

Annual Environmental Report

2018



Lusk

D0122-01

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1 EXECUTIVE SUMMARY AND INTRODUCTION TO THE 2018 AER

This Annual Environmental Report has been prepared for D0122-01, Lusk in Country Dublin in accordance with the requirements of the wastewater discharge licence for the agglomeration.

1.1 Licence specific reporting included in AER

There are no Licence Specific Reports included in the AER.

1.2 Treatment Type

The primary discharge from the agglomeration was to the Rogerstown Estuary, up to the 21st June 2012 when the connection to the new 65,000 PE Portrane WWTP became live. Discharge to Rogerstown Estuary then ceased. The one SWO in the Lusk agglomeration also ceased operation on 21st June 2012.

Irish Water has applied for a Review of the Portrane Donabate WWDL No D0114-01. This Review proposes an expanded agglomeration to encompass the area served by the new Portrane Donabate Rush Lusk Sewage Scheme, which includes the area covered by the existing Lusk Agglomeration Licence D0122-01.

Annual Statement of Measures

There were no major capital or operational changes undertaken in 2018.

2 MONITORING REPORTS SUMMARY

2.1 Summary report on monthly influent monitoring

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.

2.1.1 Influent Monitoring Summary

No influent monitoring was carried out in this agglomeration.

2.2 Discharges from the agglomeration

2.2.1 Effluent Monitoring Summary

No monitoring of discharges was carried in this agglomeration.

2.3 Ambient monitoring summary

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.

2.3.1 Ambient Monitoring Report Summary

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	EPA Feature Coding Tool code	Receiving Waters Designation (Y/N)				Current WFD Status
			Bathing Water	Drinking Water	FWPM	Shellfish	
(130385) Rogerstown Estuary	323110E, 251881N	RG050	N	N	N	N	Bad
(130385) Rogerstown Estuary	323933E, 252170N	RG0650	N	N	N	N	Bad
South Beach, Rush (Shore Monitoring)	326519E, 253626N		Y	N	N	N	N/A
Brook Beach, Portrane (Shore Monitoring)	325551E, 251057N		Y	N	N	N	N/A

2.3.2 Ambient Monitoring Parameter Summary

The results for ambient results and / or additional monitoring data sets are included in the **Appendix 7.1 - Ambient Monitoring Summary**.

Significance of Results:

As there were no discharges from the agglomeration, it is felt that the agglomeration can have had no observable negative impact on the ambient waters in 2018.

3 OPERATIONAL REPORTS SUMMARY

3.1 Treatment Efficiency Report

This is not required for this agglomeration.

3.2 Treatment Capacity Report Summary

This is not required for this agglomeration.

3.3 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 is no Complaint data included in this AER			

3.4 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 or fax. 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.

3.4.1 Summary of Incidents

Incident Type	Cause	No. of incident occurrences	Recurring (Y/N)	Closed (Y/N)
There is no Incident data included in this AER				

3.4.2 Summary of Overall Incidents

Question	Answer
Number of Incidents in 2018	0
Number of Incidents reported to the EPA via EDEN in 2018	0
Explanation of any discrepancies between the two numbers above	N/A

3.5 Sludge / Other inputs to the 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)? ³	Is there a leachate/sludge acceptance procedure for the WWTP?	Is there a dedicated leachate/sludge acceptance facility for the WWTP?(Y/N)
As the treatment plant was terminated in 2012, there are no sludge or other inputs to the WWTP.							

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 and Inspection Summary Report

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 2018 (No. of events)	Total volume discharged in 2018 (m ³)	Monitoring Status
There are no Storm Water Overflows associated with this Agglomeration							

4.1.2 SWO Identification and Inspection Summary Report

SWO Summary	
How much sewage was discharged via SWOs in the agglomeration in the year (m³)?	N/A
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
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.

