

Annual Environmental Report

2020



Cobh

D0054-01

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1 EXECUTIVE SUMMARY AND INTRODUCTION TO THE 2020 AER

This Annual Environmental Report has been prepared for D0054-01, Cobh, 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

In December 2020, Irish Water completed the Cobh to Monkstown Estuary Crossing Contract. This Contract was part of the Cork Lower Harbour Main Drainage Project, where Irish Water is working, in partnership with Cork County Council, towards ending the decades-long practice of discharging raw sewage directly into Cork Lower Harbour. This involved two of the longest horizontal directional drills ever carried out in Ireland under the Lee Estuary. These drilled bores allowed the installation of sewer pipelines 60m under the Lee Estuary – creating a vital connection between Cobh and Monkstown. This connection will allow the raw sewage from Cobh town to be transferred for treatment, once work on the Cobh Town Networks contract is complete in 2021.

1.2 TREATMENT SUMMARY

- Currently there is no treatment provided at Cobh . 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
TPEFF0500D0054SW001	COBH SEPTIC TANK - 2020	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 - TPEFF0500D0054SW001

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)
There is no Effluent data included in the AER.								

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):

The agglomeration is not served by a wastewater treatment plant.

Significance of Results:

The ELVs set in the Wastewater Discharge Licence cannot be measured, as there is no influent or effluent data included in the AER.

2.1.2 AMBIENT MONITORING SUMMARY FOR THE UNTREATED DISCHARGE TPEFF0500D0054SW001

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
Downstream	183363, 65327	CW05003150LE8002	No	No	No	Yes	Moderate
Downstream	181751, 59703	CW05003149LE9002	No	No	No	No	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 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.

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)
There were no reportable incidents in 2020.				

3.2.2 SUMMARY OF OVERALL INCIDENTS

Question	Answer
Number of Incidents in 2020	0
Number of Incidents reported to the EPA via EDEN in 2020	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 2020 (No. of events)	Total volume discharged in 2020 (m3)	Monitoring Status
SW016	178401, 65648	Yes	Medium	Meeting	Unknown	Unknown	Not Monitored
SW017	179466, 66275	Yes	Low	Meeting	Unknown	Unknown	Not Monitored
SW018	180068, 66442	Yes	Low	Meeting	Unknown	Unknown	Not Monitored
SW019	180281, 66502	Yes	Low	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

SWO Summary	
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
D0054-SIP:01	Discharges from SW01 (primary discharge) to cease	A	01/01/2015	Yes	Work ongoing on-site	31/12/2021	
D0054-SIP:02	Discharges from SW02 to cease	A	01/01/2015	Yes	Work ongoing on-site	31/12/2021	

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
D0054-SIP:03	Discharges from SW03 to cease	A	01/01/2015	Yes	Work ongoing on-site	31/12/2021	
D0054-SIP:04	Discharges from SW04 to cease	A	01/01/2015	Yes	Work ongoing on-site	31/12/2021	
D0054-SIP:05	Discharges from SW05 to cease	A	01/01/2015	Yes	Work ongoing on-site	31/12/2021	
D0054-SIP:06	Discharges from SW06 to cease	A	01/01/2015	Yes	Work ongoing on-site	31/12/2021	
D0054-SIP:07	Discharges from SW07 to cease	A	01/01/2015	Yes	Work ongoing on-site	31/12/2021	
D0054-SIP:08	Discharges from SW08 to cease	A	01/01/2015	Yes	Work ongoing on-site	31/12/2021	
D0054-SIP:09	Discharges from SW09 to cease	A	01/01/2015	No	Work ongoing on-site	31/12/2021	

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
D0054-SIP:10	Discharges from SW10 to cease	A	01/01/2015	Yes	Work ongoing on-site	31/12/2021	
D0054-SIP:11	Discharges from SW11 to cease	A	01/01/2015	Yes	Work ongoing on-site	31/12/2021	
D0054-SIP:12	Discharges from SW12 to cease	A	01/01/2015	Yes	Work ongoing on-site	31/12/2021	
D0054-SIP:13	Discharges from SW13 to cease	A	01/01/2015	Yes	Work ongoing on-site	31/12/2021	
D0054-SIP:14	Discharges from SW14 to cease	A	01/01/2015	Yes	Work ongoing on-site	31/12/2021	
D0054-SIP:15	Discharges from SW15 to cease	A	01/01/2015	Yes	Work ongoing on-site	31/12/2021	
D0054-SIP:16	Discharges from SW16 to cease	A	01/01/2015	Yes	Work ongoing on-site	31/12/2021	

