comhairle chontae na mí
meath county council

Stamullen
Waste Water Works

Annual Environmental Report

For

EPA Waste Water Discharge Licence D0262-01

01/01/2013 to 31/12/2013

Table of Contents

SECTION 1:
INTRODUCTION & BACKGROUND

SECTION 1.1: EXECUTIVE SUMMARY.

Introduction:
Stamullen Waste Water Treatment Plant (WwTP) is operated and maintained by Meath County Council. The waste water treatment plant was built to serve the agglomeration of Stamullen Co. Meath. It is designed for a population equivalent (p.e.) of 2,300 with a licensed p.e. of 3,465.

The following Annual Environmental Report (AER) has been prepared as per Condition 6.10 of Meath County Council's Discharge Licence D0262-01 and includes all information requested under schedule D of this licence.

Plant Details:
Stamullen WwTP includes screening, two compact aeration units (fine bubble diffusers) each incorporating a central clarifier, ferric dosing, two sludge holding tanks and a storm water tank. The primary discharge from the WwTP is to the River Devlin.

Compliance Issues:
There was a number of Emission Limit Value (ELV) exceedances recorded during the reporting period 01/01/13 to 31/12/13. These exceedances mainly relate to cBOD, Ammonia and Orthophosphate. All exceedances were reported to the Agency and all incidents reports are available for inspection at the Environment & Water Services Offices in Navan, Co.Meath.

Complaints Received:
There were no complaints received during the reporting period 01/01/13 to 31/12/13.

Projects Completed:
Improvement works to the diffused aeration system and the tertiary filter commenced during the reporting year 01/01/2013 to 31/12/2013 and are not yet completed.

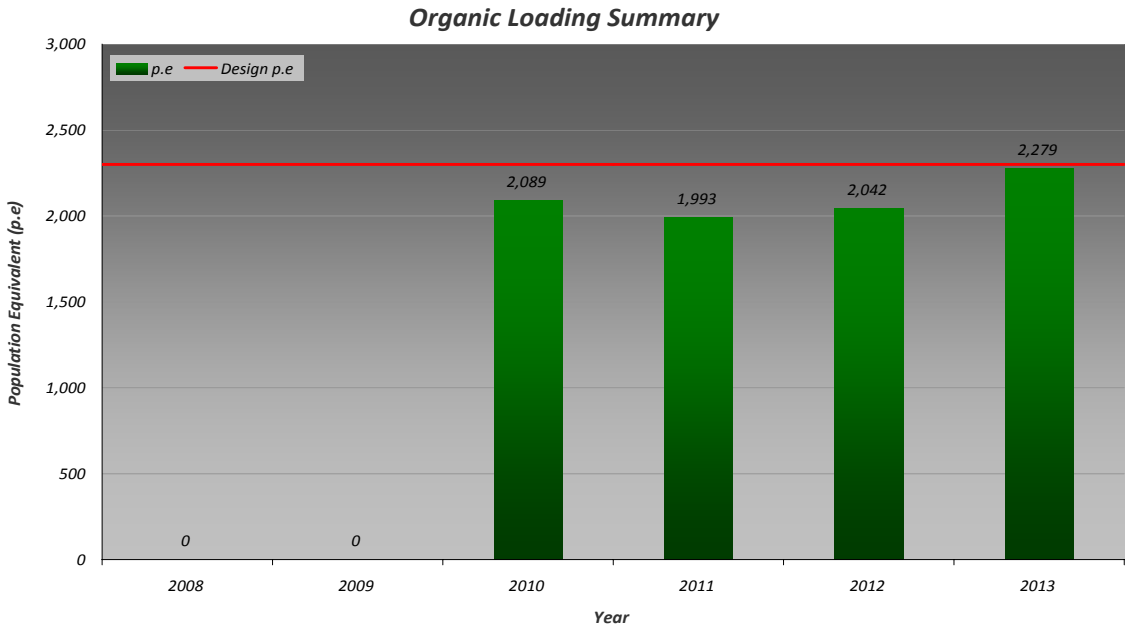
SECTION 2:
MONITORING REPORTS SUMMARY.

Section 2.1: Summary Report on Monthly Influent Monitoring.

