

# Waste Water Discharge Licence Audit Report

The audit is a random sample on a particular day of a facility's operation and environmental performance. Lack of reporting of an area or issue should not be construed to mean that this area is fully satisfactory.

<b>Name of Installation</b>	Carlanstown
<b>Licensee</b>	Irish Water
<b>Licence Register No.</b>	D0488-01
<b>Site Address</b>	Meath
<b>Site Visit Reference No.</b>	SV08610
<b>Issue Date</b>	22/12/2016
<b>Prepared By</b>	Ross O'Dwyer

## Site Visit Detail

Date Of Inspection	30/08/2016	Announced		No	
Time In	13:55	Time Out		14:55	
Agency Personnel On Site	Ross O'Dwyer Brendan Kissane				
Licensee Personnel and Role	Chirstina Gerraghty-Compliance IW Peter McNulty_Engineer IW Gerry Casey-Meath Co. Co. David Byrne-Meath Co. Co. Martin Gorman-Engineer -Meath Co. Co. Keelan McMoreland-Meath Co. Co.				
Photo Taken	No	Samples Taken	Yes	Video Taken	No
Weather Conditions	Dry				
Weather Conditions Over 24 Hours	Dry				

## > 1. Changes/Alterations

	Question	Answer
1.1	Has there been any alteration to the plant since the last site inspection that is likely to result in a significant change in the quality/quantity of the discharge?	Yes
	<b>Comment</b>	
	new process control system in place , New D.O probe at influent and effluent	
1.2	Have there been any significant changes to the overall loading of the plant since the agglomeration was licensed or the last site inspection?	No

## > 2. Flow Meter (Primary Discharge)

	Question	Answer
2.1	Is there a continuous flow meter in place at the primary discharge?	Yes
2.2	Is there a continuous flow recorder in place?	Yes
2.3	Is the flow meter operating as per the WWD licence requirements?	Yes
2.4	Is the flow meter calibrated and within the calibration date?	Yes
	<b>Comment</b>	
	recently commissioned so no calibration cert on site	
2.5	Are the calibration records for the flow meter available for review?	No
	<b>Comment</b>	
	recently commissioned so no calibration cert on site	
2.6	Is the flow meter maintained?	Yes
2.7	Are the maintenance records for the flow meter available for review?	Yes
	<b>Comment</b>	

## > 3. Composite Sampler (Primary Discharge)

	Question	Answer
3.1	Is there a 24hr composite sampler available for compliance monitoring at the primary discharge?	Yes
3.2	Is the composite sampler operating as per the license requirements?	Yes
3.3	Is the composite sampler maintained?	Yes
3.4	Are the maintenance records for the composite sampler available for review?	Yes
	<b>Comment</b>	
	Just Commissioned	
3.5	Are all samples (used to determine compliance with the license), taken and analysed from a composite sampler?	Yes

## > 4. Control & Monitoring

	Question	Answer
4.1	Are sampling, analyses and measurements of the waste water discharges being undertaken in accordance with the requirements of the licence? (see Schedule A of licence)	Yes
4.2	Are the discharge monitoring records available for review?	Yes
4.3	Is monitoring of the influent stream being undertaken to measure mass loadings and removal efficiencies?	Yes
4.4	Are the influent monitoring records available for review?	Yes
4.5	Is there an established Data Management System in place?	Yes
4.6	Is there a maintenance programme in place for plant and equipment?	Yes
4.7	Is there a process control monitoring programme in place for the waste water works to ensure that it is being operated to meet the WWDL criteria?	Yes
4.8	Have the key parameters to monitor been identified at this waste water treatment works, to ensure that it meets the WWDL criteria?	Yes
	<b>Comment</b>	
	Ammonia TP DO MLSS	

