Annual Environmental Report 2024



Ennisarone

D0102-01

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1 EXECUTIVE SUMMARY AND INTRODUCTION TO THE 2024 AER

This Annual Environmental Report has been prepared for D0102-01, Enniscrone, in Sligo 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.

1.2 TREATMENT SUMMARY

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

• Enniscrone WWTP with a Plant Capacity PE of 5000, 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
TPEFF2700D0102SW001	Enniscrone WWTP	Treated	Non-Compliant	Total Oxidised 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 ENNISCRONE WWTP - TREATED DISCHARGE

2.1.1 INFLUENT MONITORING SUMMARY - ENNISCRONE 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	28	119	27
Total Phosphorus (as P) mg/l	28	29	2.99
COD-Cr mg/l	27	1080	286
Suspended Solids mg/l	27	494	145
BOD, 5 days with Inhibition (Carbonaceo mg/l	27	582	74
Hydraulic Capacity	N/A	1901	762

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 - TPEFF2700D0102SW001

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	26	N/A	N/A	13	Pass
Suspended Solids mg/l	35	87.5	N/A	26	N/A	N/A	6.22	Pass
Temperature °C	25	25	N/A	25	N/A	N/A	12	Pass
BOD, 5 days with Inhibition (Carbonaceo mg/I	25	50	N/A	26	N/A	N/A	1.08	Pass
Total Oxidised Nitrogen (as N) mg/l	15	18	N/A	26	3	3	6.51	Fail
Ammonia-Total (as N) mg/l	10	12	N/A	26	N/A	N/A	0.111	Pass
pH pH units	9	9	N/A	26	N/A	N/A	8.26	Pass
Total Phosphorus (as P) mg/l	N/A	N/A	N/A	22	N/A	N/A	1.82	
Total Nitrogen mg/l	N/A	N/A	N/A	22	N/A	N/A	8.75	

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)
Fats, Oils and Greases mg/l	N/A	N/A	N/A	5	N/A	N/A	5.00	

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):

Refer to Incident Section of the Report.

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 TPEFF2700D0102SW001

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

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 do not 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 for the following: Total Oxidised Nitrogen (as N) mg/l.

Based on ambient monitoring results a deterioration in Ammonia-Total (as N) mg/l, Intestinal Enterococci cfu/100ml, 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.

Other causes of deterioration in water quality in the area are unknown.

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

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

2.1.4 OPERATIONAL PERFORMANCE SUMMARY - ENNISCRONE WWTP

2.1.4.1 Treatment Efficiency Report - Enniscrone 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)
cBOD	20509	268	99
ТР	833	384	54
COD	79526	3256	96

Parameter	Influent mass loading (kg/year)	Effluent mass emission (kg/year)	Efficiency (% reduction of influent load)	
ss	40279	1552	96	
TN	7453	1846	75	

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

2.1.4.2 Treatment Capacity Report Summary - Enniscrone 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.

Enniscrone WWTP	
Peak Hydraulic Capacity (m³/day) - As Constructed	3369
DWF to the Treatment Plant (m³/day)	1123
Current Hydraulic Loading - annual max (m³/day)	1901
Average Hydraulic loading to the Treatment Plant (m³/day)	762.4
Organic Capacity (PE) - As Constructed	5000
Organic Capacity (PE) - Collected Load (peak week)Note1	3432
Organic Capacity (PE) - Remaining	1568
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 - ENNISCRONE 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)
Domestic /Septic Tank Sludge	1255.28	Volume (m3)		0.4	No	Yes	No
Domestic /Septic Tank Sludge	40	Volume (m3)		0.4	No	Yes	No

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 2024.							

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 not designed for N removal	No	Yes

3.2.2 SUMMARY OF OVERALL INCIDENTS

Question	Answer
Number of Incidents in 2024	1
Number of Incidents reported to the EPA via EDEN in 2024	1
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 2024 (No. of events)	Total volume discharged in 2024 (m3)	Monitoring Status	
SW002	128488, 330962	Yes	Medium Significance	Not Meeting Criteria	Unknown	Unknown	Not Monitored	
SW003	128358, 329720	Yes	Low Significance	Meeting Criteria	Unknown	Unknown	Monitored	
SW004	128448, 331331	Yes	Low Significance	Meeting Criteria	Unknown	Unknown	Monitored	

The contents presented in this table include the most up to date information available at the time of writing. Any TBC SWO(s) were identified as part of the ongoing 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 (m3)?	10795
Is each SWO identified as not meeting DoEHLG Guidance included in the Programme of Improvements?	N/A
The SWO Assessment included the requirements of relevant of WWDL schedules?	N/A

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
There are no Specified Improvemen	nt Programme	s for this Aggl	omeration.				

