

Annual Environmental Report

2022



Kilkee

D0078-01

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1 EXECUTIVE SUMMARY AND INTRODUCTION TO THE 2022 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.

There was no major capital or operational changes undertaken

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 | 13 | 8 | 3 | N/A | Fail |
| Suspended Solids mg/l | 35 | 87.5 | N/A | 13 | 8 | 4 | N/A | Fail |
| Total Oxidised Nitrogen (as N) mg/l | 30 | 36 | N/A | 13 | N/A | N/A | N/A | Pass |
| BOD, 5 days with Inhibition (Carbonaceous BOD) mg/l | 25 | 50 | N/A | 13 | 9 | 9 | N/A | Fail |
| Ammonia-Total (as N) mg/l | 10 | 12 | N/A | 13 | 9 | 9 | N/A | Fail |
| pH pH units | 9 | 9 | N/A | 13 | N/A | N/A | N/A | Pass |
| Faecal coliforms MPN/100ml | N/A | N/A | N/A | 5 | 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):

The agglomeration is not served by a wastewater treatment plant.

Significance of Results:

The ELVs set in the Wastewater Discharge Licence cannot be measured, as there is no influent or effluent data included in the AER.

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 | 86272, 159591 | CW03004135SP1001 | Yes | No | No | No | Unassigned |
| 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 bathing 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 environmental complaints in 2022. | | | |

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 | No. of incident occurrences | Recurring (Y/N) | Closed (Y/N) |
|----------------------|-----------------------------------|-----------------------------|-----------------|--------------|
| Breach of ELV | WWTP upgrade required to meet ELV | 1 | Yes | No |
| Spillage | Broken Sewer Pipe | 1 | No | Yes |
| Uncontrolled release | Broken Sewer Pipe | 1 | No | Yes |

| Incident Type | Cause | No. of incident occurrences | Recurring (Y/N) | Closed (Y/N) |
|----------------------|--|-----------------------------|-----------------|--------------|
| Uncontrolled release | Inadequate Operational Procedures / Training | 1 | No | Yes |
| Uncontrolled release | Broken Sewer Pipe | 1 | No | Yes |
| Uncontrolled release | Broken Sewer Pipe | 1 | Yes | No |

3.2.2 SUMMARY OF OVERALL INCIDENTS

| Question | Answer |
|--|--------|
| Number of Incidents in 2022 | 6 |
| Number of Incidents reported to the EPA via EDEN in 2022 | 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 2022 (No. of events) | Total volume discharged in 2022 (m3) | Monitoring Status |
|--|---------------------------|----------------------------------|---|----------------------------------|--|--------------------------------------|-------------------|
| SW002 | 88305,159554 | Yes | Low Significance | Meeting Criteria | Unknown | Unknown | Not 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 sewage was discharged via monitored SWOs in the agglomeration in 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 | 2025 | |

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 | Year included in AER | 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 | No |
| 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 | N/A |

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

Signed: Date: 12/06/2023

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

Acting Head of Environmental Regulation.

7 APPENDIX

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|---|
| Appendix |
| Appendix 7.1 - Ambient monitoring summary |

Ambient Monitoring Report Summary Data

2022 Kilkee

| Ambient monitoring point/Coastal Monitoring Code | Irish Grid Reference | Designations | | | | |
|--|----------------------|---------------|----------------|------|-----------|------------|
| | | Bathing Water | Drinking Water | FWPM | Shellfish | WFD Status |
| Kilkee Bay 1; CW03004135SP1002 | 086242; 159547 | Yes | No | No | No | Unassigned |