Influent Results Table:

	Influent Results (mg/l)					Hydraulic Loading (m3/d)	Organic Loading (p.e/d)
	BOD	COD	TSS	TP	TN		
No. Samples	10	10	10	10	10		
Max. Result	868	1029	234	13	76	1,119	-
Avg. Result	206	516	152	8	61	664	2,279

Summary of Results:



As can be seen from the 'Influent Results Table' and the 'Organic Loading Summary' chart Stamullen WwTP is operating under its design capacity of 2,300PE.

Section 2.2: Discharges from the Agglomeration Report.

Parameter:	***Flow***	***BOD***	***COD***	***TSS***	***TN***	***NH4***	***TP***	***OP***	***N03***	***N02***	***TON***
Units:	***m^3/d***	***mg/l***	***mg/l***	***mg/l***	***mg/l***	***mg/l***	***mg/l***	***mg/l***	***mg/l***	***mg/l***	***kg/d***
Average Results for 2013	**559**	**18**	**44**	**12**	N/A	**4.34**	N/A	**0.64**	N/A	N/A	N/A
WWDL ELV	N/A	**25**	**125**	**35**	N/A	**3**	N/A	**2**	N/A	N/A	N/A
ELV (Condition 2)	N/A	**50**	**250**	**88**	N/A	**3.6**	N/A	**2.4**	N/A	N/A	N/A
Annual Mean ELV	**559**	**18**	**44**	**12**	N/A	**4.34**	N/A	**0.64**	N/A	N/A	N/A
No. of Results	N/A	13	13	13	N/A	13	**N/A**	13	N/A	N/A	N/A
WWDL ELV Exceedances	N/A	1	1	1	N/A	3	**N/A**	1	N/A	N/A	N/A
ELV (Condition 2) Exceedances	N/A	1	0	0	N/A	2	**N/A**	1	N/A	N/A	N/A
Allowable Exceedances	N/A	**2**	**2**	**2**	N/A	**2**	**N/A**	2	N/A	N/A	N/A
Overall Compliance	**N/A**	**Pass**	**Pass**	**Pass**	**N/A**	**Pass**	**N/A**	**Pass**	**N/A**	**N/A**	**N/A**

Section 2.3: Ambient Monitoring Summary Report.

Report

From: Kieran Cunningham

Re: Stamullen WWDL (D0262-01)
u/s and d/s Ambient rover monitoring 2012

The following table below details monitoring data of the River Delvin where samples were collected upstream and downstream of Stamullen WWTP in 2013 as required by Schedule B of the licence.

Schedule B requires that 10 samples per year of the receiving water are taken. In 2013 the River Delvin was sampled on 9 occasions.

		Date		Ammonia	Ortho P	DO	BOD	Total N
				mgN/L	mgP/L	% Sat	mg/L	mg/L
13990013	U/S STAMULLEN	06/03/2013		0.029	0.03	95.9	0.73	8.68
13990136	U/S STAMULLEN	19/04/2013				108.3	2.57	3.81
13990162	U/S STAMULLEN	22/05/2013		0.019	0.046	108	1.63	3.03
13990305	U/S STAMULLEN	25/07/2013		0.318	0.147	93	6.54	
13990327	U/S STAMULLEN	08/08/2013		0.018	0.086	106.1	1.87	
13990438	U/S STAMULLEN	12/09/2013		0.015	0.083	94	1.87	
13990471	U/S STAMULLEN	31/10/2013		0.034	0.069	94.6	1.81	
13990534	U/S STAMULLEN	19/11/2013		0.034	0.076	93	1.87	2.62
13-725	U/S STAMULLEN	17/12/2013		0.019	0.073	95.6	2.77	2.19
			Mean	**0.061**	**0.076**	**98.722**	**2.407**	**4.066**
			95% ile	**0.218456**	**0.12578265**	**108.18**	**5.032**	**7.706**
13990014	D/S STAMULLEN	06/03/2013		0.03	0.042	94.6	1.35	5.36
13990137	D/S STAMULLEN	19/04/2013				101.5	1.57	5.47
13990163	D/S STAMULLEN	22/05/2013		0.032	0.130	101.6	1.65	5.2
13990306	D/S STAMULLEN	25/07/2013		0.052	0.215	83.7	7.78	
13990328	D/S STAMULLEN	08/08/2013		0.035	0.186	93.8	1.27	
13990439	D/S STAMULLEN	12/09/2013		0.040	0.155	90.3	1.14	
13990472	D/S STAMULLEN	31/10/2013		0.058	0.068	94.1	1.63	
13990535	D/S STAMULLEN	19/11/2013		0.054	0.087	94.6	2.09	2.61
13-726	D/S STAMULLEN	17/12/2013		0.162	0.092	88.2	3.08	2.89
			Mean	**0.058**	**0.122**	**93.600**	**2.396**	**4.306**
			95% ile	**0.125839**	**0.2048185**	**101.56**	**5.9**	**5.448**

