# Annual Environmental Report

2024



Kilkee

D0078-01

#### **CONTENTS**

#### 1 EXECUTIVE SUMMARY AND INTRODUCTION TO THE 2024 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 KILKEE WWTP UNTREATED DISCHARGE
  - 2.1.1 EFFLUENT MONITORING SUMMARY KILKEE WWTP -
  - 2.1.2 Ambient Monitoring Summary for Untreated Discharge -

#### 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
- 6 CERTIFICATION AND SIGN OFF
  - 6.1 Summary of AER Contents
- 7 APPENDIX

### 1 EXECUTIVE SUMMARY AND INTRODUCTION TO THE 2024 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.

Construction and operation of a secondary WWTP. This is at planning stage.

#### 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 COD-Cr 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	6	1	127	Fail
Suspended Solids mg/l	35	87.5	N/A	12	6	3	47	Fail
Total Oxidised Nitrogen (as N) mg/l	30	36	N/A	12	N/A	N/A	0.133	Pass
BOD, 5 days with Inhibition (Carbonaceous BOD) mg/l	25	50	N/A	12	8	4	51	Fail
Ammonia-Total (as N) mg/l	10	12	N/A	12	7	6	14	Fail
pH pH units	9	9	N/A	12	N/A	N/A	7.54	Pass
E. Coli MPN/100ml	N/A	N/A	N/A	6	N/A	N/A	24197	
Visual Inspection Descriptive	N/A	N/A	N/A	11	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)
Enterococci (Intestinal) MPN/100ml	N/A	N/A	N/A	6	N/A	N/A	18488	
Faecal coliforms no./100mls	N/A	N/A	N/A	6	N/A	N/A	84	
Coliform Bacteria (Total) MPN/100ml	N/A	N/A	N/A	3	N/A	N/A	24197	

#### 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 the incident section of this report.

#### **Significance of Results:**

The WWTP is not in compliance with the ELV, as set by the WWDL. The impact on receiving waters is assessed in section 2.

#### 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 impact on the water quality.

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 coastal/transitional water quality.

### 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 environme	ental 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 upgrade required to meet ELV	Yes	No

## **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
SW2	88287, 159550	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 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)?	Unknown			
Is each SWO identified as not meeting DoEHLG Guidance included in the Programme of Improvements?				
The SWO Assessment included the requirements of relevant of WWDL schedules?				
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.	С	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: 01/07/2025

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

#### **Ambient Points**

Ambient		Receiving Waters Designation (Y/N)					WFD Status
Monitoring Point from WWDL (or as agreed with EPA)		EPA Feature Coding Tool code	Bathing Water	Drinking Water	FWPM	Shellfish	
CW03004135SP1002	86242 159547	TPEFF0300D0078SW001	No	No	No	No	Unassigned

### **Ambient Impact Assessment Table**

Parameter Name	Downstream	Downstream	EQS (Mean)	%EQS	
	<b>Monitoring Point</b>	<b>Monitoring Point</b>			
	Location	<b>Annual Mean</b>			
Ammonia-Total (as N) mg/l	CW03004135SP1002	0.103			
BOD, 5 days with Inhibition	CW0200412ECD1002				
(Carbonaceous BOD) mg/l	CW03004135SP1002	0.500			
Dissolved Oxygen mg/l	CW03004135SP1002	10.903			
Dissolved Oxygen % O2	CW03004135SP1002	100.690	70 - 130		
E. Coli MPN/100ml	CW03004135SP1002	421.250			
Enterococci (Intestinal)	CW0200412ECD1002				
cfu/100ml	CW03004135SP1002	1183.099			
Faecal coliforms no./100mls	CW03004135SP1002	511.250			
pH pH Units	CW03004135SP1002	7.667			
Suspended Solids mg/l	CW03004135SP1002	83.000			
Temperature °C	CW03004135SP1002	13.850			
Total Oxidised Nitrogen (as N) mg/l	CW03004135SP1002	0.418			

#### **Ambient Data Tables**

				Ammonia- Total (as N)	BOD, 5 days with Inhibition (Carbonaceous BOD)	Dissolved Oxygen	Dissolved Oxygen	E. Coli	Enterococci (Intestinal)	Faecal coliforms	рН	Suspended Solids	Temper ature	Total Oxidised Nitrogen (as N)
Monitored Entity	Station	Monitoring Point	Sample Date	mg/l	mg/l	mg/l	% O2	MPN/1 00ml	cfu/100ml	no./100ml s	pH Units	mg/l	°C	mg/l
Shannon Plume	CW03004135 SP1002	Downstrea m	26/11/2 024	0.07	0.5	9.99	94.77				7.6		16.9	0.59
Shannon Plume	CW03004135 SP1002	Downstrea m	26/11/2 024	0.03	0.5	9.99	94.77				7.6		17	0.54
Shannon Plume	CW03004135 SP1002	Downstrea m	05/12/2 024	0.01	0.5	11.03	100.4	866	687	1046	7.7		10.7	0.1
Shannon Plume	CW03004135 SP1002	Downstrea m	05/12/2 024	0.01	0.5	11.06	100.8	517	488	613	7.7		10.8	0.74
Shannon Plume	CW03004135 SP1002	Downstrea m	05/12/2 024	0.01	0.5	11.02	99.9	291	135	378	7.4	30		0.44
Shannon Plume	CW03004135 SP1002	Downstrea m	05/12/2 024	0.49	0.5	12.33	113.5	11	>2420	8	8	136		0.1
			Mean	0.103	0.500	10.903	100.690	421.250	1183.099	511.250	7.667	83.000	13.850	0.418

Note: Where the concentration in the result is less than the limit of detection (LOD), a value of LOD/sqrt(2) was used in calculating the mean and 95%ile concentrations.

## **Bathing Water Results Summary (if relevant)**

Monitoring Point	Sample Date	E. Coli	Faecal Coliforms	Water Quality
BPBLF030000070001	02/09/2024	31	50	Excellent
BPBLF030000070001	26/08/2024	20	<10	Excellent
BPBLF030000070001	12/08/2024	<10	20	Excellent
BPBLF030000070001	22/07/2024	86	30	Excellent
BPBLF030000070001	15/07/2024	<10	10	Excellent
BPBLF030000070001	08/07/2024	10	10	Excellent
BPBLF030000070001	24/06/2024	<10	<10	Excellent
BPBLF030000070001	10/06/2024	<10	<10	Excellent
BPBLF030000070001	04/06/2024	109	20	Excellent
BPBLF030000070001	22/05/2024	31	20	Excellent