

Annual Environmental Report

2023



Glin

D0504-01

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1 EXECUTIVE SUMMARY AND INTRODUCTION TO THE 2023 AER

This Annual Environmental Report has been prepared for D0504-01, Glin, in Limerick 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 was no major capital or operational changes undertaken.

1.2 TREATMENT SUMMARY

- Currently there is no treatment provided at Glin . Please refer to section 4 for details of the Programme of Improvements.

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
TPEFF1900D0504SW001	Glin WWTP	Untreated	No Emission Limit Values are specified for the discharge under the licence.	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

2.1.1 EFFLUENT MONITORING SUMMARY -

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	N/A	N/A	N/A	6	N/A	N/A	230	
Dissolved Inorganic Nitrogen (as N) mg/l	N/A	N/A	N/A	6	N/A	N/A	24	
Total Phosphorus (as P) mg/l	N/A	N/A	N/A	6	N/A	N/A	3.89	
ortho-Phosphate (as P) - unspecified mg/l	N/A	N/A	N/A	6	N/A	N/A	2.52	
Suspended Solids mg/l	N/A	N/A	N/A	6	N/A	N/A	148	
Total Oxidised Nitrogen (as N) mg/l	N/A	N/A	N/A	6	N/A	N/A	1.46	

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)
BOD, 5 days with Inhibition (Carbonaceous) mg/l	N/A	N/A	N/A	6	N/A	N/A	90	
Total Nitrogen mg/l	N/A	N/A	N/A	6	N/A	N/A	41	
pH units	N/A	N/A	N/A	6	N/A	N/A	7.92	

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:

Not applicable

2.1.2 AMBIENT MONITORING SUMMARY FOR THE UNTREATED DISCHARGE TPEFF1900D0504SW001

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	113047, 147867	TW36004123SN3002	No	No	No	No	Good
Downstream	111322, 147464	TW36004123SN3003	No	No	No	No	Good

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 discharge does not have an observable impact on the water quality.

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

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)
There were no reportable incidents in 2023.			

3.2.2 SUMMARY OF OVERALL INCIDENTS

Question	Answer
Number of Incidents in 2023	0
Number of Incidents reported to the EPA via EDEN in 2023	0
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 (m3)	Monitoring Status
There are no Storm Water Overflows in this Agglomeration.							

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)?	Unknown
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
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
There are no Specified Improvement Programmes for this Agglomeration.							

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
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	Capital upgrade
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	Yes
List reason e.g. changes to monitoring requirements	Ambient Monitoring Location Changes
Have these processes commenced?	No
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: 08/03/2024

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

Ambient Points

Ambient Monitoring Point from WWDL (or as agreed with EPA)	Irish Grid Reference	EPA Feature Coding Tool code	Receiving Waters Designation (Y/N)				WFD Status
			Bathing Water	Drinking Water	FWPM	Shellfish	
Upstream Glin	113047, 147867	TW36004123SN3002	No	No	No	No	Good
Downstream Glin	111322, 147465	TW36004123SN3003	No	No	No	No	Good

Ambient Impact Assessment Table

Parameter Name	Upstream Monitoring Point Location	Upstream Monitoring Point Annual Mean	Downstream Monitoring Point Location	Downstream Monitoring Point Annual Mean	EQS (95%ile)	%EQS
cBOD mg/l	TW36004123SN3002	1.65	TW36004123SN3003	1	≤4.0	0
Ortho-Phosphate (as P) mg/l	TW36004123SN3002	0.02	TW36004123SN3003	0.02	<0.06	0
Total Oxidised Nitrogen N mg/l	TW36004123SN3002	0.185	TW36004123SN3003	0.17		
pH pH units	TW36004123SN3002	8.1	TW36004123SN3003	8.15		
Dissolved Oxygen %saturation or mg/l	TW36004123SN3002	97.5	TW36004123SN3003	93.0		
Dissolved Inorganic Nitrogen (as N) mg/l	TW36004123SN3002	0.317	TW36004123SN3003	0.278	≤2.6	0
Temperature	TW36004123SN3002	12.05	TW36004123SN3003	11.5		

Parameter	Biological Oxygen Demand	Dissolved Inorganic Nitrogen DIN	Dissolved Oxygen % Saturation	pH	Temperature	Ortho-Phospho	Total Oxidised Nitrogen N	Visual Inspection								
Max.	--	--	--	--	--	--	--	--								
Min.	--	--	--	--	--	--	--	--								
Test Method	TM-CHEM-3	--	TM-CHEM-8	TM-CHEM-21	TM-CHEM-33	TM-CHEM-36	TM-CHEM-36	--								
Category	Entity	Station	Station Reference	Station Easting	Station North	Sample Date	Reason	Analyst Conclu	mg/l	mg/l	% Sat.	pH units	Degrees C	mg/l	mg/l	Descriptive
Transition Waters	Lower Shannon Estuary	u/s Glin WWTP	TW36004123SN3002	113047	147867	14-Mar-2023	Compliance	-	2.2	0.317	97	8.1	7	0.02	0.31	ok
Transition Waters	Lower Shannon Estuary	u/s Glin WWTP	TW36004123SN3002	113047	147867	5-Sep-2023	Compliance	-	1.1	< 0.25	98	8.1	17.1	0.02	0.06	High Tide

Parameter	Biological Oxygen Demand	Dissolved Inorganic Nitrogen DIN	Dissolved Oxygen % Saturation	pH	Temperature	Ortho-Phospho	Total Oxidised Nitrogen N	Visual Inspection								
Max.	--	--	--	--	--	--	--	--								
Min.	--	--	--	--	--	--	--	--								
Test Method	TM-CHEM-3	--	TM-CHEM-8	TM-CHEM-21	TM-CHEM-33	TM-CHEM-36	TM-CHEM-36	--								
Category	Entity	Station	Station Reference	Station Easting	Station North	Sample Date	Reason	Analyst Conclu	mg/l	mg/l	% Sat.	pH units	Degrees C	mg/l	mg/l	Descriptive
Transition Waters	Lower Shannon Estuary	d/s Glin WWTP	TW36004123SN3003	111322	147465	14-Mar-2023	Compliance	-	< 1	0.278	91	8.2	6	0.02	0.28	ok
Transition Waters	Lower Shannon Estuary	d/s Glin WWTP	TW36004123SN3003	111322	147465	5-Sep-2023	Compliance	-	< 1	< 0.25	95	8.1	17	0.02	0.06	High Tide