# **Annual Environmental Report**



Dunmore



D0370-01

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# **1 EXECUTIVE SUMMARY AND INTRODUCTION TO THE 2024 AER**

This Annual Environmental Report has been prepared for D0370-01, Dunmore, 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)

• Dunmore WWTP with a Plant Capacity PE of 3000, the treatment type is 3P - Tertiary P removal .

# **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
TPEFF1200D0370SW001	Dunmore 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 DUNMORE WWTP - TREATED DISCHARGE**

## **2.1.1 INFLUENT MONITORING SUMMARY - DUNMORE 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	6	442	210
BOD, 5 days with Inhibition (Carbonaceo mg/l	6	143	52
Hydraulic Capacity	N/A	607	261

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 greater 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 - TPEFF1200D0370SW001

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/I	125	250	N/A	6	N/A	N/A	13	Pass
Suspended Solids mg/l	35	87.5	N/A	6	N/A	N/A	2.83	Pass
BOD, 5 days with Inhibition (Carbonaceo mg/I	25	50	N/A	6	N/A	N/A	0.958	Pass
pH pH units	9	9	N/A	6	N/A	N/A	8.20	Pass
Ammonia-Total (as N) mg/l	5	6	N/A	6	N/A	N/A	0.416	Pass
ortho- Phosphate (as P) - unspecified mg/l	2	2.4	N/A	6	N/A	N/A	0.143	Pass

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 TPEFF1200D0370SW001

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	150674, 263874	RS30S010240	No	No	No	No	Good
Downstream	150060, 263943	RS30S010300	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 WWTP discharge was compliant with the ELV's set in the wastewater discharge licence.

The ambient monitoring results do not meet the required EQS at the upstream monitoring location. The EQS relates to the Oxygenation and Nutrient Conditions set out in the Surface Water Regulations 2009.

Based on ambient monitoring results a deterioration in BOD (5 days) Total mg/l, Ammonia-Total (as N) mg/l, concentrations downstream of the effluent discharge is noted.

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 - DUNMORE WWTP

#### 2.1.4.1 Treatment Efficiency Report - Dunmore 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)	
SS	N/A	248	N/A	
COD	19125	1145	94	
ТN	N/A	N/A	N/A	
ТР	N/A	N/A	N/A	
cBOD	4718	84	98	

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

#### 2.1.4.2 Treatment Capacity Report Summary - Dunmore 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.

Dunmore WWTP	
Peak Hydraulic Capacity (m³/day) - As Constructed	300
DWF to the Treatment Plant (m <sup>3</sup> /day)	100
Current Hydraulic Loading - annual max (m³/day)	607

Dunmore WWTP	
Average Hydraulic loading to the Treatment Plant (m³/day)	261.35
Organic Capacity (PE) - As Constructed	3000
Organic Capacity (PE) - Collected Load (peak week) <sup>Note1</sup>	903
Organic Capacity (PE) - Remaining	2097
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 - DUNMORE WWTP

'Other inputs' to the waste water treatment plant are summarised in table below

Inpu type	t Quantity	Unit	P.E.	% of load to WWTP	Included in Influent Monitoring (Y/N)?				
The	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	Number of Complaints Nature of Complaint		Number Closed Complaints	
There were no relevant environm	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)
Uncontrolled release	Network Infrastructure	No	No
Uncontrolled release	Adverse Weather	No	No

## **3.2.2 SUMMARY OF OVERALL INCIDENTS**

Question	Answer
Number of Incidents in 2024	2
Number of Incidents reported to the EPA via EDEN in 2024	2
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
SW002	150591, 263901	Yes	Low Significance	Meeting Criteria	Unknown	Unknown	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?	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.

Progra	ied Improvement ammes (under Schedule A 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	Improvement Description / or any Operational	Improvement	Expected Completion	Comments
Identifier	Improvements	Source	Date	
No additional improver	nents 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
D0370-01-Priority Substances Assessment	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: 16/05/2025

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 Monitoring Points from	Irish Grid Reference	EPA Feature Coding Tool code		Receiving Wa	aters Designation (Y/	N)
WWDL (or as agreed by EPA)			Bathing Water	Drinking Water	FWPM	Shellfis
Upstream Monitoring Station	150675E 263874N	RS30S010240	No	No	No	No
Downstream Monitoring Station	150060E 263943N	RS30S010300	No	No	No	No

Parameter Name	Upstream Monitoring Point Location	Upstream Monitoring Point Annual Mean	Downstream Monitoring Point Location	Downstream Monitoring Point Annual Mean	EQS (mean)	% EQS
cBOD mg/l	150675E 263874N	1.071	150060E 263943N	0.804	1.5	17.8
Ortho-Phosphate (as P) mg/l	150675E 263874N	0.014	150060E 263943N	0.014	0.035	0
Ammonia (as N) mg/l	150675E 263874N	0.081	150060E 263943N	0.022	0.065	90.769

	WFD Status
sh	
	Good
	Good

Cou	ty Licence F	kef. Agglomerat	tion Rec	eiving Water Body	Monitoring Location	Monitoring Result Source	Date	рН	Temperatur e (°C)	BOD mg/l	COD mg/l	SS mg/l	Total Nitrogen (as N) mg/I	Total Phosphorus (as P) mg/l	Ammonia (as N) mg/I	Orthophosp hate (as P) mg/l	Dissolved Oxygen mg/l	Dissolved Oxygen (%Sat)	Oxidised Nitrogen	Inorganic	Coliforms	Escherichia coli cfu/100ml	C-4	Visual Inspection	SSRS	Water level	Conductivity	Nitrate	Chloride	Fluoride	Ammonium (NH4)	Major anions	Major Cations	Priority Subs	Metals & Organic Compounds	Salinity	Nitrate	Nitrite	Chlorophyll
Gal	ay D0370-	01 Dunmore	ie i	Sinking River	Number of samples Required			4	0	4	0	0	0	0	4	4	4		0	0	0	0	0	4	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0
Issued	n 11/03/20	114			Upstream: SW1u (E N)																																		
					Downstream:SW1d (E150061 N263944)																																		
					Upstream	Lab Cert	03/01/2024	7.7	7.9	<1					0.19	0.03	9.45	82.2																					
					Downstream	Lab Cert	03/01/2024	7.5	7.5	1					<0.02	0.03	9.05	77.6																					
					Upstream	Lab Cert	16/05/2024	8		<1.0					<0.02	<0.01	9.15	93.25																					
					Downstream	Lab Cert		8		<1.0					<0.02	<0.01	9.69	98.96																					
					Upstream	Lab Cert	24/07/2024	8.2		1.8					0.04	<0.01	11.18	111.1																					
					Downstream	Lab Cert	24/07/2024	8.2		<1					0.04	<0.01	10.34	106																					
					Upstream																																		
					Downstream																																		