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

Ammonia	**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)**
Ortho P	**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)**
B.O.D.	**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)**
D.O.	**Lower Limit** **Upper Limit**	**80 % saturation (95% ile)** **120 % saturation (95% ile)**		

In terms of licence parameters Ammonia and Total N, the discharge from the Stamullen WwTP is having no adverse effect on receiving waters. On the contrary background Ammonia concentrations are reduced downstream of the Stamullen Plant from 61 µg/l to 58 µg/l using mean values and 218 µg/l to 125 µg/l based on 95%-ile values.

Ortho-P concentrations in the receiving waters did rise between upstream and downstream sampling locations were Ortho-P background concentrations rose from 76 µg/l to 122 µg/l based on mean values and 125 µg/l to 204 µg/l based on 95%-ile values.

In 2014 Meath County Council will carry out an investigation of the receiving waters to determine whether there are any other sources of pollution in this area that maybe contributing to this rise in Ortho-P.

Section 2.4: Data Collection and Reporting Requirements under the Urban Waste Water Treatment Directive

The Environmental Section of Meath County Council is responsible for all the data collection and reporting requirement under the Urban Waste Water Treatment Directive. All results have been submitted via EDEN and the Online Urban Waste Water System.

Section 2.5: Pollutant Release and Transfer Register

Guidance to completing the PRTR workbook

AER Returns Workbook

Version 1.1.17

REFERENCE YEAR	2013

1. FACILITY IDENTIFICATION

Parent Company Name	Meath County Council
Facility Name	Stamullen Waste Water Treatment Plant
PRTR Identification Number	D0262
Licence Number	D0262-01

Waste or IPPC Classes of Activity

No.	class_name
30.4	General

Address 1	County Hall
Address 2	Navan
Address 3	County Meath
Address 4	
	Meath
Country	Ireland
Coordinates of Location	-6.25941 53.6301
River Basin District	IEEA
NACE Code	3700
Main Economic Activity	Sewerage
AER Returns Contact Name	Gerry Boyle
AER Returns Contact Email Address	gboyle@meathcoco.ie
AER Returns Contact Position	Senior Engineer
AER Returns Contact Telephone Number	046 9097000
AER Returns Contact Mobile Phone Number	
AER Returns Contact Fax Number	046 9097001
Production Volume	0.0
Production Volume Units	
Number of Installations	0
Number of Operating Hours in Year	0
Number of Employees	0
User Feedback/Comments	
Web Address	

2. PRTR CLASS ACTIVITIES

Activity Number	Activity Name
5(f)	Urban waste-water treatment plants

3. SOLVENTS REGULATIONS (S.I. No. 543 of 2002)

Is it applicable?	
Have you been granted an exemption ?	
If applicable which activity class applies (as per Schedule 2 of the regulations) ?	
Is the reduction scheme compliance route being used ?	

4. WASTE IMPORTED/ACCEPTED ONTO SITE

Guidance on waste imported/accepted onto site

Do you import/accept waste onto your site for on-site treatment (either recovery or disposal activities) ?	

