# Annual Environmental Report

2020



Duncannon

D0245-01

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## 1 EXECUTIVE SUMMARY AND INTRODUCTION TO THE 2020 AER

This Annual Environmental Report has been prepared for D0245-01, Duncannon, in Wexford 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 were no significant changes or improvements in 2020, aside for preparatory works for provision of new treatment plant to service the Duncannon agglomeration, Planning permission and land acquisition are in place. A contractor has been selected further to a tender competition. It is expected that Irish Water will sign construction contracts within the Q1 2021, with a view to construction commencing in March 2021. The expected construction and commissioning phase is expected to be 18 months in total.

#### 1.2 TREATMENT SUMMARY

• Currently there is no treatment provided at Duncannon. 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
TPEFF3300D0245SW002	Duncannon Untreated Discharge - 2020	Untreated	Non-Compliant	N/A

# 1.4 LICENCE SPECIFIC REPORTING INCLUDED IN AER

Assessment / Report	Included in AER
There are no Licence Specific Reports included in the 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 with Condition 2 Interpretation included	Annual Mean	Overall Compliance (Pass/Fail)
There is no	There is no Effluent data included in the AER.							

Notes

#### **Cause of Exceedance(s):**

No treatment plant in place.

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

No WWTP in place. New WWTP at Arthurstown expected to begin construction Q2 2021, for 18 month programme.

#### 2.1.2 AMBIENT MONITORING SUMMARY FOR THE UNTREATED DISCHARGE TPEFF3300D0245SW002

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.

<sup>1 –</sup> This represents the Emission Limit Values after the Interpretation provided for under Condition 2 of the licence is applied

Ambient Monitoring Point from WWDL (or as agreed with EPA)	Irish Grid Reference	River Station Code	Bathing Water	Drinking Water	FWPM	Shellfish	WFD Status
Downstream	271959, 108203	TW33002097SR6005	No	No	No	Yes	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 WWTP discharge was not compliant with the ELV's set in the wastewater discharge licence.

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

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.

## **3 COMPLAINTS AND INCIDENTS**

#### 3.1 COMPLAINTS SUMMARY

A summary of complaints of an environmental nature is included below.

	Number of Complaints	Nature of Complaint	Number Open Complaints	Number Closed Complaints
There were no relevant environmental complaints in 2020.				

### 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 Irish Water 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
Abatement Equipment offline Plant or equipment breakdown at WWTI		1	No	Yes
Uncontrolled release	Adverse Weather	1	No	Yes

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

Question	Answer
Number of Incidents in 2020	3
Number of Incidents reported to the EPA via EDEN in 2020	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	Irish Grid Ref.	Included in Schedule A4 of the WWDL	Significance of the overflow(High / Medium / Low)	Assessed against DoEHLG Criteria	No. of times activated in 2020 (No. of events)	Total volume discharged in 2020 (m3)	Monitoring Status
SW2	272788, 108346	Yes	Medium	Not yet Assessed	Unknown	Unknown	Not Monitored

SWO Summary	
How much sewage was discharged via 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?	No

# 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 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
D0245-SIP:01	Any improvement works required to ensure compliance with the emission limit values as set out in Schedule A: Discharges & Discharge Monitoring	С	31/12/2019	Yes	Work ongoing on-site	31/12/2023	

A summary of the status of any improvements identified by under Condition 5.2 is included below.

#### **4.2.2 IMPROVEMENT PROGRAMME SUMMARY**

Improvement Identifier	Improvement Description / or any Operational Improvements	Improvement Source	Expected Completion Date	Comments	
There are no Improvements Programme for this Agglomeration.					

#### 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 Table.

## **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 list of the various reports required for this agglomeration and a brief summary of their recommendations.

#### 5.a Licence Specific Reports Summary Table

Licence Specific Report	Required by licence	Year included in AER	Included in this AER	Reference to relevant section of AER
Priority Substances Assessment	Yes	2014	No	
Shellfish Impact Assessment	Yes		No	

## **5.1 PRIORITY SUBSTANCES ASSESSMENT**

The Priority Substances Assessment Report has been included in the AER 2014

#### **5.2 SHELLFISH IMPACT ASSESSMENT**

# **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	Amalgamating 3 agglomerations - Arthurstown, Ballyhack, Duncannon
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	Yes

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

Signed: Date: 31/03/2021

This AER has been produced by Irish Water's Environmental Information System (EIMS) and has been electronically signed off in that system for and on behalf of ,

Katherine Walshe

Acting Head of Environmental Regulation.

# **7 APPENDIX**

### **Appendix**

Appendix 7.1 - Ambient monitoring summary

	Ortho- Phosphate P	рН	Suspended Solids	Total Phosphate P		Dissolved Oxygen		Faecal Coliforms	E Coli	Enterococci	Biological Oxygen Demand
Sample Date	mg/l	pH units	mg/l	mg/l	Degrees C	mg/l	Descriptive	no./100mls	MPN/100mls	cfu/100mls	mg/l
	Ambient Monitoring Station - TW33002097SR6005										
							Clear, Low SS No Tarry residue, mineral oil				
4-Feb-2020	0.24	8.23	32	0.12	7.9	12.04	or detergents	111	49	23	1
							Clear, No SS, No Tarry residue, mineral oil				
19-May-2020	0.08	7.88	141	0.12	14.9	10.58	or detergents				2
							Clear, No SS, No Tarry residue, mineral oil				
2-Sep-2020	0.07	7.8	105	0.12	16.2	9.17	or detergents	308	38	50	2
3-Nov-2020	0.06	7.85	48.6	0.05	10.6	11.22	Clear, No Tarry Residue or Detergents, Seaweed & Debris visible				2
Mean	0.1125	7.94	81.65	0.1025	12.4	10.7525		209.5	43.5	36.5	1.75

			Receiving Waters Designation (Y/N)				WFD Status	
Ambient Monitoring Point from WWDL (or as agreed with EPA)	Irish Grid Reference	EPA Feature Coding Tool code	Bathing Water	Drinking Water	FWPM	Shellfish		
TW33002097RS6004		TPEFFD0036SW001	Yes	No	No	Yes	Poor	
TW33002097RS6005	271959,108 203	TPEFFD0036SW001	Yes	No	No	Yes	Poor	

#### **Ambient Impact Assessment Table**

Parameter Name	Upstream	Upstream	Downstream	Downstream	EQS	%EQS
	Monitoring	Monitoring	Monitoring	Monitoring		
	Point	Point Annual	Point	Point Annual		
	Location	Mean	Location	Mean		
BOD mg/l	TW3300209	No Data	TW3300209	1.75	4.0	
	7RS6004	available	7RS6005			
Ortho-Phosphate (as P) mg/l	TW3300209	No Data	TW3300209	0.1125	0.060	
	7RS6004	available	7RS6005			
Ammonia (as N) mg/l	TW3300209	No Data	TW3300209	No data	0.140	
	7RS6004	available	7RS6005			