

# Annual Environmental Report

2023



Galway City

D0050-01

## **CONTENTS**

### **1 EXECUTIVE SUMMARY AND INTRODUCTION TO THE 2023 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 GALWAY WWTP - TREATED DISCHARGE
  - 2.1.1 INFLUENT SUMMARY - GALWAY WWTP
  - 2.1.2 EFFLUENT MONITORING SUMMARY - GALWAY WWTP -
  - 2.1.3 AMBIENT MONITORING SUMMARY FOR THE TREATMENT PLANT DISCHARGE -
  - 2.1.4 OPERATIONAL REPORTS SUMMARY FOR GALWAY WWTP
  - 2.1.5 SLUDGE/OTHER INPUTS TO GALWAY WWTP

### **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**

- 5.1 PRIORITY SUBSTANCES ASSESSMENT

### **6 CERTIFICATION AND SIGN OFF**

- 6.1 SUMMARY OF AER CONTENTS

### **7 APPENDIX**

7.1 AMBIENT MONITORING SUMMARY

# 1 EXECUTIVE SUMMARY AND INTRODUCTION TO THE 2023 AER

This Annual Environmental Report has been prepared for D0050-01, Galway City, in Galway 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

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

- Galway WWTP with a Plant Capacity PE of 170000, the treatment type is 2 - Secondary treatment .

## 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
TPEFF1100D0050SW001	Galway 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 GALWAY WWTP - TREATED DISCHARGE

#### 2.1.1 INFLUENT MONITORING SUMMARY - GALWAY 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	26	656	380
BOD, 5 days with Inhibition (Carbonaceous BOD) mg/l	26	310	157
Total Phosphorus (as P) mg/l	26	7.00	3.31
Ammonia-Total (as N) mg/l	26	34	16
pH pH units	26	7.70	7.49
Suspended Solids mg/l	26	419	233
Total Nitrogen mg/l	26	34	16
Hydraulic Capacity	N/A	86010	61013

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 - TPEFF1100D0050SW001

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)
<b>COD-Cr mg/l</b>	125	250	N/A	26	N/A	N/A	26	Pass
<b>Total Nitrogen mg/l</b>	35	42	N/A	26	N/A	N/A	14	Pass
<b>Suspended Solids mg/l</b>	35	87.5	N/A	26	N/A	N/A	7.37	Pass
<b>BOD, 5 days with Inhibition (Carbonaceous BOD) mg/l</b>	25	50	N/A	26	N/A	N/A	3.66	Pass
<b>Ammonia-Total (as N) mg/l</b>	25	30	N/A	26	N/A	N/A	0.811	Pass
<b>Total Oxidised Nitrogen (as N) mg/l</b>	20	24	N/A	26	N/A	N/A	12	Pass
<b>pH pH units</b>	9	9	N/A	26	N/A	N/A	7.53	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)
Conductivity @20°C µS/cm	N/A	N/A	N/A	25	N/A	N/A	1964	
Faecal coliforms MPN/100ml	N/A	N/A	N/A	4	N/A	N/A	43943	
Total Phosphorus (as P) mg/l	N/A	N/A	N/A	26	N/A	N/A	0.497	
Conductivity @ 25°C (on-site) µS/cm	N/A	N/A	N/A	1	N/A	N/A	2660	
E. Coli MPN/100ml	N/A	N/A	N/A	4	N/A	N/A	35007	
Enterococci (Intestinal) cfu/100ml	N/A	N/A	N/A	4	N/A	N/A	1235	

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 TPEFF1100D0050SW001

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	130256, 224636	TW12005248GY1001	No	No	No	No	Moderate
Downstream	135305, 223508	CW12005240GY2003	No	No	No	No	Good
Downstream	124624, 222727	CW12005240GY2007	No	No	No	No	Good
Downstream	130681, 223127	TW12005248GY1003	No	No	No	No	Moderate
Downstream	118892, 221674	CW03005222GY3002	No	No	No	No	High
Downstream	122942, 220865	CW03005222GY3001	No	No	No	No	High
Downstream	130759, 223872	TW12005248GY1002	No	No	No	No	Moderate

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	121015, 215849	CW03005222GY3005	No	No	No	No	High
Downstream	129218, 221179	CW12005240GY2005	No	No	No	No	Good
Downstream	127844, 222691	CW12005240GY2001	No	No	No	No	Good
Downstream	132347, 222892	CW12005240GY2002	No	No	No	No	Good
Downstream	124989, 217429	CW03005222GY3006	No	No	No	No	High
Downstream	126132, 221137	CW12005240GY2006	No	No	No	No	Good
Downstream	130968, 221287	CW12005240GY2004	No	No	No	No	Good
Downstream	134988, 222037	CW12005240GY2009	No	No	No	No	Good
Downstream	135184, 223306	CW12005240GY2008	No	No	No	No	Good
Downstream	129955, 222760	TW12005248GY1004	No	No	No	No	Moderate

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 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.

