

Annual Environmental Report

2023



Kilkee

D0078-01

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1 EXECUTIVE SUMMARY AND INTRODUCTION TO THE 2023 AER

This Annual Environmental Report has been prepared for D0078-01, Kilkee, in Clare 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

- Currently there is no treatment provided at Kilkee . 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
TPEFF0300D0078SW001	KILKEE WWTP	Untreated	Non-Compliant	Ammonia-Total (as N) mg/l BOD, 5 days with Inhibition (Carbonaceous BOD) mg/l Suspended Solids 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

2.1.1 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	125	250	N/A	12	2	N/A	N/A	Pass
Suspended Solids mg/l	35	87.5	N/A	12	3	N/A	N/A	Fail
Total Oxidised Nitrogen (as N) mg/l	30	36	N/A	12	N/A	N/A	N/A	Pass
BOD, 5 days with Inhibition (Carbonaceous BOD) mg/l	25	50	N/A	12	4	1	N/A	Fail
Ammonia-Total (as N) mg/l	10	12	N/A	12	7	7	N/A	Fail
pH pH units	9	9	N/A	12	N/A	N/A	N/A	Pass
E. Coli MPN/100ml	N/A	N/A	N/A	4	N/A	N/A	N/A	
Enterococci (Intestinal) MPN/100ml	N/A	N/A	N/A	4	N/A	N/A	N/A	

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)
Faecal coliforms MPN/100ml	N/A	N/A	N/A	4	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.

2.1.2 AMBIENT MONITORING SUMMARY FOR THE UNTREATED DISCHARGE TPEFF0300D0078SW001

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
Downstream	86242 159547	CW03004135SP1002	Yes	No	No	No	Unassigned

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.

The discharge from the wastewater treatment plant 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)
Breach of ELV	WWTP upgrade required to meet ELV	Yes	No

3.2.2 SUMMARY OF OVERALL INCIDENTS

Question	Answer
Number of Incidents in 2023	1
Number of Incidents reported to the EPA via EDEN in 2023	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 2023 (No. of events)	Total volume discharged in 2023 (m3)	Monitoring Status
SW003	86369,159511	Yes	Low Significance	Meeting Criteria	Unknown	Unknown	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 (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?	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
D0078-SIP:01	Construction and operation of a secondary WWTP.	C	31/12/2015	Yes	At Planning Stage	2027	

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	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	N/A
List reason e.g. changes to monitoring requirements	N/A
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: 10/04/2024

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
Appendix 7.2 - Other

Bathing Water Results Summary (if relevant)

Monitoring point	Date	E Coli	Enterococci	Visual Inspection	Salinity	Colour (Apparent)	Turbidity
		MPN/100mls	cfu/100mls	Descriptive	ppt	Pt-Co	NTU
BPBLF030000070001	22/05/2023	<10	<10	Clear	N/A	N/A	N/A
BPBLF030000070001	06/06/2023	121	50	Clear	N/A	N/A	N/A
BPBLF030000070001	12/06/2023	10	10	Clear	N/A	N/A	N/A
BPBLF030000070001	19/06/2023	<10	<10	Clear	N/A	N/A	N/A
BPBLF030000070001	03/07/2023	119	80	Clear	N/A	N/A	N/A
BPBLF030000070001	17/07/2023	246	30	Clear	N/A	N/A	N/A
BPBLF030000070001	18/07/2023	75	50	Clear	N/A	N/A	N/A
BPBLF030000070001	19/07/2023	20	40	Clear	N/A	N/A	N/A
BPBLF030000070001	24/07/2023	41	40	Clear	N/A	N/A	N/A
BPBLF030000070001	08/08/2023	<10	<10	Clear	N/A	N/A	N/A
BPBLF030000070001	21/08/2023	20	<10	Clear	N/A	N/A	N/A
BPBLF030000070001	04/09/2023	63	<10	Clear	N/A	N/A	N/A

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	
CW03004135SP1002	86242, 159547	TPEFF0300D0078SW001	Yes	No	No	No	High

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	%EQS
Ammonia - Total (as N) mg/l	-		CW03004135SP1002	0.0144		
BOD – 5 days (total) mg/l	-		CW03004135SP1002	0.58		
Dissolved Oxygen % saturation	-		CW03004135SP1002	118.35	80-120% sat	
E. Coli no./100mls	-		CW03004135SP1002	22.8		
Enterococci (Intestinal) cfu/100ml	-		CW03004135SP1002	22		
Faecal coliforms no./100mls	-		CW03004135SP1002	24.4		
pH	-		CW03004135SP1002	8.17		
Suspended Solids mg/l	-		CW03004135SP1002	18.5		
Total Oxidised Nitrogen (as N)	-		CW03004135SP1002	0.0748	1	

Raw Ambient Data

Downstream											
Monitoring Point	Date	Ammonia-Total (as N)	BOD - 5 days (Total)	Dissolved Oxygen	E. Coli	Enterococci (Intestinal)	Faecal coliforms	pH	Suspended Solids	Temperature	Total Oxidised Nitrogen (as N)
CW03004135SP1002	23/01/2023	0.005	1	109.5	-	-	-	8	-	9.7	0.216
	10/02/2023	0.014	0.5	110.3	0	0	0	8.1	-	9.8	0.142
	10/03/2023	0.012	0.5	99.7	-	-	-	8.2	21	7.2	0.083
	03/04/2023	0.061	0.5	115.1	-	-	-	8.3	-	10.1	0.074
	29/05/2023	0.011	0.5	115.7	0	0	0	8.3	-	16.2	0.022
	09/06/2023	0.013	0.5	109	-	-	-	7.9	-	16.5	0.016
	03/07/2023	0.011	1	121.6	-	-	-	8.5	-	16.3	0.022
	08/08/2023	0.005	0.5	100.4	62	27	62	8.1	-	17.4	0.004
	04/09/2023	0.005	0.5	99.4	20	77	28	8.1	-	18.8	0.019
	02/10/2023	0.016	0.5	100.6	-	-	-	8.2	-	14	0.057
	16/11/2023	0.015	0.5	96.6	32	6	32	8.2	-	11.8	0.116
	19/12/2023	0.005	0.5	98.5	-	-	-	8.1	16	10	0.127
Mean		0.014417	0.58	106.3667	22.8	22	24.4	8.17	18.5	13.15	0.0748
95%ile		0.03625	1	118.355	56	67	56	8.39	20.75	18.03	0.1753