

Annual Environmental Report 2014

Agglomeration Name:	Carlanstown
Licence Register No.	D0488-01



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Section 1 Executive Summary and Introduction to the 2014 AER

1.1 Summary report on 2014

This Annual Environmental Report has been prepared in accordance with EPA Licence D0488-01, governing Carlanstown WWTP and associated discharges, Carlanstown Co. Meath.

Specified assessments are included as an appendix to the AER as follows:

- Storm water overflow assessment
- Priority substances assessment

The agglomeration is served by a wastewater treatment plant with a design population equivalent (PE) of 820. The treatment process includes the following:-

- Preliminary treatment (including screening / grit removal)
- Secondary treatment - conventional activated sludge
- Chemical dosing for phosphorus removal

The Carlanstown WWTP was non-compliant with the ELVs as set in the wastewater discharge licence for Orthophosphate and Ammonia. There were 5 samples non-compliant with the licence ELVs, relating to the parameters Ortho-P and Ammonia. The non-compliances were due to issues with the ferric dosing system and the requirement for a major clean out of the plant, respectively. These issues have been dealt with.

As there are no dewatering facilities at the Carlanstown WWTP, 637,720 kilograms of liquid sludge was removed from the wastewater treatment plant in 2014. Sludge removed from Carlanstown WWTP was transferred to the Navan Wastewater Treatment works for dewatering.

In May 2014, the following process optimisation improvements were introduced to the operation of the Carlanstown WWTP:

- Regular checks of DO levels in the aeration basin
- Regular checks of Suspended Solids concentrations
- Regular checks of final effluent Ammonia concentrations
- Regular checks of final effluent Total Phosphorus concentrations

In addition to the listed process optimisation improvements, the following improvement works were undertaken at the Carlanstown WWTP in 2014:-

- Jetting and CCTV of entire Network
- Cleaning of Aeration basin and clarifier
- Replacement of all 32 diffusers

An Annual Statement of Measures for 2015 is included in Appendix 7.1.

Section 2 Monitoring Reports Summary:

2.1 Summary report on monthly influent monitoring:

Table 2.1 - Influent Monitoring Summary

	BOD (mg/l)	COD (mg/l)	SS (mg/l)	TP (mg/l)	TN (mg/l)	NH ₄ (mg/l)	Hydraulic Loading (m ³ /d)	Organic Loading (PE/day)
Number of Samples	10	10	10	10	10	4		
Annual Max.	358.2	1024	386	13.8	137.9	100.6	516	1,284
Annual Mean	313.4	627.81	234	9.47	76.92	18.9	113	590

Significance of results

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

The design of the wastewater treatment plant allows for peak values and therefore the peak loads have not impacted on compliance with Emission Limit Values.

2.2 Discharges from the agglomeration:

Table 2.2 - Effluent Monitoring Summary

	BOD (mg/l)	COD (mg/l)	TSS (mg/l)	Total P (mg/l)	Ortho P (mg/l)	Total N (mg/l)	NH ₄ (mg/l)	Comment
WWDL ELV (Schedule A)	25	125	35	-	2	-	5	
ELV with Condition 2 Interpretation included	50	250	87.5	-	2.4	-	6	
Number of sample results	13	13	13	13	13	13	13	
Number of sample results above WWDL ELV	0	0	1	-	2	-	4	
Number of sample results above ELV with Condition 2 Interpretation included	0	0	0	-	2	-	3	Grab samples
Annual Mean (for parameters where a mean ELV applies)	10.86	64.67	18.76	1.52	1.17	38.33	5.51	
Overall Compliance (Pass/Fail)	Pass	Pass	Pass	Pass	Fail	Pass	Fail	

Significance of results

The Carlanstown WWTP was non-compliant with the ELVs for Orthophosphate and Ammonia as set in the wastewater discharge licence. There were 5 samples non-compliant with the licence ELVs, relating to the parameters Orthophosphate and Ammonia. The non-compliances were due to issues with the ferric dosing system and the requirement for a major clean out of the plant, respectively. These issues have been dealt with. The impact on receiving waters is assessed further in Section 2.3.

2.3 Ambient monitoring summary:

Table 2.3 - Ambient Monitoring Report Summary

Ambient Monitoring Point from WWDL (or as agreed with EPA)	Irish Grid Reference	EPA Feature Coding Tool code	Current EQS Status	Does assessment of the ambient monitoring results indicate that the discharge is impacting on water quality?
Upstream monitoring point	276474, 279249	aSW-1u	Poor	No
Downstream monitoring point	277097, 279109	aSW-1d	Poor	No

The results for the upstream and downstream monitoring are included as in Appendix 7.2.

Significance of results

The WWTP was non - compliant with the ELVs for Orthophosphate and Ammonia set in the wastewater discharge licence as detailed in Section 2.2.

The discharge from the wastewater treatment plant does not have an observable impact on the water quality status. It is worth noting that the EQS upstream of the discharge is “poor”. The upstream concentrations of Ammonia were greater on all sampling occasions. There were no differences in BOD concentrations on each sampling occasion.

2.4 Data collection and reporting requirements under the Urban Waste Water Treatment Directive

The electronic submission of data was completed in January 2015.

2.5 Pollutant Release and Transfer Register (PRTR) - report for previous year

A PRTR is not required as the agglomeration is less than 2000 p.e.

Section 3 Operational Reports Summary:

3.1 Treatment Efficiency Report

A summary presentation of the efficiency of the treatment process including information for all the parameters specified in the licence is included below:-

Table 3.1 - Treatment Efficiency Report Summary

	cBOD (kg/yr)	COD (kg/yr)	SS (kg/yr)	Total P (kg/yr)	Total N (kg/yr)	Comment
Influent mass loading (kg/year)	12,925	25,890	9,650	390	3,172	
Effluent mass emission (kg/year)	489	2,424	733	61	47	
% Efficiency (% reduction of influent load)	96%	91%	92%	84%	99%	

3.2 Treatment Capacity Report:

Table 3.2 - Treatment Capacity Report Summary

Hydraulic Capacity – Design / As Constructed (m ³ /year) Peak	109,500
Hydraulic Capacity – Design / As Constructed (m ³ /year) DWF	36,500
Hydraulic Capacity – Current loading (m ³ /year)	41,238
Hydraulic Capacity – Remaining (m ³ /year)	68,262
Organic Capacity - Design / As Constructed (PE)	820
Organic Capacity - Current loading (PE)	590
Organic Capacity – Remaining (PE)	230
Will the capacity be exceeded in the next three years? (Yes / No)	No

3.3 Extent of Agglomeration Summary Report:

In this section Irish Water is required to report on the amount of urban waste water generated within the agglomeration. It does not include any waste water collected and treated in a private system and discharged to water under a Section 4 Licence issued under the Water Pollution Acts 1977 (as amended):

Table 3.3 - Extent of Agglomeration Summary Report

	% of p.e. load generated in the agglomeration
Load generated in the agglomeration that is collected in the sewer network	100%
Load collected in the agglomeration that enters treatment plant	100%
Load collected in the sewer network but discharged without treatment	0%

Load generated in the agglomeration that is collected in the sewer network is the total load generated and collected in the municipal network within the boundary of the agglomeration.

