Annual Environmental Report

2020

Ringaskiddy

D0057-01

CONTENTS

Rev 1 - Ambient Monitoring Data appended

1 EXECUTIVE SUMMARY AND INTRODUCTION TO THE 2020 AER

This Annual Environmental Report has been prepared for D0057-01,Ringaskiddy, in Cork 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.

1.2 TREATMENT SUMMARY

The agglomeration is served by a wastewater treatment plant(s)

- Cork Lower Harbour WWTP - 2020 with a Plant Capacity PE of 65,000, the treatment type is 2 - Secondary treatment

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
TPEFF0500D0057SW001	Cork Lower Harbour WWTP - 2020	Combined	Non-Compliant	-BOD, 5 days with Inhibition (Carbonaceous BOD) mg/l -COD-Cr mg/l -Suspended Solids mg/l

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 CORK LOWER HARBOUR WWTP - 2020 - COMBINED DISCHARGE

2.1.1 INFLUENT MONITORING SUMMARY - CORK LOWER HARBOUR WWTP - 2020

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.

Parameters	Number of Samples	Annual Max	Annual Mean
BOD, 5 days with Inhibition (Carbonaceous BOD) mg/l	31	563	183.93
Total Nitrogen mg/l	27	84	39.24
Suspended Solids mg/l	31	1638	328.05
Total Phosphorus (as P) mg/l	31	19.25	9.09
COD-Cr mg/l	31	3295	637.1
Hydraulic Capacity	N/A	30986	9671

If other inputs in the form of sludge / leachate are added to the WWTP then these are included in Section 2.1.5 if applicable.

Significance of Results:

The annual mean hydraulic loading is greater than the peak Treatment Plant Capacity. The annual maximum hydraulic loading is greater than the peak Treatment Plant Capacity. Further details on the plant capacity and efficiency can be found under the sectional ‘Operational Performance Summary’.

2.1.2 EFFLUENT MONITORING SUMMARY – TPEFF0500D0057SW100

Effluent Monitoring summary – Cork Lower Harbour WWTP (Monitoring location SW100 upstream of flows from industrial licensed facilities)

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)
COD-Cr mg/l	125	250	N/A	30	0	0	42.2	Pass
Suspended Solids mg/l	35	87.5	N/A	30	0	0	7.2	Pass
Total Nitrogen mg/l	15	28.5	N/A	28			15.9	
BOD, 5 days with Inhibition (Carbonaceous BOD) mg/l	25	50	N/A	29	0	0	4.24	Pass
pH pH units	6 - 9	6 - 9	N/A	29	N/A	N/A	7.4	Pass

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):

Not Applicable

Significance of Results:

The WWTP is compliant with the ELV's set in the Wastewater Discharge Licence

2.1.3 EFFLUENT MONITORING SUMMARY - COMBINED – TPEFF0500D0057SW001

Effluent Monitoring summary – Combined discharge of Cork Lower Harbour WWTP and Industrial Discharges - SW001

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)
BOD, 5 days with Inhibition (Carbonaceous BOD) mg/l	25	50	N/A	26	3	9	33.2	Fail
ortho-Phosphate (as P) - unspecified mg/l	N/A	N/A	N/A	26	N/A	N/A	3.42	
Copper - unspecified µg/l	N/A	N/A	N/A	2	N/A	N/A	6.5	
Lead - unspecified µg/l	N/A	N/A	N/A	2	N/A	N/A	1.35	
PCB 28 µg/l	N/A	N/A	N/A	2	N/A	N/A	0.07	
Mercury - unspecified µg/l	N/A	N/A	N/A	2	N/A	N/A	1.03	

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)
Total Phosphorus (as P) mg/l	N/A	N/A	N/A	26	N/A	N/A	4.5	
Suspended Solids mg/l	35	87.5	N/A	26	5	9	67.81	Fail
Ammonia-Total (as N) mg/l	N/A	N/A	N/A	26	N/A	N/A	8.97	
Toxicity (Freshwater Crustacean) T.U.'s	N/A	N/A	N/A	1	N/A	N/A	2.19	
Zinc - unspecified µg/l	N/A	N/A	N/A	2	N/A	N/A	53	
Di(2-ethylhexyl) phthalate (DEHP) µg/l	N/A	N/A	N/A	2	N/A	N/A	0.06	
Total Oxidised Nitrogen (as N) mg/l	N/A	N/A	N/A	26	N/A	N/A	1.5	
pH pH units	6-9	6-9	N/A	26	N/A	N/A	7.6	Pass

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)
Toxicity (Marine Bacterium) T.U.'s	N/A	N/A	N/A	1	N/A	N/A	1.56	
PCB 118 µg/l	N/A	N/A	N/A	2	N/A	N/A	0.07	
Total Nitrogen mg/l	28.5	34.2	N/A	26	2	0	16.41	Pass
COD-Cr mg/l	125	250	N/A	26	7	4	140.46	Fail
Chromium - unspecified µg/l	N/A	N/A	N/A	2	N/A	N/A	4.3	

Notes:
1 – This represents the Emission Limit Values after the Interpretation provided for under Condition 2 of the licence is applied
2 – For parameters where a mean ELV applies 3 – For pH the WWDA specifies a range of pH 6-9

Cause of Exceedance(s):

cBOD exceeded on 3 occasions, COD 7 times, Suspended Solids 5 times.