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
D0054-SIP:17	Infrastructural works to cease discharges	C	01/01/2015	Yes	Work ongoing on-site	31/12/2021	
D0054-SIP:18	Upgrade collecting system(reduce infiltration, remediate structural damage, separate storm water, install major pumping station and provide marine pipeline crossing)	C	01/01/2015	Yes	Works ongoing on-site	31/12/2021	

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
Priority Substances Assessment	Yes	2015	No	

5.1 PRIORITY SUBSTANCES ASSESSMENT

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

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	Yes

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

Signed: Date: 10/05/2021

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

Ambient (Coastal)	EQS		6/02/2020	22/07/2020	12/08/2020	95%ile	Mean
	Mean	95%ile					
D.O % O ₂	80%<95%ile<120%		96	108	113	112.5	105.7
Temperature C°	≤ 1.5 C° increase		9.2	13.8	15.9		
pH	6 < pH < 9		8	8.1	8.1	8.10	8.07
BOD mg/L	N/A		1.1	0.5	0.5	1.04	0.7
Ammonia (N) mg/l	N/A		0.049	0.021	0.026	0.0467	0.0320
TON (N) mg/l	≤ 0.25 @ 34 PSU		0.22	0.005	0.015	0.20	0.08

Ambient Monitoring Point from WWDL (or as agreed with EPA)	Irish Grid Reference	EPA Feature Coding tool Code	Bathing Water	Drinking Water	FWPM	Shellfish	Current WFD Status
Downstream Monitoring Point	E18175,N59703	CW05003150LE9002	No designated	No	No	No	Good

Significance of Results	
Did the ambient monitoring results meet the EQS Required?	Yes
Is there an observable negative impact on water quality?	Unknown - "Observable" TBC
List the parameters causing the impact?	N/A
A deterioration has been identified, but it is not known if it is caused by the TP	N/A
Do the discharges from the WWTP have an observable negative impact on the WFD?	N/A (No WWTP)
Any other known impacts	Catchment Pressures/Diffuse Urban

Ambient (Coastal)	EQS		06/02/2020	23/06/2020	22/07/2020	12/08/2020	95%ile	Mean
	Mean	95%ile						
D.O % O ₂	80%<95%ile<120%		95	106	128	104	124.7	108.25
Temperature C°	≤ 1.5 C° increase		9.4	15.2	15.8	14.7		
pH	6 < pH < 9		8	8.1	8.2	8.1	8.185	8.1
BOD mg/L	N/A		0.5	0.5	0.5	1.2	1.1	0.7
Ammonia (N) mg/l	N/A		0.62	0.058	0.015	0.019	0.5357	0.1780
TON (N) mg/l	≤ 0.25 @ 34 PSU		0.22	0.061	0.005	0.005	0.20	0.07

Ambient Monitoring Point from WWDL (or as agreed with EPA)	Irish Grid Reference	EPA Feature Coding tool Code	Bathing Water	Drinking Water	FWPM	Shellfish	Current WFD Status
Downstream Monitoring Point	E18853 N64946	CW05003150LE8003	No designated	No	No	No	Moderate

Significance of Results	
Did the ambient monitoring results meet the EQS Required?	No
Is there an observable negative impact on water quality?	Unknown - "Observable" TBC
List the parameters causing the impact?	Dissolved Oxygen
A deterioration has been identified, but it is not known if it is caused by the TP	TRUE
Do the discharges from the WWTP have an observable negative impact on the WFD?	N/A (No WWTP)
Any other known impacts	Catchment Pressures/Diffuse Urban

Active Layers

Coastal Waterbody WFD Status 2013-2018



Abstract

Water Quality Status data for Coastal Waterbodies 2013-2018

Zoom to layer

Legend

- High
- Good
- Moderate
- Poor
- Bad
- Unassigned

Layer Symbology

Default