Load collected in the agglomerations that enters treatment plant is that portion of the previous figure which enters the waste water treatment plant

Load collected but discharged without treatment is that portion of the first figure which is discharged without treatment.

The data in Table 3.3 above is based on influent monitoring as detailed in Section 2.1 above.

3.4 Complaints Summary:

There were no complaints recorded in the reporting period 01/01/14 to 31/12/14. The complaints summary (environmental nature) is included below.

Table 3.4 - Complaints Summary Table:

Number	Date & Time	Nature of Complaint	Cause of Complaint	Actions taken to resolve issue	Closed (Y/N)
N/A	N/A	N/A	N/A	N/A	N/A

3.5 Reported Incidents Summary:

A summary of reported incidents is included below:

Table 3.5.1 - Summary of Incidents

Incident Type (e.g. Non-compliance, Emission, spillage, Emergency Overflow Activation)	Incident Description	Cause	No. of incident	Corrective Action	Authorities Contacted <small>Note 1</small>	Reported to EPA (Yes/No)	Closed (Y/N)
Non-Compliance ELV	Ortho-P Exceedance 31/03/14	Ferric Dosing Pump failure	IW002-06-14005. See Appendix 7.7	Two New Dosing pumps to be installed on a duty standby arrangement	Noel McGloin Inland Fisheries Ireland	Yes	Yes
Non-Compliance ELV	Ortho-P Exceedance 28/4/14	Ferric Dosing Pump failure	IW002-06-14011. See Appendix 7.7	Two New Dosing pumps were installed on the 17 th of April.	Noel McGloin Inland Fisheries Ireland	Yes	Yes
Non-Compliance ELV	Ammonia Exceedance 09/06/14	Plant clean out required and diffuser damage	IW002-06-14017. See Appendix 7.7	Clean plant and replace diffusers.	Noel McGloin Inland Fisheries Ireland	Yes	Yes
Non-Compliance ELV	Ammonia Exceedance 14/08/14	Plant clean out required and diffuser damage	IW002-06-14022. See Appendix 7.7	Clean plant and replace diffusers.	Noel McGloin Inland Fisheries Ireland	Yes	Yes
Non-Compliance ELV	Ammonia Exceedance 05/11/14	Poor air diffusion in aeration basin.	IW002-06-14017. See Appendix 7.7	DO set point has been increased to the maximum in order to maintain DO in the aeration basin	Noel McGloin Inland Fisheries Ireland	Yes	Yes

Table 3.5.2 - Summary of Overall Incidents

Number of Incidents in 2014	5
Number of Incidents reported to the EPA via EDEN in 2014	5
Explanation of any discrepancies between the two numbers above	N/A

3.6 Sludge / Other inputs to the WWTP:

No imported loads are received at this wastewater treatment plant. 'Other inputs' to the waste water treatment plant are summarised in Table 3.6 below.

Table 3.6 - Other Inputs

Input type	m³/year	PE/year	% of load to WWTP	Is there a leachate/sludge acceptance procedure for the WWTP? (Y/N)	Is there a dedicated leachate/sludge acceptance facility for the WWTP? (Y/N)
Domestic /Septic Tank Sludge	0	0	0	n/a	n/a
Industrial / Commercial Sludge	0	0	0	n/a	n/a
Landfill Leachate (delivered by tanker)	0	0	0	n/a	n/a
Landfill Leachate (delivered by sewer network)	0	0	0	n/a	n/a
Other (specify)	0	0	0	n/a	n/a

Note:

1. Other Inputs include; septic tank sludge, industrial /commercial sludge, landfill leachate and any other sludge that is collected and added to the treatment plant.
2. Sludge that is added to a dedicated sludge reception facility at a waste water treatment plant not included in Table 3.6. Only include sludge which is added to the waste water treatment process stream. Enter zero where there are no inputs.

Section 4. Infrastructural Assessments and Programme of Improvements

4.1 Storm water overflow identification and inspection report:

The Storm Water Overflow Identification & Inspection Report is included in Appendix 7.3. A summary of the significance and operation is included below.

Table 4.1.1 - SWO Identification and Inspection Summary Report

WWDL Name / Code for Storm Water Overflow	Irish Grid Ref.	Included in Schedule A4 of the WWDL	Significance of the overflow (High / Medium / Low)	Compliance with DoEHLG Criteria	No. of times activated in 2014 (No. of events)	Total volume discharged in 2014 (m ³)	Total volume discharged in 2014 (P.E.)	Estimated /Measured data
SW002	276742E 279164N	Yes	Low	Compliant	0	0	0	E

Table 4.1.2 - SWO Identification and Inspection Summary Report

How much sewage was discharged via SWOs in the agglomeration in the year (m ³ /yr)?	0
How much sewage was discharged via SWOs in the agglomeration in the year (p.e.)?	0
What % of the total volume of sewage generated in the agglomeration was discharged via SWOs in the agglomeration in 2014?	0
Is each SWO identified as non-compliant with DoEHLG Guidance included in the Programme of Improvements?	N/A
The SWO assessment includes the requirements of Schedule A3 & C3	List the relevant section of the SWO Report.
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.

There was no Specified Improvement Programme required as per the Carlanstown Waste Water Discharge Licence (see Appendix 7.4).

Table 4.2.1 - Specified Improvement Programme Summary

Specified Improvement Programmes (under Schedule A and C of WWDL)	Licence Schedule (A or C)	Licence Completion Date	Date Expired? (N/NA/Y)	Status of Works ((i) Not Started; (ii) At planning stage; (iii) Work ongoing on-site; (iv) Commissioning Phase; (v) Completed; (vi) Delayed;)	% Construction Work Completed	Timeframe for Completing the Work	Comments
None	n/a	n/a	n/a	n/a	n/a	n/a	n/a

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

Table 4.2.2 - Improvement Programme Summary

Improvement Identifier	Improvement Description	Improvement Source	Progress (% completed)	Expected Completion Date	Comments
None	n/a	n/a	n/a	n/a	

Improvements identified above also include measures taken to prevent environmental damage anticipated following events or accidents/incidents associated with discharges or overflows from the waste water works and as such are considered to fulfil any Statement of Measures requirements. Refer also to Appendix 7.1.

