Annual Environmental Report

2018

Foynes

D0502-01

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1 EXECUTIVE SUMMARY AND INTRODUCTION TO THE 2018 AER

This Annual Environmental Report has been prepared for D0502-01, Foynes, in Limerick 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

There is currently no treatment at this agglomeration

1.3 ELV Overview

There is currently no treatment at this agglomeration. ELVs do not come in to operation until 1st January 2020.

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

No Significant works or changes were 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 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 - Foynes WWTP

Parameters	Number of Samples	Annual Max	Annual Mean
BOD, 5 days with Inhibition (Carbonaceous BOD) mg/l	1	55.9	0
COD-Cr mg/l	1	207	0
Total Nitrogen mg/l	1	37.7	0
Total Phosphorus (as P) mg/l	1	3.15	0
Suspended Solids mg/l	1	83	0
Hydraulic Capacity	0	1026	409

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

Significance of Results:

The annual mean hydraulic loading is greater than the peak Treatment Plant Capacity as detailed further in Section 3.2. The annual maximum hydraulic loading is greater than the peak Treatment Plant Capacity as detailed further in Section 3.2.

2.2 Discharges from the agglomeration

2.2.1 Effluent Monitoring Summary - Foynes WWTP

ELVs do not come in to operation until 1st January 2020

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 - Foynes 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
Upstream	135844, 157038	TPEFF1900D0502SW001	No	No	No	No	Poor
Downstream	124520, 15269	TPEFF1900D0502SW001	No	No	No	No	Poor

2.3.2 Ambient Monitoring Parameter Summary - Foynes WWTP

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 ELVs do not come in to operation until 1st January 2020

3 OPERATIONAL REPORTS SUMMARY

3.1 Treatment Efficiency Report

There is currently no treatment at this agglomeration. The facilities comprise two tidal holding tanks which discharge via an outfall pipe to Foynes Harbour.

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.

Foynes WWTP	
Peak Hydraulic Capacity (m3/day) - As Constructed	170
DWF to the Treatment Plant (m3/day)	170
Current Hydraulic Loading - annual max (m3/day)	1026
Average Hydraulic loading to the Treatment Plant (m3/day)	409
Organic Capacity (PE) - As Constructed	0
Organic Capacity (PE) - Collected Load (peak week)	564
Organic Capacity (PE) - Remaining	0
Will the capacity be exceeded in the next three years? (Yes/No)	Yes

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 currently no treatment at this agglomeration.							

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:

No Appendix Included

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
SW2	125122, 151376	Yes	Low	Not Meeting			Not Monitored

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?	Yes
The SWO Assessment included the requirements of relevant of WWDL schedules?	Yes
Have the EPA been advised of any additional SWOs / charges to Schedule C3 and A4 under Condition 1.7?	No

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
Discharges from SW000 to cease	A		No	Not Started	31/12/2023	The improvement programme will be reviewed by Irish Water to assess the works required to comply with the licence condition on a prioritised basis
Discharges from SW002 to cease	A		No	Not Started	31/12/2023	The improvement programme will be reviewed by Irish Water to assess the works required to comply with the licence condition on a prioritised basis
Installation of new rising mains and pumping station	C	01/01/2020	No	Not Started	31/12/2023	Upgrade of Foynes WWTP is on the Capital Investment Plan 2017-2021, Consultants have been appointed and preparation of the Feasibility Study Options report for provision of new WWTP and ancillary works such as new / upgraded pumping station, new rising mains is underway
Installation of new waste water treatment plant and ancillary works	C	01/01/2020	No	Not Started	31/12/2023	Upgrade of Foynes WWTP is on the Capital Investment Plan 2017-2021, Consultants have been appointed and preparation of the Feasibility Study Options report for provision of new WWTP and ancillary works such as new / upgraded pumping station is underway

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
Installation of storm water storage tank.	C	01/01/2020	No	Not Started	31/12/2023	Upgrade of Foynes WWTP is on the Capital Investment Plan 2017-2021, Consultants have been appointed and preparation of the Feasibility Study Options report for provision of new WWTP and ancillary works such as new / upgraded pumping station is underway

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	
Is there a need to request/advise the EPA of any modifications to the existing WWDL?	
List reason e.g. changes to monitoring requirements	
Have these processes commenced?	
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: 07/03/2019

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

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

Upstream

							Parameter	Dissolved Inorg
							Max.	--
							Min.	--
							Test Method	--
Station	Station Referen	Station Easting	Station Northin	Surface Waterb	Ground Waterb	Sample Date	Analyst Conclus	mg/l
u/s Foynes WD	TW03004128SM	135844	157038	Transitional: Upper Shannon Es		6-Mar-2018	-	0.762
u/s Foynes WD	TW03004128SM	135844	157038	Transitional: Upper Shannon Es		13-Mar-2018	-	0.721
u/s Foynes WD	TW03004128SM	135844	157038	Transitional: Upper Shannon Es		1-May-2018	-	0.531
u/s Foynes WD	TW03004128SM	135844	157038	Transitional: Upper Shannon Es		4-Sep-2018	-	0.294
u/s Foynes WD	TW03004128SM	135844	157038	Transitional: Upper Shannon Es		11-Sep-2018	-	0.162
u/s Foynes WD	TW03004128SM	135844	157038	Transitional: Upper Shannon Es		13-Nov-2018	-	0.401

pH	Temperature	Biological Oxyg	Dissolved Oxyg	Ortho-Phospha	Total Oxidised I	Ammonia NH3-	Salinity	Visual Inspection
14	--	--	--	--	--	--	--	--
--	--	--	--	--	--	--	--	--
TM-CHEM-21	--	TM-CHEM-3	TM-CHEM-8	--	--	TM-CHEM-17	--	--
pH units	Degrees C	mg/l	% O2	mg/l	mg/l	mg/l	ppt	Descriptive
7.8	4.4	< 2	95	0.025	0.709	0.053		
8	6.3	< 2	97.3	0.026	0.693	0.028	17.9	Clear
7.9	11.3	< 2	96.6	0.018	0.527	< 0.01	19.7	
8.1	16.3	< 1	108	0.034	0.23	0.064	26.6	
8	15.8	< 2	89.4	0.034	0.124	0.038		
8	9.1	< 2	93.7	0.024	0.366	0.035	24.2	

Downstream

Parameter	Dissolved Inorg
Max.	--
Min.	--
Test Method	--

Station	Station Referen	Station Easting	Station Northin	Surface Waterb	Ground Waterb	Sample Date	Analyst Conclus	mg/l
WDLW 19 Shar	TW36004124FH	124635	152022	Transitional: Foynes Harbour		6-Mar-2018	-	0.597
WDLW 19 Shar	TW36004124FH	124635	152022	Transitional: Foynes Harbour		11-Sep-2018	-	0.102

pH	Temperature	Biological Oxyg	Dissolved Oxyg	Ortho-Phospha	Total Oxidised I	Ammonia NH3-N
14	--	--	--	--	--	--
--	--	--	--	--	--	--
TM-CHEM-21	--	TM-CHEM-3	TM-CHEM-8	--	--	TM-CHEM-17
pH units	Degrees C	mg/l	% O2	mg/l	mg/l	mg/l
7.8	5	< 2	96	0.015	0.568	0.029
8	16	< 2	91.6	0.026	0.076	0.026