The Improvement Programme summaries in the Tables below address the Specified Improvement Programmes as detailed in Schedules A3 and C of the WWDL. They also detail other improvements identified through assessments required under the licence.

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)	Licence Schedule	Licence Completion Date	Date Expired? (N/NA/Y)	Status of Works	Timeframe for Completing the Work	Comments
Infrastructural works necessary to cease primary discharge (SW001)	C	31/12/2012	No	Works Completed		
Infrastructural works necessary to cease SWO at septic tank overflow (SW002 Discharge)	C	31/12/2012	No	Works Completed		
Installation of new pump station at Whitestown	C	31/12/2012	No	Works Completed		
SW001 (primary discharge) to cease	A	31/12/2012	No	Works Completed		
SW002 (SWO) to cease	A	31/12/2012	No	Works Completed		
Upgrade of sewer network and connection to new Portrane WWTP	C	31/12/2012	No	Works Completed		

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	Improvement Source	Expected Completion Date	Comments
There is 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.

Licence Specific Report	Required by licence	Year included in AER	Included in this AER	Reference to relevant section of AER
There is no Licence Specific Report Required in this 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 modifications to the existing WWDL?	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	N/A

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

Date: 19/03/2019

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:

Eleanor Roche

Acting Head of Environmental Regulation

7 APPENDIX

Appendix

Appendix 7.1 - Ambient Monitoring Summary

Appendix 7.1 Ambient Monitoring Report Summary

Sampling Point Description	Sample Date	Ammonia	Chlorophyll a	DIN	Dissolved Oxygen	pH	Pheophytin a	Phosphorus (React)	Salinity	Temp.	TON	Total B.O.D. (Saline)	Total Nitrogen Saline
		µg/l as N	mg/m ³	µg/l	% Sat.	pH	mg/m ³	µg/l SRP as P	PSU	°C	µg/l as N	mg/l	µg/l as N
Rogerstown Estuary (RG050)	06/09/2018	18	1.7	18	98	8.2	1.4	84	29.7	15.6	<40	2	404
Rogerstown Estuary (RG050)	18/10/2018	139	1.5	689	114	8.3	0.3	143	30.8	14.5	550	1	1120
Rogerstown Estuary (RG0650)	06/09/2018	<10	2.7	<50	107	8.1	1.2	16	33.2	15.6	<40	<1	143
Rogerstown Estuary (RG0650)	18/10/2018	91	1.5	182	120	8.2	1.2	61	32.7	13.8	91	1	285

Bathing Water Results 2018

Brook Beach

Date	<i>Escherichia coli</i>	Intestinal <i>enterococci</i>	Sample Quality Status
05/09/2018	31	8	Excellent
20/08/2018	145	44	Excellent
07/08/2018	10	4	Excellent
23/07/2018	98	20	Excellent
09/07/2018	10	590	Poor
25/06/2018	<10	<1	Excellent
11/06/2018	52	59	Excellent
06/06/2018	52	13	Excellent
23/05/2018	<10	4	Excellent

(Source: Beaches.ie)

The Bathing Water Quality Regulations, 2008 (S.I No 79 of 2008), was consulted to assess the Brook Beach results. Brook Beach is reported as “*Restricted*” due to historical monitoring results, although all values in 2017 were reported as “*Excellent*” or “*Good*”.

Portrane, the Brook Beach is classified as having Poor Water Quality in 2018, based on the assessment of bacteriological results for the period 2015 to 2018 and consequently, an Advice Not To Swim restriction will apply at the bathing water for the 2019 season. Portrane, the Brook Beach also had a Poor Water Quality rating in 2017 and 2016 and achieved a Good Water Quality rating in 2015.