Table 4.2.3 - Sewer Integrity Risk Assessment Tool Summary

The Improvement Programme should include an assessment of the integrity of the existing wastewater works for the following:	Risk Assessment Rating (High, Medium, Low)	Risk Assessment Score	Comment
Hydraulic Risk Assessment Score	Medium	87	
Environmental Risk Assessment Score	Low	65	
Structural Risk Assessment Score	High	115	A high score was recorded here due to a sewer failure identified in a recent CCTV survey. Remedial works are noted in the annual improvement plan
Operation & Maintenance Risk Assessment Score	Low	26	
Overall Risk Score for the agglomeration	Low	293	

See Appendix 7.5 for Sewer Integrity Tool Output Summary.

Section 5. Licence Specific Reports

Licence Specific Reports Summary Table

Licence Specific Report	Required in 2014 AER or outstanding from previous AER	Included in 2014 AER	Reference to relevant section of AER
Priority Substances Assessment	Yes	Yes	Full report in Appendix 7.6
Drinking Water Abstraction Point Risk Assessment	No	No	
Habitats Impact Assessment	No	No	
Shellfish Impact Assessment	No	No	
Pearl Mussel Report	No	No	
Toxicity/Leachate Management	No	No	
Toxicity of Final Effluent Report	No	No	

Licence Specific Reports Summary of Findings

Licence Specific Report	Recommendations in Report	Summary of Recommendations in Report
Priority Substances Assessment	None	None
Drinking Water Abstraction Point Risk Assessment	Not required	Not applicable
Habitats Impact Assessment	Not required	Not applicable
Shellfish Impact Assessment	Not required	Not applicable
Pearl Mussel Report	Not required	Not applicable
Toxicity/Leachate Management	Not required	Not applicable
Toxicity of Final Effluent Report	Not required	Not applicable

5.1 Priority Substances Assessment

The Priority Substances Assessment report is included in Appendix 7.6. A summary of the findings of this report is included below.

Table 5.1 - Priority Substance Assessment Summary

	Licensee self- assessment checks to determine whether all relevant information is included in the Assessment.
Does the assessment use the Desk Top Study Method or Screening Analysis to determine if the discharge contains the parameters in Appendix 1 of the EPA guidance	Desk top Study
Does the assessment include a review of Trade inputs to the works?	No
Does the assessment include a review of other inputs to the works?	No
Does the report include an assessment of the significance of the results where a listed material is present in the discharge? (e.g. impact on the relevant EQS standard for the receiving water)	No
Does the assessment identify that priority substances may be impacting the receiving water?	No
Does the Improvement Programme for the agglomeration include the elimination / reduction of all priority substances identified as having an impact on receiving water quality?	No

5.2 Drinking Water Abstraction Point Risk Assessment.

No Assessment required by the Licence.

5.3 Shellfish Impact Assessment Report.

No Assessment required by the Licence.

5.4 Toxicity / Leachate Management

No Assessment required by the Licence.

5.5 Toxicity of the Final Effluent Report

No Assessment required by the Licence.

5.6 Pearl Mussel Measures Report

No Assessment required by the Licence.

5.7 Habitats Impact Assessment Report

No Assessment required by the Licence.

Section 6 Certification and Sign Off:

Table 6.1 - Summary of AER Contents

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 (<i>insert lines as required</i>)	
Is there a need to request/advise the EPA of any modifications to the existing WWDL? Refer to Condition 1.7 (changes to works/discharges) & Condition 4 (changes to monitoring location, frequency etc.)	No
List reason e.g. failure to complete specified works within dates specified in the licence, changes to monitoring requirements (<i>insert lines as required</i>)	
Have these processes commenced? (i.e. Request for Technical Amendment / Licence Review / Change Request)	N/A
Are all outstanding reports and assessments from previous AERs included as an appendix to this AER?	N/A
List outstanding reports (<i>insert lines as required</i>)	N/A

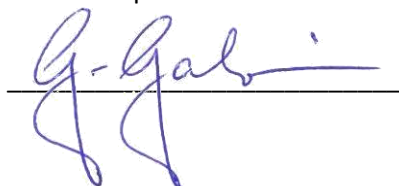
Declaration by Irish Water

The AER contains the following;

- Introduction and background to 2014 AER
- Monitoring reports summary
- Operational reports summary
- Infrastructural Assessment and Programme of Improvements
- Licence specific reports
- Certification and Sign Off
- Appendices

I certify that to the best of my knowledge the information given in this Annual Environmental Report is truthful, accurate and complete:

Signed:



Date: 02/03/2015

Gerry Galvin
Chief Technical Advisor

Section 7. Appendix

Appendix 7.1	Annual Statement of Measures
Appendix 7.2	Ambient Monitoring Summary
Appendix 7.3	Storm Water Overflow Identification and Inspection Report
Appendix 7.4	Specified Improvement Programme
Appendix 7.5	Sewer Integrity Tool Output
Appendix 7.6	Priority Substances Assessment
Appendix 7.7	Incidence Reports

Appendix 7.1

Annual Statement of Measures

In 2014, the following process optimisation improvements were introduced to the operation of the Carlanstown WWTP:

- Regular checks of DO levels in the aeration basin
- Regular checks of Suspended Solids concentrations
- Regular checks of final effluent Ammonia concentrations
- Regular checks of final effluent Total Phosphorus concentrations

In addition to the listed process optimisation improvements, the following improvement works were undertaken at the Carlanstown WWTP in 2014:-

- Jetting and CCTV of entire Network
- Cleaning of Aeration basin and clarifier
- Replacement of all 32 diffusers

The process optimisation improvements introduced in 2014 will be continued in 2015. No other additional measures in relation to the prevention of environmental damage are currently planned to be taken in 2015. The need for measures to prevent environmental damage will be reviewed on an annual basis.