4.9	Are there records to confirm that this monitoring and testing is being undertaken regularly?	Yes
4.10	Has the frequency and volume of desludging for this plant been determined?	Yes
	<b>Comment</b>	
	every two weeks	
4.11	Are there records available to confirm that desludging is being carried out?	Yes
	<b>Comment</b>	
	last desludging 30.08.16	
4.12	Do the records demonstrate that sludge was removed (in the last calendar year) as per the frequency and volume determined (in the previous question)?	Yes
	<b>Comment</b>	
	last desludging 30.08.16	
4.13	Is there visual evidence of elevated sludge blanket or excessive floating scum/foam in the clarifiers (where appropriate)?	No

## > 5. Improvements, Discharges & Storm Water Overflows

	Question	Answer
5.1	Have discharges ceased from the points identified in the licence as discharges to be discontinued?, where the time specified in Schedule A of the licence has passed?	Not Applicable
5.2	Have specified improvement works identified in Schedule C of the licence been completed, where the time specified in Schedule C of the licence has passed?	Not Applicable
5.3	Has the Storm Water Overflow Identification and visit assessment been completed, where the time specified in the licence has passed?	Not Applicable

## > 6. Notifications, Records and Reports

	Question	Answer
6.1	Since the last site visit, have all discharges from the waste water works complied with the Emission Limit Values, as set out in Schedule A of the licence (subject to the requirements of Condition 2 of the licence)?	Yes
6.2	Have there been any notifiable incidents since the last WWDL inspection, apart from those reported to the EPA?	No
6.3	Is there a record of incidents including all corrective actions taken to manage, minimise and avoid recurrence?	Yes

<b>Comment</b>	
INC1008412 March 2016-Ammonia	
Have there been any complaints received of an environmental nature related to the discharge to water?	No
Are details of the any such complaints received recorded?	Not Applicable
Is there a documented Emergency Response Procedure in place?	Yes
If there is an Emergency Response Procedure in place, can Irish Water confirm that it covers the entire agglomeration?	Yes
Is there a Public Awareness & Communications Programme in place?	Yes
<b>Comment</b>	
Meath Co.Co.website	
Does the Emergency Response Procedure address all emergency situations that may originate on site, including for example power and pump failures and the need for back-up power supply on site for critical equipment?	Yes
Is there a contingency plan in place in the event of prolonged power failure with regard to operation of both the network and the WWTP?	Yes
<b>Comment</b>	
Generator available	

## > 7. TPEFF2300D0488SW001: Primary Discharge, Receiving Water & Observations

<b>Name:</b>	TPEFF2300D0488SW001	<b>Type:</b>	Primary Discharge Point
<b>Easting:</b>	276742	<b>Northing:</b>	279164
<b>Sample Taken:</b>	Yes	<b>Split Sample Offered:</b>	Yes
<b>Floc Present:</b>	No	<b>Sample Compliant?:</b>	No
<b>Sample Colour:</b>	Clear	<b>Sample Code:</b>	
<b>Sample Type:</b>	Grab	<b>Time Taken:</b>	14:35
<b>Sample Comment:</b>	Sample No. 16-15004 (Resampled 12/09/2016 - Previous Sample No. 16-14384 not considered)		

	Question	Answer
7.1	Is the discharge monitoring point clearly labelled?	Yes
7.2	Is there safe and permanent access to the sampling point?	Yes

7.3	Was there evidence of gross solids or litter in the discharge? No
7.4	Was there evidence of gross solids or litter in the receiving water associated with the discharge resulting in an impairment of, or an interference with, amenities or the environment? Not Applicable
<b>Comment</b>	
due to time constraints receiving waters were not observed	
7.5	Has the Irish Water representative been informed of the observations made while on site? Yes

Report To: <b>OEE Wastewater Thematic Team</b>	Project: EPA-16-01939
	Report Number : 849
	Entity: D0488-01
	Location/Site: Carlanstown

## Final EPA Laboratory Test Report

Sample Number: <b>16-14384</b>	Sampled Date: 30/08/2016 14:30
Sampling Point: <b>D0488-SW001</b>	Sampled By: R O'Dwyer
Description: Carlanstown - SW001	Replicate / Split: Split
	Grab/Composite: Grab
Sample Condition: Good	Received in Lab: 30/08/2016

