# Annual Environmental Report 2024



Dungloe

D0208-01

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

This Annual Environmental Report has been prepared for D0208-01, Dungloe, in Donegal 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)

• Dungloe WWTP with a Plant Capacity PE of 2400, 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	
TPEFF0600D0208SW001	Dungloe 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 DUNGLOE WWTP - TREATED DISCHARGE

#### 2.1.1 INFLUENT MONITORING SUMMARY - DUNGLOE 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
Total Phosphorus (as P) mg/l	6	4.40	2.10
COD-Cr mg/l	7	904	220
Ammonia-Total (as N) mg/l	7	29	13
BOD, 5 days with Inhibition (Carbonaceous BOD) mg/l	7	342	98
ortho-Phosphate (as P) - unspecified mg/l	7	4.05	1.74
Suspended Solids mg/l	7	358	123
pH pH units	7	7.10	6.89
Total Nitrogen mg/l	7	37	22
Hydraulic Capacity	N/A	1047	649

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 - TPEFF0600D0208SW000

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	7	N/A	N/A	23	Pass
Suspended Solids mg/l	35	87.5	N/A	7	N/A	N/A	5.83	Pass
BOD, 5 days with Inhibition (Carbonaceous BOD) mg/l	20	40	N/A	7	N/A	N/A	1.66	Pass
pH pH units	9	9	N/A	7	N/A	N/A	7.17	Pass
Ammonia-Total (as N) mg/l	1.7	2.04	N/A	7	N/A	N/A	0.086	Pass
ortho-Phosphate (as P) - unspecified mg/l	0.6	0.72	N/A	7	N/A	N/A	0.157	Pass
Total Nitrogen mg/l	N/A	N/A	N/A	7	N/A	N/A	5.28	

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	7	N/A	N/A	524	
Total Phosphorus (as P) mg/l	N/A	N/A	N/A	7	N/A	N/A	0.247	

#### 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 TPEFF0600D0208SW000

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	176915, 411525	RS38D020250	No	No	No	Yes	Poor
Downstream	176739, 411432	RS38D020300	No	No	No	Yes	Poor

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 and the downstream monitoring locations. 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 mg/l, concentrations downstream of the effluent discharge is noted.

A deterioration in water quality has been identified, however it is not known if it or is not caused by the WWTP.

Other causes of deterioration in water quality in the area are unknown.

The discharge from the wastewater treatment plant does have an observable negative impact on the Water Framework Directive status.

The discharge from the wastewater treatment plant does have an observable impact on the designated shellfish water quality.

#### 2.1.4 OPERATIONAL PERFORMANCE SUMMARY - DUNGLOE WWTP

#### 2.1.4.1 Treatment Efficiency Report - Dungloe 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)	
cBOD	22121	352	98	
ТР	491	52	89	
COD	49866	4871	90	
ss	27804	1239	96	
TN	5040	1121	78	

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

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

Dungloe WWTP				
Peak Hydraulic Capacity (m³/day) - As Constructed	1704			
DWF to the Treatment Plant (m³/day)	284			
Current Hydraulic Loading - annual max (m³/day)	1047			
Average Hydraulic loading to the Treatment Plant (m³/day)				
Organic Capacity (PE) - As Constructed				
Organic Capacity (PE) - Collected Load (peak week)Note1				
Organic Capacity (PE) - Remaining	644			
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 - DUNGLOE 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	
	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)
There were no reportable incidents in 2	024.		

#### **3.2.2 SUMMARY OF OVERALL INCIDENTS**

Question	Answer
Number of Incidents in 2024	0
Number of Incidents reported to the EPA via EDEN in 2024	0
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
SW3	176744, 411430	Yes	Low Significance	Meeting Criteria	Unknown	Unknown	Not Monitored
твс	176748, 411196	Yes	Low Significance	Meeting Criteria	Unknown	Unknown	Monitored
твс	176924, 411526	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)?	77248
Is each SWO identified as not meeting DoEHLG Guidance included in the Programme of Improvements?	No
The SWO Assessment included the requirements of relevant of WWDL schedules?	Yes

# 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
D0208-SIP:01	Provision of new WWTP to provide secondary and tertiary level waste water treatment.	С	31/12/2014	Yes	Works Completed		
D0208-SIP:02	Provision of storm water holding tank (with associated new storm water overflow) at Pumping Station No. 1	С	31/12/2014	Yes	Works Completed		
D0208-SIP:03	SW000 located at 100m from the Courthouse, near the mouth of the Dungloe River to be discontinued	А	31/12/2014	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
D0208-SIP:04	SW002 Discharge from Septic Tank serving dwelling on Quay road, south west of the town to be discontinued.	А	31/12/2014	Yes	Works Completed		
D0208-SIP:05	The secondary waste water discharge (SW2) shall be connected to the main drainage network by 31/12/2014. thereafter, there shall be no secondary waste water discharges.	С	31/12/2014	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
No additional improver	ments 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
D0208-01-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	N/A

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

Signed: Date: 21/05/2025

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

### Dungloe WWTP

Ambient Monitoring Points from	Irish Grid Reference	EPA Feature Coding Tool code		I)	WFD Status		
WWDL (or as agreed by EPA)			Bathing Water	Drinking Water	FWPM	Shellfish	
Upstream Monitoring Station	176915E 411525N	RS38D020250	No	No	No	Yes	Poor
Downstream Monitoring Station	176739E 411432N	RS38D020300	No	No	No	Yes	Poor

Parameter Name	Upstream Monitoring Point	Upstream Monitoring Point	Downstream Monitoring Point	Downstream Monitoring Point	EQS (mean)	% EQS
	Location	Annual Mean	Location	Annual Mean		
cBOD mg/l	176915E 411525N	2	176739E 411432N	2	1.5	0
Ortho-Phosphate (as P) mg/l	176915E 411525N	0.010	176739E 411432N	0.010	0.035	0
Ammonia (as N) mg/l	176915E 411525N	0.025	176739E 411432N	0.030	0.065	-7.69

County	Licence Ref	. Agglomerat	ic Receiving Water Body		Monitoring Result Source	Date																																
							рН	Temperatur e (°C)	BOD mg/I	COD mg/l	SS mg/l	Total Nitrogen (as N) mg/l	Total Phosphorus (as P) mg/l	Ammonia (as N) mg/l	Orthophosp hate (as P) mg/I	Dissolved Oxygen mg/l	Oxygen	Total Oxidised Nitrogen (as N) mg/l	Dissolved Inorganic Nitrogen (as N) mg/l	Coliforms	Escherichia coli cfu/100ml	Intestinal Enterococci cfu/100ml	Visual Inspection	SSRS	Water level	Conductivity	Chloride	Fluoride	Ammonium (NH4)	Major anions	Major Cations	Priority Sub	Metals & Organic Compounds	Salinity	Nitrate	Nitrite		Chlorophyll (mg/m3)
Donega	D0208-01	Dunglo	e Dungloe Bay	Number of samples Require	d		6	6	0	0	6	6	6	6	6	6		6	6	0	0	0	- 6	6 6	0	0	0	0	0	0	0	0	0	0	0	0		
Issued (	n 12/12/201			Upstream: SW1u ()																																		
				Downstream:SW1d ()																																		
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