Appendix 7.2

Ambient Monitoring Summary

									Dissolved Oxygen	pH	Ammonium NH4-N	Ortho-Phosphate P	Total Nitrogen N	Biological Oxygen Demand	Dissolved Oxygen % Saturation
Entity	Station	Station Reference	Station Easting	Station Northing	River Basin District	Water Management Unit	Sample Reference	Sample Date	mg/l	pH units	mg/l	mg/l	mg/l	mg/l	% Sat.
Moynalty River	u/s Carlanstown n WWTP	RS07M030800	276470	279239	Eastern RBD	BlackwaterNorth	14-075	11-Feb-14	9.67	7.81	0.048	0.031	2.7	1	77.5
							14-190	14-May-04	11.38	8.15	0.068	0.024	1.56	1	103.7
								02-Oct-14	11.63		0.048	0.019	2.533	1	108.9
								19-Nov-14	10.53		0.12	0.023	3.412	1	93.1
								Mean	10.803	7.980	0.071	0.024	2.551	1.000	95.800
								95%ile	11.5925	8.133	0.1122	0.02995	3.3052	1	108.12

									Dissolved Oxygen	pH	Ammonium NH4-N	Ortho-Phosphate P	Total Nitrogen N	Biological Oxygen Demand	Dissolved Oxygen % Saturation	
Entity	Station	Station Reference	Station Easting	Station Northing	River Basin District	Water Management Unit	Sample Reference	Sample Date	mg/l	pH units	mg/l	mg/l	mg/l	mg/l	% Sat.	
Moynalty River	d/s Carlanstown WWTP	RS07M030820	277093	279106	Eastern RBD	BlackwaterNorth	14-076	11-Feb-14	9.52	7.74	0.046	0.029	3.16	1	75.8	
							14-191	14-May-14	10.85	8.08	0.027	0.056	1.72	1	98.8	
								02-Oct-14	89.5		0.042	0.024	2.25	1	89.5	
								19-Nov-14	11.56		0.057	0.018	3.823	1	102.6	
									Mean	30.358	7.910	0.043	0.032	2.738	1.000	91.675
									95%ile	77.809	8.063	0.05535	0.05195	3.72355	1	102.03

EQS as per EC Environmental Objectives (Surface Water) Regulations 2009:

<u>Ammonia</u>	High Status	≤ 0.040 mgN/L (mean) ≤ 0.090mgN/L (95% ile)	Good Status ≤ 0.060 mgN/L (mean) ≤ 0.14 mgN/L (95% ile)
<u>Ortho P</u>	High Status	≤ 0.025 mgP/L (mean) ≤ 0.045 mgP/L (95% ile)	Good Status ≤ 0.035 mgP/L (mean) ≤ 0.075 mgP/L (95% ile)
<u>B.O.D.</u>	High Status	≤ 1.3 mgO2/L (mean) ≤ 2.2 mgO2/L (95% ile)	Good Status ≤ 1.5 mgO2/L (mean) ≤ 2.2 mgO2/L (95% ile)
<u>D.O.</u>	Lower Limit	80 % saturation (95% ile)	
	Upper Limit	120 % saturation (95% ile)	

Appendix 7.3

Storm Water Overflow Assessment

NAME OF RECEIVING WATER: Moynalty River		GIS CO -ORDINATES OF DISCHARGE: E276742,N279164
SECONDARY DISCHARGE POINT CODE: N/A		PHOTOGRAPHS TAKEN: NO VIDEO TAKEN: NO
	Yes/No /N/A	COMMENTS
14.1 Was there evidence of the operation of the storm water overflow?	No	The storm water overflow outlet pipe invert level is approximately 300mm above the invert level of the inlet pipe work. Significant flooding of the network would have to occur prior to the operation of the SWO.
14.2 Is there a system in place to monitor the frequency of the operation of the SWO?	No	
14.3 Is the SWO operating according to the criteria specified in the Procedures and Criteria in relation to Storm Water Overflows?	Yes	
14.4 Is the SWO causing significant visual/aesthetic impact or resulting in public complaints?	No	The SWO is located approximately 2 meters away from the primary discharge point on the Moynalty River. The caretaker carries out visual inspections weekly. There are no indications of any visual or aesthetic impacts from the operation of the SWO.
14.5 Have the local authority evaluated whether there is deterioration in the water quality of the receiving water due to the operation of the SWO?	Yes	Please refer to Appendix 7.2 ambient monitoring results for the Moynalty River.
14.6 Have the local authority evaluated whether the SWO gives rise to failure to meet the requirements of national Regulations (for example, the Bathing Water Regulations)?	N/A	
14.7 Does the SWO operate in dry weather?	No	
14.8 Was there evidence of gross solids or litter in the receiving water associated	No	

with the SWO discharge resulting in an impairment of, or an interference with, amenities or the environment?		
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$$\text{Formula A} = \text{DWF} + 1.36P + 2E$$

$$P = \text{design domestic population at SW002} = 820 \text{ PE}$$

$$E = \text{design industrial effluent flow at SW002} = 0 \text{ m}^3/\text{day}$$

$$\text{DWF} = 185 \text{ m}^3/\text{day}$$

$$\begin{aligned} \text{Formula A} &= \text{DWF} + 1.36P + 2E \\ &= 185 + (1.36 \times 820) + (2 \times 0) \\ &= 185 + 1,115.2 + 0 \\ &= 1,300 \text{ m}^3/\text{day} \end{aligned}$$

This inlet chamber at Carlanstown has a capacity of 15 m^3 . At 3 times DWF the chamber is capable of providing 39 minutes retention time. At formula A flow the storm tanks give 16 minutes retention time.

The dilution of the stormwater overflow is calculated, in accordance with the Procedures and Criteria for Storm Water Overflows as follows:

$$\text{Moynalty River 95 percentile flow (OPW at Fyanstown Bridge)} = 0.28 \text{ m}^3/\text{s}$$

$$\begin{aligned} \text{DWF contributing to SW002:} &= [185/(24 \times 3600)] \\ &= 0.00214 \text{ m}^3/\text{s} \end{aligned}$$

$$\begin{aligned} \text{Dilution of overflow:} &= (0.28/0.00214) \\ &= 130 \end{aligned}$$

A stormwater detention tank is not required for a dilution of greater than 8 in accordance with the Procedures and Criteria for Storm Water Overflows.

The pumps in Carlanstown are capable of delivering approximately 20 l/sec to the aeration basin. Therefore they pump $1,728 \text{ m}^3/\text{day}$ which is in excess of Formula A flow.

SW002 complies with Formula A. There is no requirement for a Stormwater tank as calculated by dilution of overflow. Therefore SW002 is fully compliant with the DoEHLG "Procedures and Criteria for Storm Water Overflows", 1995.