## 2.1.4 OPERATIONAL PERFORMANCE SUMMARY - GALWAY WWTP

### 2.1.4.1 Treatment Efficiency Report - Galway 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)
TP	74416	11542	84
COD	8552997	602940	93
SS	5238001	171345	97
TN	366583	313999	14
cBOD	3542796	84993	98

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

### 2.1.4.2 Treatment Capacity Report Summary - Galway 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.

Galway WWTP	
Peak Hydraulic Capacity (m <sup>3</sup> /day) - As Constructed	135000
DWF to the Treatment Plant (m <sup>3</sup> /day)	45000
Current Hydraulic Loading - annual max (m <sup>3</sup> /day)	86010
Average Hydraulic loading to the Treatment Plant (m <sup>3</sup> /day)	61013
Organic Capacity (PE) - As Constructed	170000
Organic Capacity (PE) - Collected Load (peak week) <sup>Note1</sup>	105693
Organic Capacity (PE) - Remaining	64307
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 - GALWAY 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)
There is no Sludge and Other Input data for the Treatment Plant included in the AER.							

## 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
1	Blocked Sewer	0	1

### 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	Blocked Sewer	No	Yes
Uncontrolled release	Network Infrastructure	Yes	No

### 3.2.2 SUMMARY OF OVERALL INCIDENTS

Question	Answer
Number of Incidents in 2023	3
Number of Incidents reported to the EPA via EDEN in 2023	3
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
<b>Michael Collins SWO</b>	Unknown	No	Low Significance	Meeting Criteria	Unknown	Unknown	Not Monitored
<b>Glen Burren PS SWO</b>	Unknown	No	TBC	Not yet Assessed	Unknown	Unknown	Not Monitored
<b>Mellow Park SWO</b>	Unknown	No	TBC	Not yet Assessed	Unknown	Unknown	Not Monitored
<b>Parkavera PS</b>	Unknown	No	TBC	Not yet Assessed	Unknown	Unknown	Not Monitored
<b>Dominick Street PS</b>	Unknown	No	TBC	Not yet Assessed	Unknown	Unknown	Not Monitored
<b>Renmore Park SWO</b>	Unknown	No	TBC	Not yet Assessed	Unknown	Unknown	Not 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 2023 (No. of events)	Total volume discharged in 2023 (m3)	Monitoring Status
<b>Dublin Road SWO</b>	Unknown	No	TBC	Not yet Assessed	Unknown	Unknown	Not Monitored
<b>SW008</b>	129696,224768	Yes	Low Significance	Not yet Assessed	Unknown	Unknown	Not Monitored
<b>SW019</b>	129812,224776	Yes	Low Significance	Not yet Assessed	Unknown	Unknown	Not Monitored
<b>SW020</b>	129645,225526	Yes	Low Significance	Meeting Criteria	Unknown	Unknown	Not Monitored
<b>SW021</b>	131301,225796	Yes	Low Significance	Not yet Assessed	Unknown	Unknown	Not Monitored
<b>SW022</b>	131199,226070	Yes	Low Significance	Not yet Assessed	Unknown	Unknown	Not Monitored
<b>SW023</b>	132375,224416	Yes	Low Significance	Meeting Criteria	Unknown	Unknown	Not Monitored
<b>SW002</b>	129581,223202	Yes	Low Significance	Meeting Criteria	Unknown	Unknown	Monitored
<b>SW005</b>	133295,224745	Yes	Low Significance	Meeting Criteria	Unknown	Unknown	Not Monitored
<b>SW006</b>	137761,224817	Yes	Low Significance	Not Meeting Criteria	Unknown	Unknown	Not 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 2023 (No. of events)	Total volume discharged in 2023 (m3)	Monitoring Status
<b>SW007</b>	131556,227566	Yes	Low Significance	Meeting Criteria	Unknown	Unknown	Monitored
<b>SW003</b>	126009,223156	Yes	Low Significance	Not yet Assessed	Unknown	Unknown	Not Monitored
<b>SW017</b>	126016,223779	Yes	Low Significance	Not yet Assessed	Unknown	Unknown	Not Monitored
<b>SW018</b>	128635,224062	Yes	Low Significance	Meeting Criteria	Unknown	Unknown	Not Monitored
<b>Merlin Park 2</b>	TBC	No	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.