Parameter	Result	Units	Limits	Measurement Uncertainty	Analysis Date	Lab	Method
<b>Ammonia</b>	<b>6.6</b>	<b>mg/l N</b>	<b>≤ 5</b>	<b>20%</b>	<b>02/09/16</b>	<b>Dublin</b>	<b>EPA_W07 *</b>
CBOD	4.6	mg/l O <sub>2</sub>	≤ 25	41%	01/09/16	Dublin	EPA_W04 *
COD	55.0	mg/l O <sub>2</sub>	≤ 125	25%	31/08/16	Dublin	EPA_W01 *
Conductivity @25°C	875	µS/cm		9%	31/08/16	Dublin	EPA_W08 *
o-Phosphate	0.15	mg/l P	≤ 2	16%	02/09/16	Dublin	EPA_W07 *
<b>pH</b>	<b>4.8</b>	<b>pH units</b>	<b>≥ 6 and ≤ 9</b>	<b>0.19 pH units</b>	<b>31/08/16</b>	<b>Dublin</b>	<b>EPA_W09 *</b>
Suspended Solids	17	mg/l	≤ 35	12%	02/09/16	Dublin	EPA_W03 *

Comments: Flow meter working, Composite sampler working, no evidence of spills/incidents

Report Approved By:



Cara O'Loughlin - Chemist

Bold result are outside specified limits. \* Indicates accredited method. nm = not measured, nr = not reported, tntc = too numerous to count.

nd = not detected, no = not observed. Results relate only to the item tested/calibrated.

**This test report shall not be amended except in full without approval of the laboratory.**

Report To: <b>OEE Wastewater Thematic Team</b>	Project: EPA-16-02008
	Report Number : 855
	Entity: D0488-01
	Location/Site: Carlanstown

## Final EPA Laboratory Test Report

Sample Number: <b>16-15004</b>	Sampled Date: 12/09/2016 11:05
Sampling Point: <b>D0488-SW001</b>	Sampled By: R O' Dwyer
Description: Carlanstown - SW001	Replicate / Split: None
	Grab/Composite: Grab
Sample Condition: Good	Received in Lab: 12/09/2016

Parameter	Result	Units	Limits	Measurement Uncertainty	Analysis Date	Lab	Method
Ammonia	0.027	mg/l N	≤ 5	20%	13/09/16	Dublin	EPA_W07 *
CBOD	nr	mg/l O2	≤ 25	41%	13/09/16	Dublin	EPA_W04 *
COD	75.0	mg/l O2	≤ 125	25%	13/09/16	Dublin	EPA_W01 *
Conductivity @25°C	812	µS/cm		9%	13/09/16	Dublin	EPA_W08 *
o-Phosphate	0.056	mg/l P	≤ 2	16%	13/09/16	Dublin	EPA_W07 *
pH	5.5	pH units	≥ 6 and ≤ 9	0.19 pH units	13/09/16	Dublin	EPA_W09 *
Suspended Solids	47	mg/l	≤ 35	12%	13/09/16	Dublin	EPA_W03 *

Comments: No valid CBOD result obtained due to possible matrix effects.

Report Approved By:



Cara O'Loughlin - Chemist

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The sample taken on the day of the site visit was found to be non-compliant with Condition 3 of the licence for the following parameter(s): pH

Suspended Solids although elevated were compliant with Condition 3 subject to Condition 2 interpretation.

**Action:** Irish Water shall undertake measures to ensure the final effluent is compliant with the ELV for pH as specified in WWD Licence No. D0488-01

### FOLLOW-UP ACTIONS

Where relevant, Irish Water is required to implement corrective actions as a priority to bring about compliance with the Waste Water Discharge Licence and improve the environmental performance of the waste water works.

Irish Water shall maintain documentary evidence, for review by the EPA, that the prescribed corrective actions were completed in a timely manner.