Appendix 7.4

Specified Improvement Programme

There was no Specified Improvement Programme required under the Carlanstown Waste Water Discharge Licence. Please see Appendix 7.1 for the Annual Statement of Measures.

Appendix 7.5

Sewer Integrity Tool Output

Section 1.1 Agglomeration Details

Agglomeration Name:	Carlanstown
Licence Register No.	D0488-01

	Inlet	Final Effluent
Average Flow (m ³ /d)	112.8	107
Max Flow (m ³ /d)	515	490
Total Flow (m ³ /annum)	41,238	39,176
Total Storm Flow (m ³ /annum)	4,123	
Average Influent BOD (mg/l)	313	
Kg -BOD -Year	12,924	
Design p.e	820	
Population Equivalent (p.e)	590	
Available Capacity	230	

Section 2.1 Hydraulic Risk Assessment					
Query	Description	Prompt	Risk Score	Short Commentary by the Local Authority	Comment or Action to be Taken
2.1	<u>Has a Hydraulic Performance Assessment been undertaken for the Sewer Network (e.g., Computer Model or other Engineering Design or Design Review) ?</u>	No	40		If the answer is No assess the need and cost benefit of developing a computer model or engineering design assessment of the Sewer Network and complete Query 2.12. If the answer is Yes proceed to Queries 2.1.1 to 2.1.4 inclusive
2.1.1	If Answer to Query 2.1 is Yes, what % of the Network is covered by the hydraulic assessment ?	N/A	0		The % coverage of the Network by the Hydraulic Assessment can be estimated by the area assessed against the area served by the Network. ENTER "N/A" IF COMPUTER MODEL or DESIGN DOES NOT EXIST. DO NOT LEAVE BLANK OR ENTER "0"
2.1.2	How many years has it been since the completion of the hydraulic assessment ?	N/A	0		Select N/A response if no design assessment or design exists.
2.1.3	Are the outcomes of the Hydraulic Assessment being implemented ?	N/A	0		Select N/A response if no design assessment or design exists.
2.1.4	How many years has it been since the outcomes of the hydraulic assessment have been implemented ?	N/A	0		Select N/A response if no hydraulic performance assessment or design exists. For ongoing works select "less than 5".
2.2	<u>Has a Dynamic Computer Model been used to Assess the Hydraulic Performance of the Sewer Network ?</u>	No	10		Computer Model means a Hydroworks/Infoworks Model, Micro-Drainage Model or equivalent.
2.3	<u>Has a Manhole Survey been undertaken in accordance with WRc Documentation "Model Contract Document for Manhole Location Surveys and the Production of Record Maps" ?</u>	Yes	0		If the answer is No assess the need and cost benefit of undertaking a Manhole Survey and complete Query 2.12. If the answer is Yes proceed to Query 2.2.1
2.3.1	If yes, how many years has it been since the survey was undertaken or updated?	less than 5	2		Select N/A if no Manhole Survey has been undertaken. Enter N/A value for Confidence Grade if Prompt Box is "N/A"
2.4	<u>Has a Flow Survey been undertaken in accordance with WRc Documentation "A Guide to Short Term Flow Surveys of Sewer Systems" and "Contract Documents for Short Term Sewer Flows" ?</u>	Yes	0		If the answer is No assess the need and cost benefit of undertaking a Flow Monitoring Survey and complete Query 2.12. If answer is Yes Proceed to Query 2.5
2.5	<u>What was this Flow Survey Information Used for ?</u>				
2.5.1	To Determine the extent of Problematic Sewer Catchments	Yes	0		Select N/A if no Flow Survey has been undertaken.
2.5.2	To Verify a Computer or Mathematical Model of the Network	No	10		Select N/A if no Flow Survey has been undertaken.
2.6	<u>Have Performance Criteria been developed to determine the short, medium or long term capacity of the sewer network ?</u>	Yes	0		If the answer is No assess the Future Needs of the Sewer Network and complete Query 2.12. If the answer is Yes proceed to Query 2.8
2.7	<u>How many flood events resulting from surcharge in the network have occurred in the past 3 years?</u>	1 to 3	5		Flood events in this context means water/sewage backing up from the Network causing flooding of properties or causing disruption of traffic
2.8	<u>Are there deficiencies in performance criteria within the sewer network ?</u>	No	0		If the answer is No , Proceed to Query 2.10 and complete Query 2.12. If the answer is Yes proceed to Query 2.9
2.9	<u>Have the causes of these deficiencies in the Performance Criteria been identified and rectified ?</u>	N/A	0		If the answer is No , consider further examination of the hydraulic model (if available) and complete Query 2.12. If the answer is Yes proceed to Query 2.10
2.10	<u>Can the Hydraulic Assessment (defined in Query 2.1 above) be used to determine the benefit of reducing the contributory Impermeable Areas or extent of surface water contributions</u>	No	10		If the answer is No , consider further development of the Hydraulic Assessment (or model if available) and complete Query 2.12. If the answer is Yes proceed to Query 2.11
2.11	<u>Has an Impermeable Area Survey been carried out for the agglomeration or parts of the agglomeration ?</u>	No	10		If the answer is No , consider the need and cost benefit of undertaking an Impermeable Survey for parts of the agglomeration which are under hydraulic pressure and complete Query 2.12.
Total Risk Assessment Score (RAS)			87		
2.12	<u>Prepare Assessment of Needs & Sewer Upgrade Implementation Plan</u>	In the AER Attach Assessment of Needs and Rehabilitation Implementation Plan as separate documents			
2.13	In the AER provide Summary of Proposed Works or Direction to be taken to improve hydraulic efficiency				

