# Annual Environmental Report





Falcarragh

D0343-01

#### **CONTENTS**

#### 1 EXECUTIVE SUMMARY AND INTRODUCTION TO THE 2019 AER

- 1.1 ANNUAL STATEMENT OF MEASURES
- 1.2 TREATMENT SUMMARY
- 1.3 ELV OVERVIEW
- 1.4 LICENSE SPECIFIC REPORT INCLUDED IN AER

#### 2 TREATMENT PLANT PERFORMANCE AND IMPACT SUMMARY

- 2.1 FALCARRAGH WWTP UNTREATED DISCHARGE
  - 2.1.1 EFFLUENT MONITORING SUMMARY FALCARRAGH WWTP -
  - 2.1.2 Ambient Monitoring Summary for Untreated Discharge -

#### **3 COMPLAINTS AND INCIDENTS**

- 3.1 COMPLAINTS SUMMARY
- 3.2 REPORTED INCIDENTS SUMMARY
  - 3.2.1 SUMMARY OF INCIDENTS
  - 3.2.2 SUMMARY OF OVERALL INCIDENTS

#### 4 INFRASTRUCTURAL ASSESSMENT AND PROGRAMME OF IMPROVEMENTS

- 4.1 STORM WATER OVERFLOW IDENTIFICATION AND INSPECTION REPORT
  - 4.1.1 SWO IDENTIFICATION AND INSPECTION SUMMARY REPORT
- 4.2 REPORT ON PROGRESS MADE AND PROPOSALS BEING DEVELOPED TO MEET THE IMPROVEMENT PROGRAMME REQUIREMENTS
  - 4.2.1 Specified Improvement Programme Summary
  - 4.2.2 IMPROVEMENT PROGRAMME SUMMARY
  - 4.2.3 SEWER INTEGRITY RISK ASSESSMENT

#### **5** LICENCE SPECIFIC REPORTS

5.1 PRIORITY SUBSTANCES ASSESSMENT

#### 6 CERTIFICATION AND SIGN OFF

- 6.1 SUMMARY OF AER CONTENTS
- 7 APPENDIX
  - 7.1 Ambient monitoring summary

# **1 EXECUTIVE SUMMARY AND INTRODUCTION TO THE 2019 AER**

This Annual Environmental Report has been prepared for D0343-01, Falcarragh, in Donegal 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.

There were no major capital or operational changes undertaken.

## **1.2 TREATMENT SUMMARY**

• Currently there is no treatment provided at Falcarragh. 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	Discharge Point Reference Treatment Plant		Compliance Status	Parameters failing if relevant	
TPEFF0600D0343SW001	FALCARRAGH WWTP	Untreated	Non-Compliant	No treatment provided	

## **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 -

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)
Enterococci (Intestinal) cfu/100ml	N/A	N/A	N/A	2	N/A	N/A	112203.18	
Total Oxidised Nitrogen (as N) mg/l	N/A	N/A	N/A	6	N/A	N/A	0.72	
BOD, 5 days with Inhibition (Carbonaceous BOD) mg/l	N/A	N/A	20% Reduction	6	6	N/A	53.22	Fail
Ammonia-Total (as N) mg/l	N/A	N/A	N/A	6	N/A	N/A	15.2	
Suspended Solids mg/l	N/A	N/A	50% Reduction	6	6	N/A	48.74	Fail
ortho-Phosphate (as P) - unspecified mg/l	N/A	N/A	N/A	5	N/A	N/A	1.49	
Nitrite (as N) mg/l	N/A	N/A	N/A	6	N/A	N/A	0.03	

COD-Cr mg/l	N/A	N/A	N/A	6	N/A	N/A	142.65	
E. Coli MPN/100ml	N/A	N/A	N/A	2	N/A	N/A	1101914.53	
Faecal coliforms cfu/100ml	N/A	N/A	N/A	2	N/A	N/A	931999.22	
Nitrate (as N) mg/l	N/A	N/A	N/A	6	N/A	N/A	0.69	
pH pH units	N/A	N/A	N/A	6	N/A	N/A	7.22	
Conductivity 20 C µS/cm	N/A	N/A	N/A	6	N/A	N/A	466.96	

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):**

There is currently no treatment at this agglomeration.

#### **Significance of Results:**

The WWTP is non-compliant with the ELV's set in the Wastewater Discharge Licence. The impact on receiving waters is assessed further in Section 2.

#### 2.1.2 AMBIENT MONITORING SUMMARY FOR THE UNTREATED DISCHARGE TPEFF0600D0343SW001

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	191859, 433757	CW06007064BS1001	No	No	No	No	Unassigned

The 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 non-compliant with the ELV's set in the wastewater discharge licence.

The ambient monitoring results 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.