4.1 RELEASES TO AIR Link to previous years emissions data | PRTR# : D0262 | Facility Name : Stamullen Waste Water Treatment Plant | Filename : D0262_2013(1).xls | Return Year : 2013 | 21/02/2014 12:10

SECTION A : SECTOR SPECIFIC PRTR POLLUTANTS

RELEASES TO AIR					Please enter all quantities in this section in KGs			
POLLUTANT		METHOD				QUANTITY		
			Method Used					
No. Annex II	Name	M/C/E	Method Code	Designation or Description	Emission Point 1	T (Total) KG/Year	A (Accidental) KG/Year	F (Fugitive) KG/Year
01	Methane (CH4)	E	ESTIMATE	EPA UWWTP Tool Version 5.0	0.0	0.0	0.0	0.0
02	Carbon monoxide (CO)	E	ESTIMATE	EPA UWWTP Tool Version 5.0	0.0	0.0	0.0	0.0
03	Carbon dioxide (CO2)	E	ESTIMATE	EPA UWWTP Tool Version 5.0	0.0	62415.0	0.0	62415.0
05	Nitrous oxide (N2O)	E	ESTIMATE	EPA UWWTP Tool Version 5.0	0.0	0.0	0.0	0.0
07	Non-methane volatile organic compounds (NMVOC)	E	ESTIMATE	EPA UWWTP Tool Version 5.0	0.0	0.0	0.0	0.0
08	Nitrogen oxides (NOx/NO2)	E	ESTIMATE	EPA UWWTP Tool Version 5.0	0.0	0.0	0.0	0.0
11	Sulphur oxides (SOx/SO2)	E	ESTIMATE	EPA UWWTP Tool Version 5.0	0.0	0.0	0.0	0.0

* Select a row by double-clicking on the Pollutant Name (Column B) then click the delete button

SECTION B : REMAINING PRTR POLLUTANTS

RELEASES TO AIR					Please enter all quantities in this section in KGs			
POLLUTANT		METHOD				QUANTITY		
			Method Used					
No. Annex II	Name	M/C/E	Method Code	Designation or Description	Emission Point 1	T (Total) KG/Year	A (Accidental) KG/Year	F (Fugitive) KG/Year
					0.0	0.0	0.0	0.0

* Select a row by double-clicking on the Pollutant Name (Column B) then click the delete button

SECTION C : REMAINING POLLUTANT EMISSIONS (As required in your Licence)

RELEASES TO AIR					Please enter all quantities in this section in KGs			
POLLUTANT		METHOD				QUANTITY		
			Method Used					
Pollutant No.	Name	M/C/E	Method Code	Designation or Description	Emission Point 1	T (Total) KG/Year	A (Accidental) KG/Year	F (Fugitive) KG/Year
					0.0	0.0	0.0	0.0

* Select a row by double-clicking on the Pollutant Name (Column B) then click the delete button

Additional Data Requested from Landfill operators

For the purposes of the National Inventory on Greenhouse Gases, landfill operators are requested to provide summary data on landfill gas (Methane) flared or utilised on their facilities to accompany the figures for total methane generated. Operators should only report their Net methane (CH4) emission to the environment under T(total) KG/yr for Section A: Sector specific PRTR pollutants above. Please complete the table below:

Landfill: Stamullen Waste Water Treatment Plant

Please enter summary data on the quantities of methane flared and / or utilised	T (Total) kg/Year	M/C/E	Method Used: Method Code	Method Used: Designation or Description	Facility Total Capacity m3 per hour	
Total estimated methane generation (as per site model)	0.0				N/A	
Methane flared	0.0				0.0	(Total Flaring Capacity)
Methane utilised in engine/s	0.0				0.0	(Total Utilising Capacity)
Net methane emission (as reported in Section A above)	0.0				N/A	

4.2 RELEASES TO WATERS Link to previous years emissions data

SECTION A : SECTOR SPECIFIC PRTR POLLUTANTS

Data on ambient monitoring of storm/surface water or groundwater, conducted as part of your licence requirements, should NOT be submitted under AER / PRTR Reporting as this only conc