Significance of Results:

The WWTP is not compliant with the ELV's set in the Wastewater Discharge Licence

2.1.4 AMBIENT MONITORING SUMMARY FOR THE COMBINED DISCHARGE TPEFF0500D0057SW001

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	181358, 62521	CW05003149LE9001	No	No	No	Yes	Good

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 TPEFF0500D0057SW001 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.

2.1.5 OPERATIONAL PERFORMANCE SUMMARY - CORK LOWER HARBOUR WWTP - 2020

2.1.5.1 Treatment Efficiency Report - Cork Lower Harbour WWTP - 2020

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:

Parameter	Influent mass loading (kg/year)	Effluent mass emission (kg/year)	Efficiency (% reduction of influent load)
cBOD	639037	120572	81
SS	1139776	245588	78
TP	31566	15766	50
COD	2213534	492685	78
TN	138615	60017	57

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

2.1.5.2 Treatment Capacity Report Summary - Cork Lower Harbour WWTP - 2020

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.

Cork Lower Harbour WWTP - 2020	
Peak Hydraulic Capacity (m^3/day) - As Constructed	43875
DWF to the Treatment Plant (m^3/day)	14625
Current Hydraulic Loading - annual max (m^3/day)	30986
Average Hydraulic loading to the Treatment Plant (m^3/day)	9671
Organic Capacity (PE) - As Constructed	65000
Organic Capacity (PE) - Collected Load (peak week)[Note1]	30797
Organic Capacity (PE) - Remaining	34203
Will the capacity be exceeded in the next three years? (Yes/No)	No

Nominal design capacities can be based on conservative design principles. In some cases assessment of existing plants has shown organic capacities significantly higher than the nominal design capacity. Accordingly plants that appear to be overloaded when comparing a collected peak load with the nominal design capacity can be fully compliant due to the safety factors in the original design.

2.1.6 SLUDGE / OTHER INPUTS - CORK LOWER HARBOUR WWTP - 2020

'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)?	Is there a leachate/sludge acceptance procedure for the WWTP?	Is there a dedicated leachate/sludge acceptance facility for the WWTP? (Y/N)
There is no Sludge and Other Input data for the Treatment Plant included in the AER.							

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
Uncontrolled release	Broken Sewer Pipe	1	No	Yes
Uncontrolled release	Broken Sewer Pipe	1	No	Yes

Incident Type	Cause	No. of incident occurrences	Recurring (Y/N)	Closed (Y/N)
Uncontrolled release	Broken Sewer Pipe	1	No	No
Uncontrolled release	Broken Sewer Pipe	1	No	No
Uncontrolled release	Blocked Sewer	1	No	Yes
Uncontrolled release	Adverse Weather	1	Yes	Yes
Uncontrolled release	Plant or equipment breakdown at WWTP	1	No	Yes
Uncontrolled release	Adverse Weather	1	No	Yes
Spillage	Adverse Weather	1	No	Yes
Uncontrolled release	Adverse Weather	1	No	Yes
Uncontrolled release	Broken Sewer Pipe	1	No	Yes
Spillage	Blocked Sewer	1	No	Yes
Spillage	Blocked Sewer	1	Yes	No
Uncontrolled release	Adverse Weather	1	No	Yes
Uncontrolled release	Adverse Weather	1	No	No
Uncontrolled release	Blocked Sewer	1	Yes	No
Uncontrolled release	Other	1	Yes	No

3.2.2 SUMMARY OF OVERALL INCIDENTS

Question	Answer
Number of Incidents in 2020	18
Number of Incidents reported to the EPA via EDEN in 2020	18
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
SW008	175796, 64930	Yes	Medium	Meeting	Unknown	Unknown	Not Monitored
SW009	174439, 62606	Yes	Medium	Meeting	Unknown	Unknown	Monitored
SW010	173154, 62435	Yes	Medium	Meeting	Unknown	Unknown	Monitored
SW011	173068, 62345	Yes	Medium	Meeting	Unknown	Unknown	Not Monitored
SW012	178831, 61324	Yes	Medium	Meeting	Unknown	Unknown	Not Monitored
SW013	178814, 61291	Yes	Medium	Meeting	Unknown	Unknown	Not Monitored

