Annual Environmental Report

2024

Enniscorthy

D0029-01

CONTENTS

1 EXECUTIVE SUMMARY AND INTRODUCTION TO THE 2024 AER

This Annual Environmental Report has been prepared for D0029-01, Enniscorthy, in Wexford 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.

Discharges from SW10 (Slaney Street discharge) to be discontinued works on-going

1.2 TREATMENT SUMMARY

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

- Enniscorthy WWTP with a Plant Capacity PE of 26200, the treatment type is 3P - Tertiary 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
TPEFF3300D0029SW001	Enniscorthy WWTP	Treated	Compliant	N/A

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 ENNISCORTHY WWTP - TREATED DISCHARGE

2.1.1 INFLUENT MONITORING SUMMARY - ENNISCORTHY 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
COD-Cr mg/l	12	940	469
Total Phosphorus (as P) mg/l	12	13	5.72
Suspended Solids mg/l	12	444	242
Total Nitrogen mg/l	12	64	37
BOD, 5 days with Inhibition (Carbonaceo mg/l	12	551	200
Hydraulic Capacity	N/A	19174	6235

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 - TPEFF3300D0029SW001

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	12	N/A	N/A	22	Pass
Suspended Solids mg/l	35	87.5	N/A	12	N/A	N/A	11	Pass
Temperature °C	25	25	N/A	12	N/A	N/A	9.07	Pass
BOD, 5 days with Inhibition (Carbonaceo mg/l	25	50	N/A	12	N/A	N/A	2.90	Pass
Total Nitrogen mg/l	15	18	N/A	12	N/A	N/A	5.61	Pass
Fats, Oils and Greases mg/l	15	18	N/A	3	N/A	N/A	3.59	Pass
pH pH units	9	9	N/A	12	N/A	N/A	7.47	Pass
Ammonia-Total (as N) mg/l	5	6	N/A	12	N/A	N/A	0.357	Pass
Total Phosphorus (as P) mg/l	2	2.4	N/A	12	N/A	N/A	0.422	Pass

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)
ortho-Phosphate (as P) - unspecified mg/l	1	1.2	N/A	12	1	N/A	0.262	Pass
Visual Inspection Descriptive	N/A	N/A	N/A	12	N/A	N/A	N/A	

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):

Not applicable

Significance of Results:

The WWTP is compliant with the ELV's set in the Wastewater Discharge Licence.

2.1.3 AMBIENT MONITORING SUMMARY FOR THE TREATMENT PLANT DISCHARGE TPEFF3300D0029SW001

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	297536, 139759	RS12S022350	No	No	No	No	Moderate
Downstream	297803, 134564	RS12S022500	No	No	No	No	Moderate

The table below provides a summary of monitoring results for designated ambient monitoring points. The upstream and downstream annual mean values are shown (mg/l), and the difference between both monitoring stations is given as a percentage of the Environmental Quality Standard (EQS) where relevant.

Parameter Name	Upstream Monitoring Point Location	Upstream Monitoring Point Annual Mean	Downstream Monitoring Point Location	Downstream Monitoring Point Annual Mean	EQS	% of EQS
BOD - 5 days (Total) mg/l	RS12S022350	1.30	RS12S022500	1.16	1.50	-9.6
Ammonia-Total (as N) mg/l	RS12S022350	0.028	RS12S022500	0.030	0.065	3.7
ortho-Phosphate (as P) - unspecified mg/l	RS12S022350	0.015	RS12S022500	0.007	0.035	-23.3
Silica (as SiO2) mg/l	RS12S022350	7.17	RS12S022500	N/A	N/A	
Total Nitrogen mg/l	RS12S022350	4.69	RS12S022500	5.29	N/A	
Cadmium - unspecified µg/l	RS12S022350	0.022	RS12S022500	N/A	N/A	
Arsenic - unspecified µg/l	RS12S022350	1.10	RS12S022500	N/A	N/A	
Boron - unspecified µg/l	RS12S022350	13	RS12S022500	N/A	N/A	

Parameter Name	Upstream Monitoring Point Location	Upstream Monitoring Point Annual Mean	Downstream Monitoring Point Location	Downstream Monitoring Point Annual Mean	EQS	% of EQS
Alkalinity-total (as CaCO3) mg/l	RS12S022350	80	RS12S022500	N/A	N/A	
Dissolved Oxygen mg/l	RS12S022350	14	RS12S022500	20	N/A	
Beryllium - unspecified µg/l	RS12S022350	0.707	RS12S022500	N/A	N/A	
pH pH units	RS12S022350	7.94	RS12S022500	7.91	N/A	
Potassium - unspecified mg/l	RS12S022350	1.99	RS12S022500	N/A	N/A	
Iron - unspecified µg/l	RS12S022350	116	RS12S022500	N/A	N/A	
Sodium - unspecified mg/l	RS12S022350	9.19	RS12S022500	N/A	N/A	
Total Oxidised Nitrogen (as N) mg/l	RS12S022350	4.14	RS12S022500	N/A	N/A	
Lead - unspecified µg/l	RS12S022350	0.239	RS12S022500	N/A	N/A	
Copper - unspecified µg/l	RS12S022350	1.78	RS12S022500	N/A	N/A	
Antimony - unspecified µg/l	RS12S022350	0.707	RS12S022500	N/A	N/A	
Cobalt - unspecified µg/l	RS12S022350	0.707	RS12S022500	N/A	N/A	

