

Annual Environmental Report

2021



Ramelton

D0341-01

CONTENTS

1 EXECUTIVE SUMMARY AND INTRODUCTION TO THE 2021 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 RAMELTON UNTREATED DISCHARGE - UNTREATED DISCHARGE
 - 2.1.1 EFFLUENT MONITORING SUMMARY - RAMELTON UNTREATED DISCHARGE -
 - 2.1.2 AMBIENT MONITORING SUMMARY FOR UNTREATED DISCHARGE -

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
- 5.2 SHELLFISH IMPACT ASSESSMENT

6 CERTIFICATION AND SIGN OFF

- 6.1 SUMMARY OF AER CONTENTS

7 APPENDIX

- 7.1 OTHER

1 EXECUTIVE SUMMARY AND INTRODUCTION TO THE 2021 AER

This Annual Environmental Report has been prepared for D0341-01, Ramelton, 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.

Ramelton is on the Irish Water Capital Investment Programme .

1.2 TREATMENT SUMMARY

- Currently there is no treatment provided at Ramelton . 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
TPEFF0600D0341SW001	Ramelton Untreated Discharge	Untreated	Non-Compliant	BOD, 5 days with Inhibition (Carbonaceous BOD) mg/l COD-Cr mg/l Suspended Solids mg/l Total Phosphorus (as P) mg/l

1.4 LICENCE SPECIFIC REPORTING

Assessment / Report
There are no Licence Specific Reports included in this AER.

2 TREATMENT PLANT PERFORMANCE AND IMPACT SUMMARY

2.1.1 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 exceedances with Condition 2 Interpretation included	Annual Mean	Overall Compliance (Pass/Fail)
COD-Cr mg/l	125	250	N/A	6	3	2	259	Fail
Suspended Solids mg/l	35	88	N/A	6	5	3	139	Fail
BOD, 5 days with Inhibition (Carbonaceous BOD) mg/l	25	50	N/A	6	4	2	108	Fail
pH pH units	9.00	9.00	N/A	6	N/A	N/A	7.30	Pass
Total Phosphorus (as P) mg/l	2.00	2.40	N/A	6	2	2	3.03	Fail
Conductivity @20°C µS/cm	N/A	N/A	N/A	6	N/A	N/A	5563	
Faecal coliforms cfu/100ml	N/A	N/A	N/A	2	N/A	N/A	2293900	
Enterococci (Intestinal) cfu/100ml	N/A	N/A	N/A	2	N/A	N/A	257000	

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)
Nitrate (as N) mg/l	N/A	N/A	N/A	6	N/A	N/A	0.646	
Nitrite (as N) mg/l	N/A	N/A	N/A	6	N/A	N/A	0.201	
ortho-Phosphate (as P) - unspecified mg/l	N/A	N/A	N/A	6	N/A	N/A	2.88	
Ammonia-Total (as N) mg/l	N/A	N/A	N/A	6	N/A	N/A	22	
Total Oxidised Nitrogen (as N) mg/l	N/A	N/A	N/A	6	N/A	N/A	0.846	
Dissolved Inorganic Nitrogen (as N) mg/l	N/A	N/A	N/A	6	N/A	N/A	23	
E. Coli MPN/100ml	N/A	N/A	N/A	2	N/A	N/A	4721950	
Total Nitrogen mg/l	N/A	N/A	N/A	6	N/A	N/A	25	

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):

Currently there is no treatment provided at this agglomeration

Significance of Results:

The Parameters that exceeded are cBOD, COD, Total Phosphorus and Suspended Solids

2.1.2 AMBIENT MONITORING SUMMARY FOR THE UNTREATED DISCHARGE TPEFF0600D0341SW001

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	222905, 421443	TW06007073LS1020	Yes	No	No	Yes	Moderate
Downstream	223010, 421440	TW06007073LS1021	Yes	No	No	Yes	Moderate

Where the receiving water body is not a river or where the data is not in EDEN – the Ambient data is appended in appendix 7.1.

Significance of Results:

The WWTP discharge was not compliant with the ELV's set in the wastewater discharge licence.

