored
TBC	310736,275478	Yes	Low Significance	Meeting Criteria	0	0	Monitored
TBC	306422,275105	Yes	Low Significance	Meeting Criteria	Unknown	Unknown	Not Monitored
TBC	315091,276131	Yes	Low Significance	Meeting Criteria	Unknown	Unknown	Not Monitored
TBC	314640,275509	Yes	Low Significance	Meeting Criteria	Unknown	Unknown	Not Monitored
TBC	313299,275941	Yes	Low Significance	Meeting Criteria	Unknown	Unknown	Not Monitored
TBC	316186,271181	Yes	Low Significance	Meeting Criteria	Unknown	Unknown	Not Monitored
TBC	313559,270364	Yes	Low Significance	Meeting Criteria	Unknown	Unknown	Not Monitored
TBC	315372,275195	Yes	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 wastewater discharge by metered SWOs during the year (m^3)?	0
Is each SWO identified as not meeting DoEHLG Guidance included in the Programme of Improvements?	No
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
D0041-SIP:01	Nutrient removal to meet ELVs as specified in Schedule A	C	30/06/2014	Yes	Works Completed		

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

4.2.3 SEWER INTEGRITY RISK ASSESSMENT

N/A

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	Included in this AER
Priority Substances Assessment	Yes	No

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: 28/02/2024

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

Head of Environmental Regulation.

7 APPENDIX

Appendix
Appendix 7.1 - Ambient Monitoring Summary

Drogheda 2023 Ambient Monitoring Data

Ambient Monitoring Report Summary Table

			Receiving Waters Designation (Yes/No)				
Ambient Monitoring Point from WWDL (or as agreed with EPA)	**Irish National Grid Reference (Easting, Northing)**	**EPA Feature Coding Tool code**	**Bathing Water**	**Drinking Water**	**FWPM**	**Shellfish**	**WFD Status 2016-2021**
Upstream Monitoring Point	E311724 N275841	TW21001002BE1005	No	No	No	No	Moderate
Downstream Monitoring Point	E313053 N276227	TW21001002BE1006	Yes	No	No	No	Moderate

2023 Ambient Monitoring Summary

			Ammonia N	Ortho-Phosphate P	Total Suspended Solids	Total Oxidised Nitrogen N	pH	Dissolved Oxygen	Biological Oxygen Demand	Temperature
Station	**Station Reference**	**Sample Date**	**mg/l**	**mg/l**	**mg/l**	**mg/l**	**pH units**	**% Sat.**	**mg/l**	**degrees C**
Upstream	TW21001002BE1005	08/03/2023	< 0.08	< 0.16	57	5.6	8.1	71.6	< 3	6.8
Upstream	TW21001002BE1005	13/07/2023	0.2	< 0.01	39	9.5	8	94.2	< 1	16.3
Upstream	TW21001002BE1005	12/09/2023	0.11	< 0.01	29	3	8.1	92.7	1	17.1
Upstream	TW21001002BE1005	05/10/2023	0.11	< 0.01	61	3	8.1	91.6	< 1	10.9
Upstream	TW21001002BE1005	20/11/2023	< 0.015	< 0.01	< 2	2.2	8	103.2	1	9.1
		Mean	**0.097**	**0.028**	**37.483**	**4.660**	**8.060**	**90.660**	**1.107**	**12.040**
		95%ile	**0.182**	**0.092**	**60.200**	**8.720**	**8.100**	**101.400**	**1.897**	**16.940**