A deterioration in water quality has been identified; however, it is not known if it is caused by the WWTP.

Other causes of deterioration in water quality in the area are unknown.

The discharge from the wastewater treatment plant does 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 environme	ental complaints in 2019.		

## **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 20 <sup>.</sup>	19.		

### **3.2.2 SUMMARY OF OVERALL INCIDENTS**

Question	Answer
Number of Incidents in 2019	0
Number of Incidents reported to the EPA via EDEN in 2019	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 2019 (No. of events)	Total volume discharged in 2019 (m3)	Monitoring Status
SW002	194266, 432574	Yes	Low	Meeting	Unknown	Unknown	Not Monitored
твс	твс	No	Low	Not yet Assessed	Unknown	Unknown	Not Monitored
твс	192232, 432198	No	Low	Not Meeting	Unknown	Unknown	Not Monitored

SWO Summary				
How much sewage was discharged via SWOs in the agglomeration in the year (m <sup>3</sup> )?	Unknown			
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?				
Have the EPA been advised of any additional SWOs / changes 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)	Description	Licence Schedule	Licence Completion Date	Date Expired? (N/NA/Y)	Status of Works	Timeframe for Completing the Work	Comments
D0343-SIP:02	Improvement works to ensure compliance with emission percentage reductions specified in Schedule A: Discharges and Discharge Monitoring.	С	31/12/2015	Yes	At Planning Stage	01/04/2022	
D0343-SIP:03	Improvement works to increase the organic and hydraulic treatment capacity of the plant to ensure compliance with Condition 1.7 of this licence.	С	31/12/2015	Yes	At Planning Stage	01/04/2022	
D0343-SIP:01	Decommissioning of current primary discharge SW001	С	31/12/2015	Yes	At Planning Stage	01/04/2022	

D0343-SIP:04 The licensee will provide and maintain a mechanism by which the primary discharge from the Falcarragh agglomeration is restricted to periods of high tide only in Ballyness Bay to ensure compliance with Condition 5.6 of this licence.	С	31/12/2015	Yes	At Planning Stage	01/04/2022	
---	---	------------	-----	-------------------------	------------	--

A summary of the status of any improvements identified by under Condition 5.2 is included below.

## 4.2.2 IMPROVEMENT PROGRAMME SUMMARY

Improvement	Improvement Description / or any Operational	Improvement	Expected Completion	Comments
Identifier	Improvements	Source	Date	
There are no Improvem	ent Programmes 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
Priority Substances Assessment	Yes	2015	No	

## **5.1 PRIORITY SUBSTANCES ASSESSMENT**

The Priority Substances Assessment Report has been included in the 2015 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 modification to the existing WWDL with respect to condition 4 changes to monitoring location, frequency etc.	Yes
List reason e.g. changes to monitoring requirements	relocation of primary discharge
Have these processes commenced?	Yes
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: 25/03/2020

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 Monitoring Summary: Falcarragh

#### Table 1: Ambient Monitoring Table

Ambient			Receiving W	WFD Status				
Monitoring Point from WWDL (or as agreed with EPA)	Irish Grid Reference	EPA Feature Coding Tool code	Bathing Water	Drinking Water	FWPM	Shellfish		
Upstream	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Ballyness Bay	191858.75 433757.15	CW06007064BS1001	No	No	No	No	Unassigned	

#### Coastal Monitoring Report Master\_to end December 2019

Entity	Category	MONTH	Location	Lab Ref	Date	Ammonia (as N)	BOD	Chlorophyll	COD	Dissolved Inorganic Nitrogen (as N)	Dissolved Oxygen % Saturation	E coli	Intestinal Enterococci	Faecal Coliforms (E. coli)	Orthophosphate	рН	Suspended Solids	Temperature	Total Nitrogen N	Salinity	Total Oxidised Nitrogen N
Ballyness Bay	Coastal Water Body	April	Falcarragh	192502330	11-Apr-19	<0.02	2	NT	NT	<0.02	111	0	0	6	NT	8.16	68.6	NT	NT	NT	<0.7
Ballyness Bay	Coastal Water Body	June	Falcarragh	192503676	05-Jun-19	< 0.02	<2	NT	NT	<0.2	96.5	0	0	1	NT	8.21	28	NT	NT	NT	<0.7
Ballyness Bay	Coastal Water Body	September	Falcarragh	192505398	03-Sep-19	<0.02	2.2	NT	NT	<0.2	102.1	38	61	866	NT	8.37	64	16.5	NT	NT	0.11
Ballyness Bay	Coastal Water Body	November	Falcarragh	192505416	19-Nov-19	<0.02	2.26	NT	NT	1	93.6	0	50	0	NT	8.3	28.8	NT	NT	NT	<0.7

1