The 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 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 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 environmental complaints in 2021.			

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

3.2.2 SUMMARY OF OVERALL INCIDENTS

Question	Answer
Number of Incidents in 2021	1
Number of Incidents reported to the EPA via EDEN in 2021	1
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 2021 (No. of events)	Total volume discharged in 2021 (m3)	Monitoring Status
SW2	222515, 421144	Yes	Low	Meeting	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.

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?	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
D0341-SIP:01	Provision of Waste Water Treatment Plant and ancillary works	C	31/12/2015	Yes	At Planning Stage	2025	
D0341-SIP:02	SW2 to cease or upgrade	A	31/12/2015	Yes	At Planning Stage		At tender stage 2024+
D0341-SIP:03	Upgrade of waste water collection network	C	31/12/2015	Yes	At Planning Stage		At tender stage 2024+
D0341-SIP:04	Upgrading of Storm Water Overflows to comply with the criteria outlined in the DoECLG 'Procedures and Criteria in relation to Storm Water overflows, 1995'	C	31/12/2015	Yes	At Planning Stage	2025	At tender stage 2024+

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 improvements 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	Year included in AER	Included in this AER
Priority Substances Assessment	Yes	2018	No
Shellfish Impact Assessment	Yes	2018	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
Has a Technical amendment/licence review application been submitted to the Agency by IW?	Yes
List reason e.g. additional SWO identified	Alteration to Agglomeration Boundary and Relocation of Primary Discharge Point
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	N/A

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

Signed: Date: 05/05/2022

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 Data

MONTH	Category	Station	Lab Ref	Date	Ammonia (as N)	BOD	Chlorophyll	COD Chemical Oxygen Demand	Dissolved Inorganic Nitrogen (as N)	Dissolved Oxygen % Saturation	E coli	Intestinal Enterococci	Faecal Coliforms (E. coli)	Orthophosphate	Temperature	Total Oxidised Nitrogen N	Total Nitrogen N	Salinity	pH	Suspended Solids	Chlorophyll
					(mg/l)	(mg/l)	mg/m3	(mg/l)	(mg/l)	(mg/l)	mpn/100mls	cfu/100	cfu/100mls	(mg/l)	°C	(mg/l)	(mg/l)	PSU	pH units	(mg/l)	µg/L
March	Transitional Water Body	Ramelton - Point 1	212501047	03-Mar-21	0.04	<2	<4	NT	<0.5	97	NT	NT	NT	<0.02	NT	NT	0.75	NT	7.17	NT	NT
March	Transitional Water Body	Ramelton - Point 2	212501048	03-Mar-21	0.07	<2	<4	NT	<0.5	96.5	NT	NT	NT	<0.02	NT	NT	0.77	NT	7.19	NT	NT
May	Coastal Water Body	Ramelton - Point 1	212502004	18-May-21	0.06	3	NT	NT	0.21	95.9	NT	NT	NT	<0.02	NT	NT	0.68	NT	8.3	NT	7.35
May	Coastal Water Body	Ramelton - Point 2	212502005	18-May-21	0.04	3	NT	NT	0.19	96.1	NT	NT	NT	<0.02	NT	NT	0.64	NT	8.3	NT	5.93
September	Transitional Water Body	Ramelton - Point 1	212504211	14-Sep-21	0.21	<2	NT	NT	<0.52	91.9	NT	NT	NT	<0.02	NT	NT	0.81	NT	7.73	NT	5.02
September	Transitional Water Body	Ramelton - Point 2	212504212	14-Sep-21	0.24	<2	NT	NT	<0.52	91.9	NT	NT	NT	0.1	NT	NT	1.1	NT	7.71	NT	5.76
November	Transitional Water Body	Ramelton - Point 1	212504348	10-Nov-21	<0.02	2	NT	NT	<0.52	95.8	NT	NT	NT	<0.02	NT	NT	0.72	NT	7.6	NT	<4
November	Transitional Water Body	Ramelton - Point 2	212504349	10-Nov-21	0.03	2	NT	NT	0.69	95.2	NT	NT	NT	<0.02	NT	NT	1.19	NT	7.6	NT	<4