RELEASES TO WATERS					Please enter all quantities in this section in KGs			
POLLUTANT					QUANTITY			
			Method Used					
No. Annex II	Name	M/C/E	Method Code	Designation or Description	Emission Point 1	T (Total) KG/Year	A (Accidental) KG/Year	F (Fugitive) KG/Year
34	1,2-dichloroethane (EDC)	E	ESTIMATE	EPA UWWTP Tool Version 5.0	0.0	0.0	0.0	0.0
25	Alachlor	E	ESTIMATE	EPA UWWTP Tool Version 5.0	0.0	0.0	0.0	0.0
26	Aldrin	E	ESTIMATE	EPA UWWTP Tool Version 5.0	0.0	0.0	0.0	0.0
61	Anthracene	E	ESTIMATE	EPA UWWTP Tool Version 5.0	0.001	0.001	0.0	0.0
17	Arsenic and compounds (as As)	M			0.285	0.285	0.0	0.0
27	Atrazine	E	ESTIMATE	EPA UWWTP Tool Version 5.0	0.002	0.002	0.0	0.0
62	Benzene	E	ESTIMATE	EPA UWWTP Tool Version 5.0	0.003	0.003	0.0	0.0
91	Benzo(g,h,i)perylene	E	ESTIMATE	EPA UWWTP Tool Version 5.0	0.0	0.0	0.0	0.0
63	Brominated diphenylethers (PBDE)	E	ESTIMATE	EPA UWWTP Tool Version 5.0	0.0	0.0	0.0	0.0
18	Cadmium and compounds (as Cd)	M			0.122	0.122	0.0	0.0
28	Chlordane	E	ESTIMATE	EPA UWWTP Tool Version 5.0	0.0	0.0	0.0	0.0
29	Chlordecone	E	ESTIMATE	EPA UWWTP Tool Version 5.0	0.0	0.0	0.0	0.0
30	Chlorfenvinphos	E	ESTIMATE	EPA UWWTP Tool Version 5.0	0.0	0.0	0.0	0.0
79	Chlorides (as Cl)	M			31607.135	31607.135	0.0	0.0
31	Chloro-alkanes, C10-C13	E	ESTIMATE	EPA UWWTP Tool Version 5.0	0.043	0.043	0.0	0.0
32	Chlorpyrifos	E	ESTIMATE	EPA UWWTP Tool Version 5.0	0.0	0.0	0.0	0.0
19	Chromium and compounds (as Cr)	M			0.408	0.408	0.0	0.0
20	Copper and compounds (as Cu)	M			3.263	3.263	0.0	0.0
82	Cyanides (as total CN)	M			1.835	1.835	0.0	0.0
33	DDT	E	ESTIMATE	EPA UWWTP Tool Version 5.0	0.0	0.0	0.0	0.0
70	Di-(2-ethyl hexyl) phthalate (DEHP)	E	ESTIMATE	EPA UWWTP Tool Version 5.0	0.187	0.187	0.0	0.0
35	Dichloromethane (DCM)	E	ESTIMATE	EPA UWWTP Tool Version 5.0	0.009	0.009	0.0	0.0
36	Dieldrin	E	ESTIMATE	EPA UWWTP Tool Version 5.0	0.0	0.0	0.0	0.0
37	Diuron	E	ESTIMATE	EPA UWWTP Tool Version 5.0	0.005	0.005	0.0	0.0
38	Endosulphan	E	ESTIMATE	EPA UWWTP Tool Version 5.0	0.0	0.0	0.0	0.0
39	Endrin	E	ESTIMATE	EPA UWWTP Tool Version 5.0	0.0	0.0	0.0	0.0
65	Ethyl benzene	E	ESTIMATE	EPA UWWTP Tool Version 5.0	0.003	0.003	0.0	0.0
88	Fluoranthene	E	ESTIMATE	EPA UWWTP Tool Version 5.0	0.0	0.0	0.0	0.0
83	Fluorides (as total F)	M			101.959	101.959	0.0	0.0
40	Halogenated organic compounds (as AOX)	E	ESTIMATE	EPA UWWTP Tool Version 5.0	0.487	0.487	0.0	0.0
41	Heptachlor	E	ESTIMATE	EPA UWWTP Tool Version 5.0	0.0	0.0	0.0	0.0
90	Hexabromobiphenyl	E	ESTIMATE	EPA UWWTP Tool Version 5.0	0.0	0.0	0.0	0.0

