Annual Environmental Report

2018

Uisce Éireann : Irish Water

Liscannor

D0430-01

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1 EXECUTIVE SUMMARY AND INTRODUCTION TO THE 2018 AER

This Annual Environmental Report has been prepared for D0430-01, Liscannor, in Clare in accordance with the requirements of the wastewater discharge licence for the agglomeration. Specified reports are included as an appendix to the AER as follows:

1.1 Licence specific reporting included in AER

Assessment / Report	Included in AER
There is no Licence Specific Reports included in the AER.	

1.2 Treatment Type

The agglomeration is not served by a wastewater treatment plant.

1.2.1 Liscannor WWTP

Treatment type	Yes / No	Details
Preliminary Treatment	No	
Primary Treatment	No	
Secondary Treatment	No	
Nutrient Removal	No	
Tertiary Treatment	No	

1.3 ELV Overview

1.3.1 Liscannor WWTP

There is currently no treatment at this agglomeration

1.4 Sludge Removal

The amount of sludge removed from the wastewater treatment plant is shown below along with the transported destination of the sludge from the treatment plant.

Treatment Plant	Sludge type	Quantity	Unit	% Dry Solids	Destination
There is no Sludge data included in the AER.					

Annual Statement of Measures

Part of the UTAS programme. Consultants have been appointed. It is at the design stage.

2 MONITORING REPORTS SUMMARY

2.1 Summary report on monthly influent monitoring

A summary of influent monitoring for the treatment plant is presented in 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 - Liscannor WWTP

Parameters	Number of Samples	Annual Max	Annual Mean
There is no Influent data included in the AER. Influent Monitoring is not undertaken as there is currently no treatment at this agglomeration			

If other inputs in the form of sludge / leachate are added to the WWTP then these are included in Section 3.5 if applicable

2.2 Discharges from the agglomeration

2.2.1 Effluent Monitoring Summary - Liscannor WWTP

Parameter	WWDL ELV (Schedule A)	ELV with Condition 2 Interpretation included	Interim % reduction from influent concentration	Number of sample results	Number of exceedences	Number of with Condition 2 Interpretation included	Annual Mean	Overall Compliance (Pass/Fail)
There is no Effluent data included in the AER. Effluent Monitoring is not undertaken as there is currently no treatment at 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 - Liscannor WWTP

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	Code	Bathing Water	Drinking Water	FWPM	Shellfish	WFD Status
Downstream	106879, 187780	TPEFF0300D0430SW001	Yes	No	No	No	Unassigned

2.3.2 Ambient Monitoring Parameter Summary - Liscannor WWTP

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

3 OPERATIONAL REPORTS SUMMARY

3.1 Treatment Efficiency Report

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:

3.1.1 Treatment Efficiency Report Summary - Liscannor WWTP

Parameter	Influent mass loading (kg/year)	Effluent mass emission (kg/year)	Efficiency (% reduction of influent load)	Comment
There is no Treatment Efficiency data included in the AER.				

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

3.2 Treatment Capacity Report Summary

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. There is currently no treatment at this agglomeration as such hydraulic loading isnot determined. Organic loading is estimated as 388 PE.

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 the 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. 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 the 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	

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?[2](Y/N)
There is no Sludge and Other Input data for the AER.							

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 2018 (No. of events)	Total volume discharged in 2018 (m3)	Monitoring Status
There are no Storm Water Overflows in this Agglomeration.							

4.1.2 Inspection Summary Report

SWO Summary	
How much sewage was discharged via SWOs in the agglomeration in the year (m3)?	
Is each SWO identified as non 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 / charges 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 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
There are no Specified Improvement Programmes for this Agglomeration.						

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 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 (e.g. Appendix X).
There is no Licence Specific Report Required in this AER Annual Review.				

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:

Signed: Date: 27/02/2019

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

In the appendix include all the detailed or site specific reports that are relevant to the AER. Reports omitted from previous AERs should also be appended here.