			Ammonia N	Ortho-Phosphate P	Total Suspended Solids	Total Oxidised Nitrogen N	pH	Dissolved Oxygen	Biological Oxygen Demand	Temperature
Station	**Station Reference**	**Sample Date**	**mg/l**	**mg/l**	**mg/l**	**mg/l**	**pH units**	**% Sat.**	**mg/l**	**degrees C**
Downstream	TW21001002BE1006	08/03/2023	< 0.08	< 0.16	141	5.8	8.1	85.1	< 3	6.6
Downstream	TW21001002BE1006	13/07/2023	0.28	< 0.01	62	9.5	7.9	92.9	5	16.5
Downstream	TW21001002BE1006	12/09/2023	0.08	0.01	27	2.2	8	94.5	< 1	17
Downstream	TW21001002BE1006	05/10/2023	0.038	< 0.01	317		7.8	92.4	1	11.1
Downstream	TW21001002BE1006	20/11/2023	< 0.015	< 0.01	11	2.2	8.1	102.7	2	9
		Mean	**0.093**	**0.029**	**111.600**	**4.925**	**7.980**	**93.520**	**2.166**	**12.040**
		95%ile	**0.240**	**0.093**	**281.800**	**8.945**	**8.100**	**101.060**	**4.424**	**16.900**

Seapoint (Louth) Bathing Waters (EPA Beaches.ie)

The Escherichia coli and Intestinal enterococci results for the 2023 sample period are tabled below.

Date	Escherichia coli	Intestinal enterococci	Sample Quality Status
23/05/2023	31	2	Excellent
06/06/2023	10	5	Excellent
12/06/2023	10	3	Excellent
19/06/2023	<10	2	Excellent
26/06/2023	<10	<1	Excellent
03/07/2023	<10	19	Excellent
11/07/2023	31	20	Excellent
17/07/2023	10	7	Excellent
24/07/2023	52	24	Excellent
31/07/2023	52	19	Excellent
01/08/2023	10	3	Excellent
08/08/2023	20	<1	Excellent
14/08/2023	<10	8	Excellent
15/08/2023	41	7	Excellent
21/08/2023	121	21	Excellent
22/08/2023	96	21	Excellent
28/08/2023	10	1	Excellent
29/08/2023	30	11	Excellent
04/09/2023	<10	<1	Excellent
11/09/2023	20	1	Excellent

Clogherhead Bathing Waters (EPA Beaches.ie)

The Escherichia coli and Intestinal enterococci results for the 2023 sample period are tabled below.

Date	Escherichia coli	Intestinal enterococci	Sample Quality Status
23/05/2023	<10	<1	Excellent
06/06/2023	10	<1	Excellent
12/06/2023	<10	<1	Excellent
19/06/2023	10	2	Excellent
26/06/2023	<10	<1	Excellent
03/07/2023	<10	22	Excellent
11/07/2023	20	24	Excellent
17/07/2023	<10	6	Excellent
24/07/2023	<10	1	Excellent
31/07/2023	441	250	Sufficient
01/08/2023	373	109	Good
08/08/2023	10	5	Excellent
14/08/2023	<10	1	Excellent
15/08/2023	10	2	Excellent
21/08/2023	109	22	Excellent
22/08/2023	96	17	Excellent
28/08/2023	10	<1	Excellent
29/08/2023	52	8	Excellent
04/09/2023	10	2	Excellent
11/09/2023	20	8	Excellent

Laytown/Bettystown Waters (EPA Beaches.ie)

The Escherichia coli and Intestinal enterococci results for the 2023 sample period are tabled below.

Date	Escherichia coli	Intestinal enterococci	Sample Quality Status
11/09/2023	10	3	Excellent
04/09/2023	31	2	Excellent
28/08/2023	41	11	Excellent
21/08/2023	146	24	Excellent
14/08/2023	108	29	Excellent
09/08/2023	146	9	Excellent
31/07/2023	305	510	Poor
25/07/2023	52	5	Excellent
17/07/2023	41	11	Excellent
10/07/2023	<10	5	Excellent
03/07/2023	41	38	Excellent
26/06/2023	20	5	Excellent
19/06/2023	<10	7	Excellent
12/06/2023	52	12	Excellent
06/06/2023	98	39	Excellent
22/05/2023	109	11	Excellent