Annual Environmental Report

2019



Newport

D0224-01

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1 EXECUTIVE SUMMARY AND INTRODUCTION TO THE 2019 AER

This Annual Environmental Report has been prepared for D0224-01, Newport, in Mayo 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.

Improvement works to increase the organic and hydraulic treatment capacity of the plant to ensure compliance with Condition 1.7 of this licence.

1.2 TREATMENT SUMMARY

• Currently there is no treatment provided at Newport. Please refer to section 4 for details of the Programme of Improvements.

1.3 ELV OVERVIEW

There are no Emission Limit Values (ELVs) associated with Newport Wastewater Discharge Licence. As there is no treatment provided, the plant is considered non-compliant.

Discharge Point Reference	Treatment Plant	Discharge Type	Compliance Status	Parameters failing if relevant
TPEFF2200D0224SW001	Newport (Mayo) Septic Tank 1	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)
E. Coli MPN/100ml	N/A	N/A	N/A	15	N/A	N/A	1940160.67	
Enterococci (Intestinal) cfu/100ml	N/A	N/A	N/A	15	N/A	N/A	212699.67	
Suspended Solids mg/l	N/A	N/A	N/A	15	N/A	N/A	339.67	
BOD, 5 days with Inhibition (Carbonaceous BOD) mg/l	N/A	N/A	N/A	15	N/A	N/A	109.37	
Ammonia-Total (as N) mg/l	N/A	N/A	N/A	15	N/A	N/A	12.43	
Total Oxidised Nitrogen (as N) mg/l	N/A	N/A	N/A	15	N/A	N/A	1.15	
Faecal coliforms cfu/100ml	N/A	N/A	N/A	15	N/A	N/A	1622286.67	

Notes

^{1 –} This represents the Emission Limit Values after the Interpretation provided for under Condition 2 of the licence is applied

Cause of Exceedance(s):

Refer to incident section of the report.

Significance of Results:

The agglomeration is not currently served by a wastewater treatment plant. Two holding tanks are located in the agglomeration which hold wastewater prior to discharge.

2.1.2 AMBIENT MONITORING SUMMARY FOR THE UNTREATED DISCHARGE TPEFF2200D0224SW001

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 Status
Upstream	99510, 294141	RS32N010100	No	No	No	Yes	High

Additional monitoring data sets are included in the Appendix 7.1 - Ambient monitoring summary

Significance of Results:

The WWTP discharge was is considered not compliant as there is not treatment provided.

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

Based on ambient monitoring results; a deterioration of BOD concentrations downstream of the effluent discharge is noted.

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

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 2019.						

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)	
There were no reportable incidents in 2019.					

3.2.2 SUMMARY OF OVERALL INCIDENTS

Question	Answer
Number of Incidents in 2019	0
Number of Incidents reported to the EPA via EDEN in 2019	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	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 2019 (No. of events)	Total volume discharged in 2019 (m3)	Monitoring Status
SW005	98189, 293723	Yes	Low	Not yet Assessed	Unknown	Unknown	Not Monitored
SW006	98363, 293887	Yes	Low	Not yet Assessed	Unknown	Unknown	Not Monitored
SW007	99234, 293998	Yes	Low	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?	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 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
D0224-SIP:01	Improvement works to increase the organic and hydraulic treatment capacity of the plant to ensure compliance with Condition 1.7 of this licence.	С	31/12/2018	Yes	At Planning Stage	31/05/2023	

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 Improvement Programmes 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.

Licence Specific Report	Required by licence	Year included in AER	Included in this AER	Reference to relevant section of AER
Priority Substances Assessment	Yes	2015	No	
Shellfish Impact Assessment	Yes		No	

5.1 PRIORITY SUBSTANCES ASSESSMENT

The Priority Substances Assessment Report has been included in the 2015 AER.

5.2 SHELLFISH IMPACT ASSESSMENT

The Shellfish Impact Assessment Report has not been included in the AER.