Section 3.1 Environmental Risk Assessment					
Query	Description	Prompt	Risk Score	Short Commentary by the Local Authority	Comment or Action to be Taken
3.1	<u>What Environmental or Discharge Quality Data is available with regard to the sewer network?</u>	electronic or paper records exist but are > 10 years old.	0		Select N/A if no discharges; secondary discharges or overflows from network; if discharges do exist complete Query 3.12
3.1.1	<u>Do trade effluents discharge to the sewer network?</u>	No	0		If the answer is No , proceed to Query 3.1.2. If the answer is Yes , Proceed to Query 3.2
3.1.2	<u>Are there Storm Water Overflows within the network?</u>	Yes	20		If the answer is No , proceed to Query 3.1.3. If the answer is Yes , Proceed to Query 3.3
3.1.3	<u>Are there Secondary Discharges within the network (excluding Emergency Overflows at Pump Stations)?</u>	No	0		If the answer is No , proceed to Query 3.1.4.
3.1.4	<u>Is there any evidence that exfiltration is occurring from the network?</u>	No	0		If the answer is No , does all wastewater enter a wastewater treatment plant (insert summary details in the AER)? If Yes , Proceed to Query 3.6
3.2	<u>If Answer to Query 3.1.1 is "Yes", what % of trade effluents have a licence to Discharge to the Public Sewer?</u>	N/A	0		Select N/A if answer to Query 3.1.1 is No . If not all trade effluents are licenced, Local Authority should consider issuing and controlling such discharges under the appropriate Legislation.
3.2.1	<u>Are all licenced trade Discharges compliant with their relevant licence and associated conditions.</u>	N/A	0		Answer N/A if none of the trade effluents are licenced. Answer No if this information is unknown. If the answer is Unknown or No , consider issuing a direction to the relevant Licencee. If the answer is Yes , no further action is needed.
3.2.2	<u>If Answer to Query 3.2.1 is "No", state what % of Trade Discharges are NOT compliant with their relevant licence and associated conditions (where that non-compliance led to enforcement action)</u>	0 - 10%	5		Select N/A if answer to Query 3.2.1 is Yes. If N/A is selected as answer to Query 3.2.2
3.3	<u>In accordance with the DoEHLG paper "Procedures & Criteria in relation to Storm Water Overflows", what % of storm water overflows in the system have been classified for their significance?</u>	N/A	0		If the answer is No , consider a review of each discharge within the sewer network complete and Query 3.11. If the answer is Yes , proceed to Query 3.6
3.4	<u>Have samples from any Secondary Discharges within the system been analysed?</u>	N/A	0		Select N/A if no secondary discharges in system. If the answer to Query 3.4 is No , consider examining the quality of each secondary discharge within the sewer network complete Query 3.11. If the answer is Yes , proceed to Query
3.5	<u>What percentage of discharges from the system are known to cause environmental pollution of the receiving waters?</u>	< 10%	10		If the answer is greater than 50% then detail, in the AER, the Improvement Programme necessary to reduce this percentage.
3.6	<u>In relation to possible exfiltration has a risk analysis of ground water contamination or pollution been undertaken?</u>	No	20		Select N/A if answer to Query 3.1.4 is NO. If the answer is No , consider undertaking ground water risk analysis and complete Query 3.12
3.6.1	<u>If Answer to Query 3.6 is "Yes", have any groundwater aquifers been identified in the area of the Network and/or Discharge Points?</u>	N/A	0		Select N/A if no risk analysis of groundwater contamination has been undertaken.
3.6.2	<u>If Answer to Query 3.6.1 is "Yes", state the classification of groundwater aquifer identified in the area?</u>	N/A	0		Select N/A if no risk analysis of groundwater contamination has been undertaken.
3.6.3	<u>In relation to Query 3.6.1, is the aquifer used as a source for Public, Private or Group Water Supply Schemes?</u>	Yes	0		Select N/A if no risk analysis of groundwater contamination has been undertaken.
3.7	<u>Has an Impact Assessment of each Storm Water Overflow been undertaken in accordance with the DoEHLG paper "Procedures & Criteria in relation to Storm Water Overflows" including setting performance criteria?</u>	Yes	0		If the answer is No , consider assessing the risk category of the receiving waters. If the answer is Yes , proceed to Query 3.8 and provide summary details of the assessment in the AER.
3.8	<u>What percentage of storm water overflows comply with the performance criteria referred to in Query 3.7?</u>	> 80%	10		Select N/A if answer to Query 3.7 is No or if there are no SWOs in system. (Risk Score is locked at 0 if no SWOs in system is stated in Agglomeration Details)
3.9	<u>Have the causes of these Capacity Deficiencies (storm water overflows & Secondary Discharges) been identified?</u>	N/A	0		Select N/A if answer to Query 3.7 is NO or if there are no SWOs in system. If the answer to Query 3.9 is No , consider further examination of the environmental
Total Risk Assessment Score (RAS)			65		
3.10	<u>Prepare Assessment of Needs & Sewer Upgrade Implementation Plan</u>	In the AER Attach Assessment of Needs and Rehabilitation Implementation Plan as separate documents			
3.11	Provide Summary Details (in the AER) of records upstream and downstream of licenced discharges with regard to Environmental Performance of the network. These details can be included as part of the AER submitted for the agglomeration.				

Section 4.1 Structural Risk Assessment					
Query	Description	Prompt	Risk Score	Short Commentary by the Local Authority	Comment or Action to be Taken
4.1	<u>Has a CCTV Survey been undertaken in accordance with WRc Documentation "Model Contract Document for Sewer Condition Inspections" and "Manual of Sewer Condition Classification" ?</u>	Yes	0		If the answer is No assess the need and benefit of undertaking CCTV Survey. If Yes Proceed to Query 4.2
4.1.1	How many years has it been since the completion of the CCTV Survey?	less than 5	0		If no CCTV has been undertaken, select "N/A" response
4.2	<u>What was this CCTV Survey Information Used for?</u>	Determine full extent of Sewer Rehab Works to be undertaken within Network	0		Select N/A if answer to Query 4.1 is NO.
4.3	<u>Has the CCTV Survey been used to Assess the Structural Condition of the Sewer Network or targeted sections of the Sewer Network?</u>	Yes	0		If no CCTV has been undertaken, select "No" response. If the answer is No assess the need and benefit of undertaking an assessment of the Structural Condition of the Sewer Network. If the answer is Yes proceed to Q
4.4	<u>Have Performance Criteria been developed to determine the short, medium or long term structural condition of the sewer network ?</u>	No	5		If the answer is No , enter "unknown" in response to Queries 4.4.1 to 4.4.5; consider assessing the Future Needs of the Sewer Network. If the answer is Yes proceed to Queries 4
4.4.1	What % of the Total Sewer Length contains Collapsed or Imminent Collapse of Sewers (Grade 5)	unknown	30		Insert Percentage of Overall Network Length; If a sewer length contains a Grade 5 collapse, include the total length of that sewer in calculating the %. If information is not available type "Unknown" into Prompt Box
4.4.2	What % of Total Sewer Length contains Sewers Likely to Collapse (Grade 4)	unknown	25		Insert Percentage of Overall Network Length; If a sewer length contains a Grade 4 condition, include the total length of that sewer in calculating the %. If information is not available type "Unknown" into Prompt Box
4.4.3	What % of Total Sewer Length contains sewers with Further Possible Deterioration (Grade 3)	unknown	10		Insert Percentage of Overall Network Length; If a sewer length contains a Grade 3 deterioration, include the total length of that sewer in calculating the %. If information is not available type "Unknown" into Prompt Box
4.4.4	What % of Total Sewer Length contains sewers with Minimal Collapse (Grade 2)	unknown	5		Insert Percentage of Overall Network Length; If a sewer length contains a Grade 2 feature, include the total length of that sewer in calculating the %. If information is not available type "Unknown" into Prompt Box
4.4.5	What % of Total Sewer Length contains sewers of Acceptable Structural Condition (Grade 1)	unknown	5		Insert Percentage of Overall Network Length. If information is not available type "Unknown" into Prompt Box
If all % lengths are known, Check Total Length = 100%			75		If answers to Queries 4.4.1, 4.4.2 or 4.4.3 are above a set level, the RAS for Query 4 is automatically set at the maximum of 140.
4.5	<u>What % of the deficiencies, as detailed in Items 4.4.1, 4.4.2 and 4.4.3, have been rectified ?</u>	0 - 10%	35		Select N/A if answer to Query 4.4 is No . If the answer is No , Proceed to Query 4.6 If the answer is Yes , what monitoring is in place to ensure continued acceptance of structural condition? Proceed to Query 4.7
4.6	<u>Have the causes of the Structural Deficiencies (Grades 3, 4 and 5) been identified or is there a Preventative Maintenance Programme in place?</u>	Yes	0		If the answer is No , consider further examination of the sewer network, the structural loading conditions, gradients and possible H ₂ S Formation. If Yes completed Query 4.7
Total Risk Assessment Score (RAS)			115		
4.7	<u>Prepare Assessment of Needs & Sewer Rehabilitation Implementation Plan</u>	In the AER Attach Assessment of Needs and Rehabilitation Implementation Plan as separate documents			