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
TBC	173317, 62522	No	Medium	Meeting	Unknown	Unknown	Not Monitored
TBC	174443, 62603	No	Medium	Meeting	Unknown	Unknown	Not Monitored
TBC	173317, 62522	No	Medium	Meeting	Unknown	Unknown	Not Monitored
TBC	178202, 64724	No	Medium	Meeting	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?	No
The SWO Assessment included the requirements of relevant of WWDL schedules?	No
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 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
D0057-SIP:01	SW 02 Ring to meet criteria set out in DoEHLG Procedures and Criteria....	C	01/01/2015	Yes	Works Completed		
D0057-SIP:02	Infiltration programme	C	01/01/2015	Yes	Works Completed		
D0057-SIP:03	Installations of rising mains, gravity sewers, pumping stations and marine pipeline including upgrading of existing facilities	C	01/01/2015	Yes	Works Completed		
D0057-SIP:04	SW 03 Ring to meet criteria set out in DoEHLG Procedures and Criteria....	C	01/01/2015	Yes	Works Completed		
D0057-SIP:05	SW 04 Ring to meet criteria set out in DoEHLG Procedures and Criteria....	C	01/01/2015	Yes	Works Completed		

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
D0057-SIP:06	SW 05 Ring to meet criteria set out in DoEHLG Procedures and Criteria....	C	01/01/2015	Yes	Works Completed		
D0057-SIP:07	SW 06 Ring to meet criteria set out in DoEHLG Procedures and Criteria....	C	01/01/2015	Yes	Works Completed		
D0057-SIP:08	SW 07 Ring to meet criteria set out in DoEHLG Procedures and Criteria....	C	01/01/2015	Yes	Works Completed		
D0057-SIP:09	WWTP and ancillary works to provide secondary treatment	C	01/01/2015	Yes	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 / 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
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 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: 25/06/2021