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?	No
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.	No
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: 14/04/2020

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

Appendix 7.2 - Other

Ambient Points

Ambient			Receiving W	WFD Status			
Monitoring Point from WWDL (or as agreed with EPA)	Irish Grid Reference	EPA Feature Coding Tool code	Bathing Water	Drinking Water	FWPM	Shellfish	
Upstream Monitoring Point	99510, 294141	IE_WE_32N010190					Unknown
Downstream Monitoring Point 1	96139, 293892	IE_WE_350_0200	No	No	No	No	High
Downstream Monitoring Point 2	97561, 294086	IE_WE_350_0200	No	No	No	No	High

Ambient Monitoring Results 2019

Newport Upstream

Date	SS (mg/l)	TON	Salinity	DO	NH4-N	E. Coli	Enterococci	Faecal	BOD	Total
		(mg/l)	(PSU)	(mg/l)	(mg/l)	(MPN/100ml)	(No/100ml)	Coliforms	(mg/l)	Coliforms
								(cfu/100ml)		(MPN/100ml)
09/01/19	<5	<0.15	<3.0	11	0.016	10	20	20	5.7	
06/03/19	9	<0.15	<3.0	11	<0.005	33	64	410	3.5	125
18/07/19	<5	<0.15	<3.0	9	0.010	816	140	282	1.8	
26/11/19	<5	<0.15	<3.0	11	0.015	35	13	40	1.3	

Newport Downstream 1

Date	SS (mg/l)	TON	Salinity	DO	NH4-N	E. Coli	Enterococci	Faecal	BOD	Total
		(mg/l)	(PSU)	(mg/l)	(mg/l)	(MPN/100ml)	(cfu/100ml	Coliforms	(mg/l)	Coliforms
								(cfu/100ml)		(MPN/100ml)
09/01/19	17	19	<3	11	0.035	683	100	750	2.0	
06/03/19	12	<0.15	<3	11	0.023	117	387	1590	2.9	525
18/07/19	36	0.16	11.6	9	0.448	>2420	>2420	1500	5.5	
26/11/19	213	0.5	12.8	10	0.021	517	81	810	1.5	

Newport Downstream 2

Date	SS (mg/l)	TON	Salinity	DO	NH4-N	E. Coli	Enterococci	Faecal	BOD	Total
		(mg/l)	(ppt)	(mg/l)	(mg/l)	(MPN/100ml)	(cfu/100ml	Coliforms	(mg/l)	Coliforms
								(cfu/100ml		(MPN/100ml)
09/01/19	72	<0.15	<3	12	0.019	0	3	4	2.5	
06/03/19	22	<0.15	7.6	11	0.029	78	58	55	2.4	326
18/07/19	102	<0.15	32.7	10	0.033	27	727	30	3.6	
26/11/19	66	<0.15	34.7	10	0.410	3	11	28	1.0	

Newport Effluent Results 2019

Front of Quay								
		Suspended Solids	TON as N	Ammonia as N	cBOD	E. coli	Enterococci	Faecal Coliforms
	Unit	mg/l	mg/l	mg/l	mg/l	MPN/100ml	MPN/100ml	cfu/100ml
Date								
09/01/19		41	<0.69	29	43.6	6131000	119000	7100000
06/03/19		5	0.85	1.2	16.6	2720	1	19100
21/05/19		1925	<0.69	38	820.0	>2420	>2420	8300000
18/07/19		68	<0.69	22	135.6	7270000	242000	60000
26/09/19		80	<0.69	3.0	43.1	11190	2470	130000

Back of Quay								
		Suspended Solids	TON as N	Ammonia as N	cBOD	E. coli	Enterococci	Faecal Coliforms
	Unit	mg/l	mg/l	mg/l	mg/l	MPN/100ml	MPN/100ml	cfu/100ml
Date								
09/01/19		121	2.1	19	60.7	3550000	2500000	4000000
06/03/19		8	0.93	1.2	7.5	2480	4	9200
21/05/19		500	<0.69	4.4	67.8	>2420	>2420	247000
18/07/19		109	<0.69	2.7	23.1	517000	23600	1730000
26/09/19		17	1.5	2.4	10.2	34480	2700	47000

Sandymount Quay								
		Suspended Solids	TON as N	Ammonia as N	cBOD	E. coli	Enterococci	Faecal Coliforms
	Unit	mg/l	mg/l	mg/l	mg/l	MPN/100ml	MPN/100ml	cfu/100ml
Date								
09/01/19		1546	1.4	17	36.1	1725000	170000	1800000
06/03/19		26	<0.69	2.4	25.4	600	>2420	161000
21/05/19		258	<0.69	23	180.6	>2420	>2420	600000
18/07/19		354	<0.69	19	161.7	9800000	130000	70000
26/09/19		37	7.3	2.1	8.5	57940	720	61000