Appendix
Appendix 7.1 - Ambient monitoring summary

Liscannor Licence Reg. No.D0430-01 Year 2018

Parameter	BOD	DO %SAT	Ammonia	Ortho-P
		High Status		
Average	≤1.3		≤0.040	≤0.025
95%ile	≤2.2	>80%	≤0.090	≤0.045
		Good Status		
Average	≤1.5		≤0.065	≤0.035
95%ile	≤2.6	<120%	≤0.140	≤0.075

Hard Water 4.5< pH <9.0
Soft Water 6.0 < pH <9.0

Transitional Waters

Paramet	BOD	DO %SAT	Ortho-P	DIN
			High Status	
Average		>70% (0 psu)	≤0.060	≤2.6
95%ile	<4.0	>80% (35 psu)	(0-17psu)	(0 psu)
			Good Status	
Average		<130% (0 psu)	≤0.040	≤0.25 (0 psu)
95%ile		<120% (35 psu)	(35 psu)	≤0.17 (35 psu)

Liscannor Bay

Date	Ammonia(N)	Faecal Coliforms (no./100mls)	BOD O_2	TON mg/l	DO % Sat	DO mg/l	pH	E Coli no./100 mls	Intestinal Enterococci	Suspended Solids mg/l
29-Mar-2018	0.081	500	1	0.083	109	10.4	7.9	500	3	
26-June-2018	0.065	9	2	0.034	86	6.9	7.8	25	5	
20-Sep-2018	0.014	24	< 1	0.034	**88**	**7.82**	**8**	24	150	
14-Nov-2018	< 0.01	39	< 1	0.205	**95.6**	**10.2**	**7.9**	39	12	
Average	**0.053**	**143.000**	**1.5**	**0.1**	**94.7**	**8.83**	**7.90**	**147.00**	**42.50**	
95%ile	**0.079**	**430.850**	**2.0**	**0.2**	**107.0**	**10.4**	**7.99**	**430.9**	**129.300**	
Status	**H**		**H**		**H**					

Parameter	Biological Oxyg	Dissolved Oxyg	Ammonia N	Dissolved Oxyg	Ortho-Phospha	pH	Temperature	Total Oxidised	E Coli	Enterococci	Visual Inspectio	Faecal Coliform	Dissolved Inorg	Enterococci	E Coli
Max.	--	120	--	--	--	9	--	--	--	--	--	--	--	--	--
Min.	--	80	--	--	--	6	--	--	--	--	--	--	--	--	--
Test Method	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Analyst Conclu	mg/l	% O2	mg/l	mg/l	mg/l	pH units	Degrees C	mg/l	MPN/100mls	MPN/100mls	Descriptive	no./100mls	mg/l	cfu/100mls	no./100mls

Station	Station Referer	Laboratory	Sample Referer	Sample Date	Sample Time	Sample Metho	Sampled By	Analyst Conclu												
Liscannor Bay	CW03004139L	Clare Co Lis	18-852249	29-Mar-2018	11:00	Grab	Contract Lab-C	-	1	109	0.081	10.4	0.019	7.9	8.6	0.083	500	3		500	0.164		
Liscannor Bay	CW03004139L	Complete Labo	18-872985	26-June-2018	10:00	Grab	Contract Lab-C	-	2	86	0.065	6.9	0.019	7.8	18.1	0.034	, 21 degrees, low tide, 10km/hr wind light from			9	0.099	5	25
Liscannor Bay	CW03004139L	Complete Labo	18-897608	20-Sep-2018	10:00	Grab	Contract Lab-C	-	< 1	88	0.014	7.82	0.011	8	12.4	0.034	s. 100% cloud cover, raining, overcast, dull, ligh			24	0.048	150	24
Liscannor Bay	CW03004139L	Complete Labo	911027	14-Nov-2018	10:00	Grab	Contract Lab-C	-	< 1	95.6	< 0.01	10.2	0.011	7.9	12.2	0.205	air temperature, 100% cloud cover, moderate-			39	0.207	12	39