Section 5.1 O&M Risk Assessment					
Query	Description	Prompt	Risk Score	Short Commentary by the Local Authority	Comment or Action to be Taken
5.1	<u>Are complaints of an environmental nature recorded and held in a central database?</u>	Yes	0		Consider setting up Central Database for Complaints
5.2	<u>Is there an emergency response procedure in place?</u>	Yes	0		Consider setting up target response times for dealing with Complaints
5.3	<u>What has been the highest frequency of flooding in the network due to hydraulic inadequacy, over the past 5 years?</u>	Once/yr	4		Refers to flooding from the Network only, not natural flooding from rivers/streams/high tides. Select the highest number of events in any 12 month period.
5.4	<u>What has been the highest frequency of flooding in the network due to operational causes over the past 5 years?</u>	Once/yr	4		Refers to flooding from the Network only, not natural flooding from rivers/streams/high tides. Select the highest number of events in any 12 month period.
5.5	<u>What has been the highest frequency of surcharging of critical sewers in the network, over the past 5 years?</u>	Once/yr	2		Select the highest number of events in any 12 month period.
5.6	<u>What has been the highest frequency of reportable incidents in the network, over the past 5 years?</u>	None	0		Select the highest number of events in any 12 month period.
5.7	<u>What has been the highest frequency of reportable incidents due to discharges, for whatever reason, from Pumping Station Emergency Overflows in the network, over the past 5 years?</u>	None	0		Select the highest number of events at any given Pumping Station in any 12 month period.
5.8	<u>What has been the highest frequency of blockages in sewers in the network over the past 5 years?</u>	0.05 - 0.1/km/yr	12		Select the highest number of events per km of sewer network in any 12 month period.
5.9	<u>What has been the highest frequency of collapses in sewers in the network over the past 5 years?</u>	Once/yr	4		Select the highest number of events in any 12 month period.
5.10	<u>What has been the highest frequency of bursts in rising mains in the network over the past 5 years?</u>	None	0		Select the highest number of events in any 12 month period.
Total Risk Assessment Score (RAS)			26		
5.11	<u>Prepare Up Dated Operational and Maintenance Plan</u>				

Section 6.1 Summary of Risk Assessment Scores

Element	Risk Assessment Score	Risk Category	% Risk Score
Section 2.1 Hydraulic Risk Assessment	87	Medium Risk	58%
Section 3.1 Environmental Risk Assessment	65	Low Risk	13%
Section 4.1 Structural Risk Assessment	115	High Risk	77%
Section 5.1 O&M Risk Assessment	26	Low Risk	13%
Total RAS for Network	293	Low Risk	29%

If the total RAS is greater than 750, or if any of the individual RASs are greater than 75% of the Maximum Available Score, the Risk category for the Network is graded "High Risk"

Appendix 7.6

Priority Substances Assessment


Desk Top Study Outcome

- A. There are no industrial effluents discharging into the Carlanstown Agglomeration. There are no imported loads received into the Carlanstown Wastewater Treatment Plant.
- B. There is no monitoring programme for organic compounds or priority substances in the final effluent due to the lack of industrial effluents entering the network.
- C. It has been decided that due to the nature of the treatment process at the Carlanstown Wastewater Treatment works and considering that the total loading on the plant is domestic in nature, that a downstream monitoring programme is not necessary.
- D. The Carlanstown agglomeration is less than 2,000 pe. Therefore a PRTR is not necessary.


Appendix 7.7

Incident Reports


Report Internal Code IW002-06-14005

Protocol Ref.	IW-PRT-EPA-002	Template No.
Protocol Name	EPA Reporting: Wastewater Discharge Authorisations & Wastewater Reporting	002-06
	Wastewater non-compliance incident notification	
Local Authority	Meath County Council	
Agglomeration name	Carlanstown	
Agglomeration registration number	D0488-01	
Is the incident reportable to the EPA	Yes	
Incident Level	1	
Description of incident	Meath County Council wishes to notify the EPA of the following Emission Limit Value (ELV) exceedance recorded at the Carlanstown Waste Water Treatment Plant (WwTP). The exceedance relates to Orthophosphate which has an ELV reportable incident limit of 2.4	
Date of Incident	31/03/2014	
New or reoccurring incident	Reoccurring	
Corrective actions taken	A new dosing pump for Ferric Sulphate has been delivered to the site and awaits installation. Installation is due to be completed by the 7th of April. The old Ferric dosing pump was not capable of delivering the required level of ferric to deal with the I	
Preventative actions taken or planned	Monitoring	
Likelihood of reoccurrence	Monitoring	
Effect on the environment (Reference to be made to ambient monitoring results / assimilative capacity) Please attach results	Background Ortho Phosphorus concentrations also raise slightly from 37µg/l to 44µg/l. This raise in Ortho P is not cor	