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

WaterbodyNam	WaterbodyCod	Waterbodyty	MonitoringStationCode	MonitoringStati	MonitoringStat	MonitoringStat	SampleCode	SampleDate	SampleMethod	ParameterNam	ParameterUnit	ParameterUnit	Result	TextResul	ResultSt	LimitOfDetectic	ReportResult	ReportText	ReportRe	ReportLin
Outer Cork Harl	IE_SW_050_00	Coastal	CW05003149LE9001	LE630 - Adjacer	Operational	Cork County Co	20-12303	12/08/2020	TRaC Surface	Depth	m	Metres	0		OK		0		OK	
Outer Cork Harl	IE_SW_050_00	Coastal	CW05003149LE9001	LE630 - Adjacer	Operational	Cork County Co	20-12304	12/08/2020	TRaC Bottom	ortho-Phosphat	mg/l	milligrams per l	0.013		OK	0.005	0.013		OK	0.005
Outer Cork Harl	IE_SW_050_00	Coastal	CW05003149LE9001	LE630 - Adjacer	Operational	Cork County Co	20-12303	12/08/2020	TRaC Surface	Salinity	PSU	Practical salinit	32.4		OK	0.1	32.4		OK	0.1
Outer Cork Harl	IE_SW_050_00	Coastal	CW05003149LE9001	LE630 - Adjacer	Operational	Cork County Co	20-12304	12/08/2020	TRaC Bottom	Salinity(Lab)	0/oo	0/oo	33.8		OK	0.1	33.8		OK	0.1
Outer Cork Harl	IE_SW_050_00	Coastal	CW05003149LE9001	LE630 - Adjacer	Operational	Cork County Co	20-12304	12/08/2020	TRaC Bottom	Silica (as SiO2)	mg/l	milligrams per litre	<0.1		OK	0.1	0.05	<0.1	OK	0.1
Outer Cork Harl	IE_SW_050_00	Coastal	CW05003149LE9001	LE630 - Adjacer	Operational	Cork County Co	20-12303	12/08/2020	TRaC Surface	Salinity(Lab)	0/oo	0/oo	32.6		OK	0.1	32.6		OK	0.1
Outer Cork Harl	IE_SW_050_00	Coastal	CW05003149LE9001	LE630 - Adjacer	Operational	Cork County Co	20-12304	12/08/2020	TRaC Bottom	Chlorophyll	Âµg/l	Microgrammes	1.3		OK	1	1.3		OK	1
Outer Cork Harl	IE_SW_050_00	Coastal	CW05003149LE9001	LE630 - Adjacer	Operational	Cork County Co	20-12303	12/08/2020	TRaC Surface	StationDepth	m	Metres	27		OK	0.1	27		OK	0.1
Outer Cork Harl	IE_SW_050_00	Coastal	CW05003149LE9001	LE630 - Adjacer	Operational	Cork County Co	20-12304	12/08/2020	TRaC Bottom	Temperature	Â°C	Degrees centrig	14.5		OK		14.5		OK	
Outer Cork Harl	IE_SW_050_00	Coastal	CW05003149LE9001	LE630 - Adjacer	Operational	Cork County Co	20-12304	12/08/2020	TRaC Bottom	Dissolved Oxyg	% Saturation	Percentage Sat	103		OK	1	103		OK	1
Outer Cork Harl	IE_SW_050_00	Coastal	CW05003149LE9001	LE630 - Adjacer	Operational	Cork County Co	20-12303	12/08/2020	TRaC Surface	ortho-Phosphat	mg/l	milligrams per l	0.014		OK	0.005	0.014		OK	0.005
Outer Cork Harl	IE_SW_050_00	Coastal	CW05003149LE9001	LE630 - Adjacer	Operational	Cork County Co	20-12303	12/08/2020	TRaC Surface	Temperature	Â°C	Degrees centrig	16.8		OK		16.8		OK	
Outer Cork Harl	IE_SW_050_00	Coastal	CW05003149LE9001	LE630 - Adjacer	Operational	Cork County Co	20-12303	12/08/2020	TRaC Surface	Total Oxidised	mg/l	milligrams per l	0.015		OK	0.01	0.015		OK	0.01
Outer Cork Harl	IE_SW_050_00	Coastal	CW05003149LE9001	LE630 - Adjacer	Operational	Cork County Co	20-12304	12/08/2020	TRaC Bottom	Total Oxidised	mg/l	milligrams per litre	<0.01		OK	0.01	0.005	<0.01	OK	0.01
Outer Cork Harl	IE_SW_050_00	Coastal	CW05003149LE9001	LE630 - Adjacer	Operational	Cork County Co	20-12304	12/08/2020	TRaC Bottom	Transparency	m	Metres	3.5		OK		3.5		OK	
Outer Cork Harl	IE_SW_050_00	Coastal	CW05003149LE9001	LE630 - Adjacer	Operational	Cork County Co	20-12303	12/08/2020	TRaC Surface	Ammonia-Total	mg/l	milligrams per l	0.019		OK	0.01	0.019		OK	0.01
Outer Cork Harl	IE_SW_050_00	Coastal	CW05003149LE9001	LE630 - Adjacer	Operational	Cork County Co	20-12304	12/08/2020	TRaC Bottom	Ammonia-Total	mg/l	milligrams per l	0.02		OK	0.01	0.02		OK	0.01
Outer Cork Harl	IE_SW_050_00	Coastal	CW05003149LE9001	LE630 - Adjacer	Operational	Cork County Co	20-12303	12/08/2020	TRaC Surface	Chlorophyll	Âµg/l	Microgrammes	5.6		OK	1	5.6		OK	1
Outer Cork Harl	IE_SW_050_00	Coastal	CW05003149LE9001	LE630 - Adjacer	Operational	Cork County Co	20-12304	12/08/2020	TRaC Bottom	Depth	m	Metres	26.3		OK		26.3		OK	
Outer Cork Harl	IE_SW_050_00	Coastal	CW05003149LE9001	LE630 - Adjacer	Operational	Cork County Co	20-12303	12/08/2020	TRaC Surface	Dissolved Oxyg	% Saturation	Percentage Sat	122		OK	1	122		OK	1
Outer Cork Harl	IE_SW_050_00	Coastal	CW05003149LE9001	LE630 - Adjacer	Operational	Cork County Co	20-12303	12/08/2020	TRaC Surface	pH	pH units	pH Units	8.1		OK	2	8.1		OK	2
Outer Cork Harl	IE_SW_050_00	Coastal	CW05003149LE9001	LE630 - Adjacer	Operational	Cork County Co	20-12304	12/08/2020	TRaC Bottom	pH	pH units	pH Units	8		OK	2	8		OK	2
Outer Cork Harl	IE_SW_050_00	Coastal	CW05003149LE9001	LE630 - Adjacer	Operational	Cork County Co	20-12304	12/08/2020	TRaC Bottom	Salinity	PSU	Practical salinit	32.7		OK	0.1	32.7		OK	0.1
Outer Cork Harl	IE_SW_050_00	Coastal	CW05003149LE9001	LE630 - Adjacer	Operational	Cork County Co	20-12303	12/08/2020	TRaC Surface	Silica (as SiO2)	mg/l	milligrams per litre	<0.1		OK	0.1	0.05	<0.1	OK	0.1
Outer Cork Harl	IE_SW_050_00	Coastal	CW05003149LE9001	LE630 - Adjacer	Operational	Cork County Co	20-12304	12/08/2020	TRaC Bottom	StationDepth	m	Metres	27		OK	0.1	27		OK	0.1
Outer Cork Harl	IE_SW_050_00	Coastal	CW05003149LE9001	LE630 - Adjacer	Operational	Cork County Co	20-12303	12/08/2020	TRaC Surface	Transparency	m	Metres	3.5		OK		3.5		OK	