Ambient Monitoring Results Summary

| Monitoring Point | Date | Parameter | Biological Oxygen Demand | Dissolved Oxygen % Saturation | Ammonia N | Dissolved Oxygen | pH | Temperature | Total Oxidised Nitrogen N | Visual Inspection | Faecal Coliforms | Enterococci | E Coli | |
|------------------|--------------|-----------|--------------------------|-------------------------------|-----------|------------------|----------|-------------|---------------------------|---|------------------|-------------|------------|------|
| | | | mg/l | % O2 | mg/l | mg/l | pH units | Degrees C | mg/l | Descriptive | no./100mls | cfu/100mls | no./100mls | |
| CW03004135SP1002 | 14-Jan-2022 | - | < 1 | 101.8 | 0.01 | 10.1 | 8 | 8.7 | 0.12 | Cloudy and dry. South East winds at 10km/hr. Large swell and waves at real point. NOTHING unusual a | 12 | 3 | 8 | |
| CW03004135SP1002 | 14-Feb-2022 | - | < 1 | 95.4 | 0.01 | 9.17 | 8.1 | 8.3 | 0.147 | Cloudy, showers, 7C air temp, 40-52 kph NW Winds, nothing unusual @site | | | | |
| CW03004135SP1002 | 28-Mar-2022 | - | < 1 | 101.8 | < 0.01 | 11.21 | 8.2 | 11 | 0.096 | Air temp 12C, No cloud cover, sunny. No rain, nothing unusual observed. | | | | |
| CW03004135SP1002 | 25-Apr-2022 | - | 2 | 111.7 | < 0.01 | 10.3 | 8.2 | 12.5 | 0.107 | Air temp 13C, no clouds, sunny, no rain. 15-17kph Westerly winds. Nothing unusual observed | 1 | 1 | 1 | |
| CW03004135SP1002 | 16-May-2022 | - | 1 | 115.4 | < 0.01 | 10.7 | 8.7 | 16 | 0.015 | 15.C air temp, Nothing unusual at site | | | | |
| CW03004135SP1002 | 21-June-2022 | - | < 1 | 108.6 | 0.01 | 8.85 | 8.3 | 16.5 | 0.011 | 16C airtemperature. Cloudy wth no rain. Nothing unusual observed, Large waves. | 5 | 2 | 4 | |
| CW03004135SP1002 | 15-July-2022 | - | < 1 | 131.5 | < 0.01 | 10.2 | 8.3 | 18.3 | 0.013 | 18c air temperature, no rain. Nothing unusual at site | 28 | 26 | 18 | |
| CW03004135SP1002 | 5-Aug-2022 | - | < 1 | 102.8 | < 0.01 | 8.38 | 8.1 | 16.3 | 0.037 | 24-28km/hr NW winds, 15c air temperature, dry, nothing unusual observed. | | | | |
| CW03004135SP1002 | 19-Sep-2022 | - | < 1 | 115.1 | < 0.01 | 9.36 | 8.3 | 16.4 | 0.016 | Nothing unusual at site. | | | | |
| CW03004135SP1002 | 7-Oct-2022 | - | < 1 | 100.5 | 0.013 | 8.95 | 8.1 | 15 | 0.042 | 39-48km/hr west winds. Showers, 13C air temp. Nothing unusual observed. | 320 | 56 | 260 | |
| CW03004135SP1002 | 7-Nov-2022 | - | 4 | 96.3 | 0.01 | 8.06 | 8 | 13.8 | 0.142 | Raining with strong winds 13C air temp. 28-50km/hr. Lots of suspended solid in the water. | | | | |
| CW03004135SP1002 | 20-Dec-2022 | - | < 1 | 131.1 | 0.014 | 12.1 | 8.1 | 8.6 | 0.145 | Very windy with strong gusts; 50% cloud cover | | | | |
| | | | 95%ile Status | 131.28 | | | | | | | | | | Good |

Bathing Water Results Summary (if revelant)

| Monitoring point | Date | E Coli | Enterococci | Visual Inspection | Salinity | Colour (Apparent) | Turbidity |
|-------------------|--------------|------------|-------------|-------------------|----------|-------------------|-----------|
| | | MPN/100mls | cfu/100mls | Descriptive | ppt | Pt-Co | NTU |
| BPBLF030000070001 | 23-May-2022 | 20 | 20 | clear | 34 | 18 | 2.5 |
| BPBLF030000070001 | 1-June-2022 | < 10 | < 10 | clear | 35 | 28 | 1.7 |
| BPBLF030000070001 | 13-June-2022 | 10 | < 10 | Clear | 35 | < 5 | 2.5 |
| BPBLF030000070001 | 20-June-2022 | < 10 | < 10 | Clear | 33 | 130 | 1.6 |
| BPBLF030000070001 | 4-July-2022 | < 10 | < 10 | clear | 33 | 14 | 1.1 |
| BPBLF030000070001 | 18-July-2022 | 10 | < 10 | clear | 34 | 9 | 0.5 |
| BPBLF030000070001 | 2-Aug-2022 | 20 | 30 | Clear | 34 | 17 | 1.8 |
| BPBLF030000070001 | 16-Aug-2022 | 20 | 30 | Clear | 34 | 8 | 1.6 |
| BPBLF030000070001 | 29-Aug-2022 | < 10 | 10 | Clear | 34 | 3 | 0.8 |
| BPBLF030000070001 | 5-Sep-2022 | < 10 | < 10 | Clear | 34 | 8 | 0.5 |
| BPBLF030000070001 | 14-Sep-2022 | < 10 | < 10 | clear | 35 | 9 | 0.7 |