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 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	Included in this AER
D0102-01-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?	N/A
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	N/A
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:

Signed: Date: 26/05/2025

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

Enniscrone WWTP

Ambient Monitoring Points from WWDL	Irish Grid Reference	EPA Feature Coding Tool code		WFD Status			
(or as agreed by EPA)			Bathing Water	Drinking Water	FWPM	Shellfish	
Coastal Monitoring Station	128260E 329920N	CW220005295MY2010	Yes	No	No	No	Not at Risk

Data from Beaches.ie

Bathing Season Water Quality



Excellent

Sligo County Council Sampled on 02/09/2024 Next sample due: 26/05/2025

Results - 22 May to 15 September annually

The water quality of each sample is assessed as either 'Excellent', 'Good', 'Sufficient' or 'Poor'.

When a local authority takes a water sample to check the bathing water quality,

it takes at least 2-3 days to analyse the sample and publish the results below.

Annual Water Quality Rating

Excellent

2024	2023 uality Excellent Quality	2022	2021
Excellent Quality	Excellent Quality	Good Quality	Sufficient Quality

Sample Date	E.coli Result	Intestinal Enterococci Result	Water Quality
02/09/2024	<10	8	Excellent
26/08/2024	<10	6	Excellent
19/08/2024	<10	2	Excellent
06/08/2024	<10	15	Excellent
22/07/2024	10	11	Excellent
08/07/2024	20	2	Excellent
24/06/2024	<10	<1	Excellent
10/06/2024	<10	3	Excellent
27/05/2024	<10	8	Excellent

Enniscrone Beach is classified as achieving Excellent Water Quality in 2024 based on the assessment of bacteriological results for the period 2021 to 2024. Enniscrone Beach achieved an Excellent Water Quality rating in 2023 and Good Water Quality rating in 2022, and a Sufficient Water Quality rating in 2021. Annual water quality ratings are generally calculated using monitoring results over a four-year period and are assessed against stringent bacterial limits to protect bather health. <u>Data from Beaches.ie</u>

County	Licence Ref.	Agglomeration	Receiving Water Body	Monitoring Location	Monitoring Result Source	Date	рН	Temperatur e (°C)	BOD mg/l	COD mg/l	SS mg/l	Total Nitrogen (as N) mg/l	Total Phosphorus (as P) mg/l	Ammonia	Orthophosp hate (as P) mg/l	Dissolved	Total Oxidised Nitrogen (as N) mg/l	Dissolved Inorganic Nitrogen (as N) mg/l	CoEforme	coli	Intestinal Enterococci cfu/100ml	Visual Inspection	SSRS	Water level	Conductivity	Nitrate	Chloride	Fluoride	Ammonium (NH4)	Major anions	Major Cations	Priority Subs	Metals & Organic Compounds	Salinity	Nitrate	Nitrite	Chlorophyll	Total inorganic nitrogen as N (Dissolved)
Sligo	D0102-01	Enniscrone	Killala Bay	Number of samples Required			10	10	10	0	0	0	0	10	0	10	10	10	4	4	4	52	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10	
Issued on	18/05/2010			Ambient 1 E 128260 N 32992	0																																	
				Ambient 2 E 128040 N 32985	0																																	
				Ambient 3 E 128370 N 33071	0																																	
				Ambient 4 E 127830 N 32983	0																																	
			1	Coastal Monitoring	SS Excel	11/01/2024	8	10.3	1					0.47		11.36	0.29	0.76																			2.1	
			2	Coastal Monitoring	SS Excel	15/02/2024	8	10.1	1					0.44	0.02	11.46	<0.2	0.44																			2	
			3	Coastal Monitoring	SS Excel	05/03/2024	8.1	8.9	<1					0.4		12.91	<0.2	0.41																			-2	
			4	Coastal Monitoring	SS Excel	11/04/2024	8.2	12.2	<1					0.52		12.31	<0.2	0.48																			4.8	
			5	Coastal Monitoring	SS Excel	07/05/2024	8.3	14	<1					0.45		18.4	<0.2	0.42	1	1	142																3.2	
				Coastal Monitoring		June sampled?																																
			6	Coastal Monitoring	SS Excel	04/07/2024	8.3	14.2	1.3					0.37		18.48	0.38	0.41	19	6	47																2.1	
			7	Coastal Monitoring	SS Excel	07/08/2024	8.2	14.2	2.8					0.37		8.69	<0.2	0.37	- 4	12	1733																11.7	
			8	Coastal Monitoring	SS Excel	12/09/2024	8.2	20	<1.0					0.41		9.36	<0.2	0.34	8	4	270																4.3	
			9	Coastal Monitoring	cert	05/11/2024	8	10.2	<1					0.47		8.82	<0.2	0.46			1			1													<2.0	