Rush South Beach

Date	Escherichia coli	Intestinal enterococci	Sample Quality Status
05/09/2018	20	<1	Excellent
20/08/2018	41	26	Excellent
07/08/2018	<10	1	Excellent
23/07/2018	10	4	Excellent
09/07/2018	<10	<1	Excellent
25/06/2018	<10	<1	Excellent
11/06/2018	20	<1	Excellent
06/06/2018	<10	1	Excellent
23/05/2018	<10	<1	Excellent

(Source: Beaches.ie)

In order to assess these results, the Bathing Water Quality Regulations, 2008 (S.I No 79 of 2008), was consulted. It was found that in 9 cases, Rush South Beach, achieved “*Excellent*” results in all cases for the Bathing Water season 2018.

Rush South Beach is classified as having Sufficient Water Quality in 2018 based on the assessment of bacteriological results for the period 2015 to 2018. Due to a Poor Water Quality classification in 2017 an Advice Not To Swim restriction will apply at the beach for the 2019 season. Rush South Beach achieved Sufficient Water Quality rating in 2016 and had Poor Water Quality ratings in 2015 and 2014.

FCC Bathing Water Monitoring Data

Location Sampling Point	Sampled Date and Date of Testing	E. coli MPN/100ml	Enterococci CFU/100ml	Floating Materials	Mineral Oil (visual)	pH pH	Phenols Olfactory	Salinity PSU	Surfactants	Visual Inspection
(49912) Portrane Beach, The Brook	23/05/2018	<10	4	Absent	Absent	8.2	Absent	32.2	Absent	Normal
(49912) Portrane Beach, The Brook	06/06/2018	52	13	Absent	Absent	8.1	Absent	34.2	Absent	Normal
(49912) Portrane Beach, The Brook	11/06/2018	52	59	Absent	Absent	8.1	Absent	32.5	Absent	Normal
(49912) Portrane Beach, The Brook	25/06/2018	<10	<1	Absent	Absent	8.1	Absent	32.8	Absent	Normal
(49912) Portrane Beach, The Brook	09/07/2018	10	590	Absent	Absent	8.1	Absent	33.4	Absent	Normal
(49912) Portrane Beach, The Brook	23/07/2018	98	20	Absent	Absent	8.1	Absent	34.3	Absent	Normal
(49912) Portrane Beach, The Brook	07/08/2018	10	4	Absent	Absent	8.1	Absent	34.1	Absent	Normal
(49912) Portrane Beach, The Brook	20/08/2018	145	44	Absent	Absent	8	Absent	33.8	Absent	Normal
(49912) Portrane Beach, The Brook	23/05/2018	31	8	Absent	Absent	8.1	Absent	34.3	Absent	Normal
(49911) Rush South Beach	06/06/2018	<10	<1	Absent	Absent	8.2	Absent	33.9	Absent	Normal
(49911) Rush South Beach	23/05/2018	<10	1	Absent	Absent	8.2	Absent	33.7	Absent	Normal

Location Sampling Point	Sampled Date and Date of Testing	E. coli MPN/100ml	Enterococci CFU/100ml	Floating Materials	Mineral Oil (visual)	pH pH	Phenols Olfactory	Salinity PSU	Surfactants	Visual Inspection
(49911) Rush South Beach	06/06/2018	20	<1	Absent	Absent	8.1	Absent	32.6	Absent	Normal
(49911) Rush South Beach	11/06/2018	<10	<1	Absent	Absent	8.1	Absent	33.6	Absent	Normal
(49911) Rush South Beach	25/06/2018	<10	<1	Absent	Absent	8.2	Absent	33.7	Absent	Normal
(49911) Rush South Beach	09/07/2018	10	4	Absent	Absent	8.1	Absent	33.4	Absent	Normal
(49911) Rush South Beach	23/07/2018	<10	1	Absent	Absent	8.1	Absent	33.8	Absent	Normal
(49911) Rush South Beach	07/08/2018	41	26	Absent	Absent	8.1	Absent	33.8	Absent	Normal
(49911) Rush South Beach	20/08/2018	20	<1	Absent	Absent	8.1	Absent	33.7	Absent	Normal