<b>SWO Summary</b>	
<b>How much wastewater discharge by metered SWOs during the year (m3)?</b>	Unknown
<b>Is each SWO identified as not meeting DoEHLG Guidance included in the Programme of Improvements?</b>	Yes
<b>The SWO Assessment included the requirements of relevant of WWDL schedules?</b>	Yes
<b>Have the EPA been advised of any additional SWOs / changes to Schedule C3 and A4 under Condition 1.7?</b>	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
<b>D0050-SIP:01</b>	SW009 (SD09) to be discontinued	A	01/05/2014	Yes	At Planning Stage		DAP Stage 4 underway and programmed to be complete in 2025. Project to be handed over in 2025.
<b>D0050-SIP:02</b>	SW011 (SD11) to be discontinued	A	21/12/2015	Yes	At Planning Stage		DAP Stage 4 underway and programmed to be complete in 2025. Project to be handed over in 2025.
<b>D0050-SIP:03</b>	SW012 (SD12) to be discontinued	A	01/05/2011	Yes	Works Completed		
<b>D0050-SIP:04</b>	SW013 (SD13) to be discontinued	A	21/12/2015	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
<b>D0050-SIP:05</b>	SW014 (SD14) to be discontinued	A	01/05/2011	Yes	Works Completed		
<b>D0050-SIP:06</b>	SW015 (SD15) to be discontinued	A	01/05/2011	Yes	Works Completed		
<b>D0050-SIP:07</b>	WWTP upgrade and ancillary works	C	01/09/2012	Yes	Works Completed		
<b>D0050-SIP:08</b>	Upgrade to SWO - SD10	C	01/05/2014	Yes	Works Completed		
<b>D0050-SIP:09</b>	Upgrading of SWO02 Storm Water Overflow to comply with the criteria outlined in DoEHLG	C	01/09/2012	Yes	Works Completed		
<b>D0050-SIP:10</b>	Upgrading of SWO03 Storm Water Overflow to comply with the criteria outlined in DoEHLG	C	01/05/2014	Yes	At Planning Stage		DAP Stage 4 underway and programmed to be complete in 2025. Project to be handed over in 2025.
<b>D0050-SIP:11</b>	Upgrading of SWO05 Storm Water Overflow to comply with the criteria outlined in DoEHLG	C	01/05/2014	Yes	At Planning Stage		DAP Stage 4 underway. Programmed to be complete in 2025

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
<b>D0050-SIP:12</b>	Upgrading of SWO06 Storm Water Overflow to comply with the criteria outlined in DoEHLG	C	01/05/2014	Yes	At Planning Stage		DAP Stage 4 underway. Programmed to be complete in 2025
<b>D0050-SIP:13</b>	Upgrading of SWO07 Storm Water Overflow to comply with the criteria outlined in DoEHLG	C	01/05/2014	Yes	At Planning Stage		DAP Stage 4 underway. Programmed to be complete in 2025
<b>D0050-SIP:14</b>	Upgrading of SWO08 Storm Water Overflows to comply with the criteria outlined in DoEHLG	C	01/05/2014	Yes	At Planning Stage		DAP Stage 4 underway and programmed to be complete in 2025.
<b>D0050-SIP:15</b>	Upgrading of SWO17 Storm Water Overflow to comply with the criteria outlined in DoEHLG	C	01/05/2014	Yes	At Planning Stage		DAP Stage 4 underway and programmed to be complete in 2025.
<b>D0050-SIP:16</b>	Upgrading of SWO18 Storm Water Overflow to comply with the criteria outlined in DoEHLG	C	01/05/2014	Yes	At Planning Stage		DAP Stage 4 underway and programmed to be complete in 2025.

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
<b>D0050-SIP:17</b>	Upgrading of SWO19 Storm Water Overflow to comply with the criteria outlined in DoEHLG.	C	01/05/2014	No	Work ongoing on-site		DAP Stage 4 underway and programmed to be complete in 2025.
<b>D0050-SIP:18</b>	Upgrading of SWO20 Storm Water Overflow to comply with the criteria outlined in DoEHLG.	C	01/05/2014	Yes	At Planning Stage		DAP Stage 4 underway and programmed to be complete in 2025.
<b>D0050-SIP:19</b>	Upgrading of SWO21 Storm Water Overflow to comply with the criteria outlined in DoEHLG	C	01/05/2014	Yes	At Planning Stage		DAP Stage 4 underway and programmed to be complete in 2025.
<b>D0050-SIP:20</b>	Upgrading of SWO22 Storm Water Overflow to comply with the criteria outlined in DoEHLG	C	01/05/2014	Yes	At Planning Stage		DAP Stage 4 underway and programmed to be complete in 2025.
<b>D0050-SIP:21</b>	Upgrading of SWO23 Storm Water Overflow to comply with the criteria outlined in DoEHLG	C	01/05/2014	Yes	At Planning Stage		