Parameter Name	Upstream Monitoring Point Location	Upstream Monitoring Point Annual Mean	Downstream Monitoring Point Location	Downstream Monitoring Point Annual Mean	EQS	% of EQS
Calcium - unspecified mg/l	RS12S022350	27	RS12S022500	N/A	N/A	
Temperature °C	RS12S022350	12	RS12S022500	N/A	N/A	
Nickel - unspecified µg/l	RS12S022350	0.937	RS12S022500	N/A	N/A	
Magnesium - unspecified mg/l	RS12S022350	5.33	RS12S022500	N/A	N/A	
Molybdenum - unspecified µg/l	RS12S022350	0.707	RS12S022500	N/A	N/A	
Chloride mg/l	RS12S022350	17	RS12S022500	N/A	N/A	
Aluminium - unspecified µg/l	RS12S022350	70	RS12S022500	N/A	N/A	
Chromium - unspecified µg/l	RS12S022350	0.707	RS12S022500	N/A	N/A	
Conductivity @25°C µS/cm	RS12S022350	259	RS12S022500	N/A	N/A	
Dissolved Oxygen % Saturation	RS12S022350	98	RS12S022500	N/A	N/A	
Thallium - unspecified µg/l	RS12S022350	0.141	RS12S022500	N/A	N/A	
Strontium - unfiltered µg/l	RS12S022350	70	RS12S022500	N/A	N/A	

Parameter Name	Upstream Monitoring Point Location	Upstream Monitoring Point Annual Mean	Downstream Monitoring Point Location	Downstream Monitoring Point Annual Mean	EQS	% of EQS
Suspended Solids mg/l	RS12S022350	10.00	RS12S022500	N/A	N/A	
Zinc - unspecified µg/l	RS12S022350	8.41	RS12S022500	N/A	N/A	
Uranium - unfiltered µg/l	RS12S022350	2.82	RS12S022500	N/A	N/A	
Dissolved Organic Carbon mg/l	RS12S022350	4.38	RS12S022500	N/A	N/A	
Barium - unspecified µg/l	RS12S022350	12	RS12S022500	N/A	N/A	
Calculated Hardness (CaCO3) mg/l	RS12S022350	89	RS12S022500	N/A	N/A	
Mercury - unspecified µg/l	RS12S022350	0.033	RS12S022500	N/A	N/A	
Selenium - unspecified µg/l	RS12S022350	0.707	RS12S022500	N/A	N/A	
Faecal coliforms no./100mls	RS12S022350	725	RS12S022500	805	N/A	
Manganese - unspecified µg/l	RS12S022350	17	RS12S022500	N/A	N/A	
Vanadium - unspecified µg/l	RS12S022350	0.707	RS12S022500	N/A	N/A	
Total Phosphorus (as P) mg/l	RS12S022350	0.041	RS12S022500	N/A	N/A	

Parameter Name	Upstream Monitoring Point Location	Upstream Monitoring Point Annual Mean	Downstream Monitoring Point Location	Downstream Monitoring Point Annual Mean	EQS	% of EQS
True Colour mg/litre Pt Co	RS12S022350	29	RS12S022500	N/A	N/A	

Significance of Results:

The WWTP discharge was compliant with the ELV's set in the wastewater discharge licence.

The 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.

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.

2.1.4 OPERATIONAL PERFORMANCE SUMMARY - ENNISCORTHY WWTP

2.1.4.1 Treatment Efficiency Report - Enniscorthy 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)
TN	70184	10646	85
SS	462002	21286	95

Parameter	Influent mass loading (kg/year)	Effluent mass emission (kg/year)	Efficiency (% reduction of influent load)
COD	894711	41359	95
cBOD	380846	5505	99
TP	10904	801	93

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

2.1.4.2 Treatment Capacity Report Summary - Enniscorthy 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.

Enniscorthy WWTP	
Peak Hydraulic Capacity (m^3/day) - As Constructed	43080
DWF to the Treatment Plant (m^3/day)	5336
Current Hydraulic Loading - annual max (m^3/day)	19174
Average Hydraulic loading to the Treatment Plant (m^3/day)	6234.88
Organic Capacity (PE) - As Constructed	26200
Organic Capacity (PE) - Collected Load (peak week)[Note1]	15297
Organic Capacity (PE) - Remaining	10903
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 - ENNISCORTHY 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)
Waterworks Sludge	6959.24	Volume (m3)	26200	0.32	No	No	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)
Uncontrolled release	Emergency overflow caused by power failure	No	Yes
Uncontrolled release	Emergency overflow caused by power failure	No	Yes
Uncontrolled release	Emergency overflow caused by power failure	No	Yes