Report Internal Code IW002-06-14011

Protocol Ref.	IW-PRT-EPA-002	Template No.
Protocol Name	EPA Reporting: Wastewater Discharge Authorisations & Wastewater Reporting	002-06
	Wastewater non-compliance incident notification	
Local Authority	Meath County Council	
Agglomeration name	Carlanstown	
Agglomeration registration number	D0488-01	
Is the incident reportable to the EPA	Yes	
Incident Level	1	
Description of incident	Meath County Council wishes to notify the EPA of the following Emission Limit Value (ELV) exceedance recorded at the Carlanstown Waste Water Treatment Plant (WwTP). The exceedance relates to Orthophosphate which has an ELV reportable incident limit of 2.4	
Date of Incident	28/04/2014	
New or reoccurring incident	Reoccurring	
Corrective actions taken	A new dosing pump for Ferric Sulphate was Installed on 17th of April 2013. Incremental adjustments have been made on the pump to establish the correct dosing to maintain Orthophosphate results under the limits set by the waste water discharge licence. Thi	
Preventative actions taken or planned	Monitoring	
Likelihood of reoccurrence	Monitoring	
Effect on the environment (Reference to be made to ambient monitoring results / assimilative capacity) Please attach results	Background Ortho Phosphorus concentrations also raise slightly from 37µg/l to 44µg/l. This raise in Ortho P is not considered to be significant.	


Report Internal Code IW002-06-14022

Protocol Ref.	IW-PRT-EPA-002	Template No.
Protocol Name	EPA Reporting: Wastewater Discharge Authorisations & Wastewater Reporting	002-06
	Wastewater non-compliance incident notification	
Local Authority	Meath County Council	
Agglomeration name	Carlanstown	
Agglomeration registration number	D0488-01	
Is the incident reportable to the EPA	Yes	
Incident Level	1	
Description of incident	Meath County Council wishes to notify the EPA of the following Emission Limit Value (ELV) exceedance recorded at the Carlanstown Waste Water Treatment Plant (WwTP). The exceedance relates to Ammonia which has an ELV reportable incident limit of 6 mg/l und	
Date of Incident	09/06/2014	
New or reoccurring incident	Reoccurring	
Corrective actions taken	<p>The network is to be jet washed and CCTV'd this will give us an indication if the network has significant flat areas which are allowing sewerage to go septic in the network.</p> <p>The plant is to be cleaned out and the 32 DIDIER Nerox MP 340 diffusers are to</p>	
Preventative actions taken or planned	Monitoring	
Likelihood of reoccurrence	Monitoring	
Effect on the environment (Reference to be made to ambient monitoring results / assimilative capacity) Please attach results	Background ammonia concentrations were raised slightly this time last year when a similar event occurred. The raise in concentrations was from 14µg/l to 46µg/l. This raise in Ammonia is not considered to be significant.	

Report Internal Code IW002-06-14022

Protocol Ref.	W-PRT-EPA-002	Template No.
Protocol Name	EPA Reporting: Wastewater Discharge Authorisations & Wastewater Reporting	002-06
	Wastewater non-compliance incident notification	
Local Authority	Meath County Council	
Agglomeration name	Carlanstown	
Agglomeration registration number	D0488-01	
Is the incident reportable to the EPA	Yes	
Incident Level	1	
Description of incident	<p>Meath County Council wishes to notify the EPA of the following Emission Limit Value (ELV) exceedance recorded at the Carlanstown Waste Water Treatment Plant (WwTP). The exceedance relates to Ammonia which has an ELV reportable incident limit of 6 mg/l under the Carlanstown waste water discharge licence.</p> <p>On the 14/08/14 Meath County Council's Wastewater Services Unit recorded an Ammonia concentration of 6.63 mg/l in the Carlanstown WwTP's final effluent sample.</p>	
Date of Incident	14/08/2014	
New or reoccurring incident	Reoccurring	
Corrective actions taken	<p>The network was jet washed and CCTV'd which provided relief to the plant during testing in June when NH4 was recorded at 3.5mg/l. The Nocardia Bloom disappeared and the plant returned to producing good quality effluent. Unfortunately around July 20th the Nocardia bloom returned to the plant and final effluent quality gradually decreased.</p> <p>The plant is to be cleaned out and the 32 DIDIER Nerox MP 340 diffusers are to be replaced. The diffusers have been delivered. Works are dependent on the availability of fitters to complete the work over a 24 hour period.</p>	
Preventative actions taken or planned	Monitoring	
Likelihood of reoccurrence	Monitoring	
Effect on the environment (Reference to be made to ambient monitoring results / assimilative capacity) Please attach results	<p>Tests of background ammonia concentrations in the receiving waters showed no impact from the increased ammonia output from the plant. The ambient monitoring was carried out in July 2014. Further testing is to be carried out on or by the 20th of August 2014. Results will be available for any future reporting on this issue.</p>	

Report Internal Code IW002-06-14044

Protocol Ref.	IW-PRT-EPA-002	Template No.
Protocol Name	EPA Reporting: Wastewater Discharge Authorisations & Wastewater Reporting	002-06
	Wastewater non-compliance incident notification	
Local Authority	Meath County Council	
Agglomeration name	Carlanstown	
Agglomeration registration number	D0488-01	
Is the incident reportable to the EPA	Yes	
Incident Level	1	
Description of incident	Meath County Council wishes to notify the EPA of the following Emission Limit Value (ELV) exceedance recorded at the Carlanstown Waste Water Treatment Plant (WwTP). The exceedance relates to Ammonia which has an ELV reportable incident limit of 6 mg/l under the Carlanstown waste water discharge licence. On the 05/11/14 Meath County Council's Wastewater Services Unit recorded an Ammonia concentration of 9.96 mg/l in the Carlanstown WwTP's final effluent sample.	
Date of Incident	05/11/2014	
New or reoccurring incident	New	
Corrective actions taken	The DO set point of the aeration basin blowers has been increased to the maximum 5mg/l in order to achieve required treatment.	
Preventative actions taken or planned	Monitoring	
Likelihood of reoccurrence	Monitoring	
Effect on the environment (Reference to be made to ambient monitoring results / assimilative capacity) Please attach results	Tests of background ammonia concentrations in the receiving waters showed no impact from the increased ammonia output from the plant.	