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
<b>D0050-SIP:22</b>	Replacement of stand-by pump at Parkavera Pumping Station SD04 emergency overflow	C	14/07/2010	Yes	Works Completed		

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
<b>No additional improvements planned at this time.</b>				

#### 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
<b>D0050-01-Priority Substances Assessment</b>	Yes	No

## 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?	N/A
List reason e.g. additional SWO identified	N/A
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?	N/A
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: 27/05/2024

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 Impact Assessment Table**

Station Reference	Date	pH	DO	BOD	Temp	Ortho-Phosphate (as P)	Total Nitrogen (as N)	Ammonia
		pH units	% Saturation	mg/l	°C	mg/l	mg/l	mg/l
CW03005222GY3001	03/07/23	8.2	-	<1	17.4	<0.005	<0.01	0.013
CW03005222GY3002	22/05/23	8.2	80	-	14.0	<0.005	0.042	0.01
CW03005222GY3005	22/05/23	8.1	104	<1	14.0	0.0074	0.013	0.024
CW03005222GY3006	22/05/23	8.1	104	-	14.0	0.0071	0.013	0.022
CW12005240GY2001	03/07/23	8.1	105	-	17.6	<0.005	<0.01	0.013
CW12005240GY2002	03/07/23	8.2	102	-	17.3	<0.005	<0.01	0.013
CW12005240GY2003	03/07/23	8.2	106	1.1	16.6	<0.005	<0.01	0.012
CW12005240GY2004	03/07/23	8.2	97	-	17.0	<0.005	<0.01	0.016
CW12005240GY2005	03/07/23	8.2	99	<1	16.9	<0.005	<0.01	0.012
CW12005240GY2006	03/07/23	8.1	100	-	17.4	<0.005	<0.01	0.013
TW12005248GY1001	03/07/23	8.6	102	<1	17.1	0.006	<0.01	0.018
TW12005248GY1002	03/07/23	8.2	96	<1	17.3	<0.005	<0.01	0.012
TW12005248GY1003	03/07/23	8.2	99	-	17.4	0.0053	<0.01	0.011
TW12005248GY1004	03/07/23	8.1	97	<1	17.4	0.0084	<0.01	0.023

**Salthill**

Sample Date	E.coli Result	Intestinal Enterococci Result	Water Quality
11/09/2023	<10	2	Excellent
28/08/2023	<10	2	Excellent
14/08/2023	20	3	Excellent
31/07/2023	10	10	Excellent
17/07/2023	41	2	Excellent
03/07/2023	10	12	Excellent
19/06/2023	31	4	Excellent
06/06/2023	<10	2	Excellent
22/05/2023	10	2	Excellent

**Silver Strand**

Sample Date	E.coli Result	Intestinal Enterococci Result	Water Quality
11/09/2023	145	25	Excellent
28/08/2023	<10	2	Excellent
14/08/2023	10	2	Excellent
31/07/2023	63	23	Excellent
17/07/2023	10	2	Excellent
03/07/2023	262	84	Good
19/06/2023	86	23	Excellent
06/06/2023	10	7	Excellent
22/05/2023	<10	2	Excellent

**Grattan Beach**

Sample Date	E.coli Result	Intestinal Enterococci Result	Water Quality
11/09/2023	41	39	Excellent
04/09/2023	63	6	Excellent
28/08/2023	20	5	Excellent
21/08/2023	171	47	Excellent
14/08/2023	20	3	Excellent
08/08/2023	10	2	Excellent
31/07/2023	216	160	Good
24/07/2023	30	2	Excellent
17/07/2023	10	2	Excellent
10/07/2023	441	140	Good
03/07/2023	31	12	Excellent
26/06/2023	20	22	Excellent
19/06/2023	63	21	Excellent
12/06/2023	20	2	Excellent
06/06/2023	10	6	Excellent
22/05/2023	41	3	Excellent

## Ballyloughane

Sample Date	E.coli Result	Intestinal Enterococci Result	Water Quality
11/09/2023	31	24	Excellent
04/09/2023	52	15	Excellent
28/08/2023	10	7	Excellent
14/08/2023	10	2	Excellent
08/08/2023	10	2	Excellent
31/07/2023	650	290	Poor
24/07/2023	20	2	Excellent
17/07/2023	20	3	Excellent
10/07/2023	295	110	Good
03/07/2023	10	2	Excellent
26/06/2023	20	2	Excellent
19/06/2023	41	29	Excellent
12/06/2023	20	5	Excellent
06/06/2023	10	2	Excellent
22/05/2023	10	2	Excellent