Incident Type	Cause	Recurring (Y/N)	Closed (Y/N)
Uncontrolled release	Adverse Weather	No	Yes
Uncontrolled release	Emergency overflow caused by power failure	No	Yes
Uncontrolled release	Emergency overflow caused by power failure	No	Yes

3.2.2 SUMMARY OF OVERALL INCIDENTS

Question	Answer
Number of Incidents in 2024	6
Number of Incidents reported to the EPA via EDEN in 2024	6
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
SW004	297387, 139286	Yes	Low Significance	Meeting Criteria	Unknown	Unknown	Monitored
SW005	297563, 139743	Yes	Low Significance	Meeting Criteria	Unknown	Unknown	Monitored
SW007	297193, 140291	Yes	Low Significance	Meeting Criteria	Unknown	Unknown	Monitored
SW008	295392, 141322	Yes	Low Significance	Meeting Criteria	Unknown	Unknown	Monitored
SW009	295892, 140173	Yes	Low Significance	Meeting Criteria	Unknown	Unknown	Monitored
SW011	297266, 138401	Yes	Low Significance	Meeting Criteria	Unknown	37493	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 2024 (No. of events)	Total volume discharged in 2024 (m3)	Monitoring Status
SW012	297193, 138827	Yes	Low Significance	Meeting Criteria	Unknown	Unknown	Monitored
SW013	297217, 140122	Yes	Low Significance	Meeting Criteria	Unknown	Unknown	Not Monitored
SW014	297192, 140315	Yes	Low Significance	Meeting Criteria	Unknown	Unknown	Not 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 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 (m3)?	37493
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?	Yes
Have the EPA been advised of any additional SWOs / changes to Schedule C3 and A4 under Condition 1.7?	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
D0029-SIP:01	Decommissioning of secondary WWTP	C	30/06/2015	Yes	Works Completed		
D0029-SIP:02	Discharges from SW10 (Slaney Street discharge) to be discontinued	A	30/06/2015	Yes	Work ongoing on-site	2023	
D0029-SIP:03	Discharges from SW2 (Kilagoley secondary treatment plant), to be discontinued	A	30/06/2015	Yes	Works Completed		
D0029-SIP:04	Discharges from SW6 (Templeshannon) to be discontinued	A	30/06/2015	Yes	Works Completed		

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
D0029-SIP:05	Discharges from the pumping station at SW3 (St John's), shall be upgraded to SWO to conform to requirements of DoEHLG criteria	C	30/06/2015	Yes	Works Completed		
D0029-SIP:06	Discharges from the pumping station at SW4 (Promenade) shall be upgraded to SWO to conform to requirements of DoEHLG criteria	C	30/06/2015	Yes	Works Completed		
D0029-SIP:07	Discharges from the pumping station at SW5 (Spring Valley), shall be upgraded to SWO to conform to requirements of DoEHLG criteria	C	30/06/2015	Yes	Works Completed		
D0029-SIP:08	Discharges from the pumping station at SW7 (Island St), shall be upgraded to SWO to conform to requirements of DoEHLG criteria	C	30/06/2015	Yes	Works Completed		
D0029-SIP:09	Discharges from the pumping station at SW8 (Milehouse) shall be upgraded to SWO to conform to requirements of DoEHLG criteria	C	30/06/2015	Yes	Works Completed		

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
D0029-SIP:10	Discharges from the pumping station at SW9 (Carrigbruce) shall be upgraded to SWO to conform to requirements of DoEHLG criteria	C	30/06/2015	Yes	Works Completed		
D0029-SIP:11	Elimination of groundwater infiltration programme	C	30/06/2015	Yes	Works Completed	2028	Sewer rehabilitation complete.
D0029-SIP:12	Installation of storm water holding tanks at WWTP	C	30/06/2015	Yes	Works Completed		
D0029-SIP:13	Upgrade of network to connect all areas of agglomeration to the works and to convey all waste water for treatment to the St. John's WWTP	C	30/06/2015	Yes	Works Completed		All areas serviced.
D0029-SIP:14	Upgrade of WWTP	C	30/06/2015	Yes	Works Completed		
D0029-SIP:15	Upgrade of WWWs to connect all areas of agglomeration to the works and to convey all waste water for treatment to St. John's WWTP	C	30/06/2015	Yes	Works Completed	2028	All areas serviced

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

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
There is no Licence Specific Report Required 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?	Yes
List reason e.g. additional SWO identified	Additional SWOs
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?	Yes
Are all outstanding reports and assessments from previous AERs included as an appendix to this AER	No

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

Signed: Date: 28/08/2025

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

There are no Appendices included