42	Hexachlorobenzene (HCB)	E	ESTIMATE	EPA UWWTP Tool Version 5.0	0.0	0.0	0.0	0.0
43	Hexachlorobutadiene (HCBD)	E	ESTIMATE	EPA UWWTP Tool Version 5.0	0.0	0.0	0.0	0.0
89	Isodrin	E	ESTIMATE	EPA UWWTP Tool Version 5.0	0.0	0.0	0.0	0.0
67	Isoproturon	E	ESTIMATE	EPA UWWTP Tool Version 5.0	0.002	0.002	0.0	0.0
23	Lead and compounds (as Pb)	M			1.224	1.224	0.0	0.0
45	Lindane	E	ESTIMATE	EPA UWWTP Tool Version 5.0	0.0	0.0	0.0	0.0
21	Mercury and compounds (as Hg)	E	ESTIMATE	EPA UWWTP Tool Version 5.0	0.0	0.0	0.0	0.0
46	Mirex	E	ESTIMATE	EPA UWWTP Tool Version 5.0	0.0	0.0	0.0	0.0
68	Naphthalene	E	ESTIMATE	EPA UWWTP Tool Version 5.0	0.001	0.001	0.0	0.0
22	Nickel and compounds (as Ni)	M			1.427	1.427	0.0	0.0
64	Nonylphenol and Nonylphenol ethoxylates (NP/NPEs)	E	ESTIMATE	EPA UWWTP Tool Version 5.0	0.017	0.017	0.0	0.0
87	Octylphenols and Octylphenol ethoxylates	E	ESTIMATE	EPA UWWTP Tool Version 5.0	0.0	0.0	0.0	0.0
69	Organotin compounds (as total Sn)	E	ESTIMATE	EPA UWWTP Tool Version 5.0	0.0	0.0	0.0	0.0
48	Pentachlorobenzene	E	ESTIMATE	EPA UWWTP Tool Version 5.0	0.0	0.0	0.0	0.0
49	Pentachlorophenol (PCP)	E	ESTIMATE	EPA UWWTP Tool Version 5.0	0.0	0.0	0.0	0.0
71	Phenols (as total C)	E	ESTIMATE	EPA UWWTP Tool Version 5.0	0.186	0.186	0.0	0.0
50	Polychlorinated biphenyls (PCBs)	E	ESTIMATE	EPA UWWTP Tool Version 5.0	0.0	0.0	0.0	0.0
72	Polycyclic aromatic hydrocarbons (PAHs)	E	ESTIMATE	EPA UWWTP Tool Version 5.0	0.002	0.002	0.0	0.0
51	Simazine	E	ESTIMATE	EPA UWWTP Tool Version 5.0	0.003	0.003	0.0	0.0
52	Tetrachloroethylene (PER)	E	ESTIMATE	EPA UWWTP Tool Version 5.0	0.012	0.012	0.0	0.0
53	Tetrachloromethane (TCM)	E	ESTIMATE	EPA UWWTP Tool Version 5.0	0.0	0.0	0.0	0.0
73	Toluene	E	ESTIMATE	EPA UWWTP Tool Version 5.0	0.101	0.101	0.0	0.0
12	Total nitrogen	M	OTH		5057.142	5057.142	0.0	0.0
76	Total organic carbon (TOC) (as total C or COD/3)	M			1753.686	1753.686	0.0	0.0
13	Total phosphorus	M	OTH		191.07	191.07	0.0	0.0
59	Toxaphene	E	ESTIMATE	EPA UWWTP Tool Version 5.0	0.0	0.0	0.0	0.0
74	Tributyltin and compounds	E	ESTIMATE	EPA UWWTP Tool Version 5.0	0.0	0.0	0.0	0.0
54	Trichlorobenzenes (TCBs)(all isomers)	E	ESTIMATE	EPA UWWTP Tool Version 5.0	0.0	0.0	0.0	0.0
57	Trichloroethylene	E	ESTIMATE	EPA UWWTP Tool Version 5.0	0.0	0.0	0.0	0.0
77	Trifluralin	E	ESTIMATE	EPA UWWTP Tool Version 5.0	0.0	0.0	0.0	0.0
75	Triphenyltin and compounds	E	ESTIMATE	EPA UWWTP Tool Version 5.0	0.0	0.0	0.0	0.0
60	Vinyl chloride	E	ESTIMATE	EPA UWWTP Tool Version 5.0	0.0	0.0	0.0	0.0
78	Xylenes	E	ESTIMATE	EPA UWWTP Tool Version 5.0	0.024	0.024	0.0	0.0
24	Zinc and compounds (as Zn)	M			27.937	27.937	0.0	0.0

* Select a row by double-clicking on the Pollutant Name (Column B) then click the delete button

SECTION B : REMAINING PRTR POLLUTANTS

RELEASES TO WATERS					Please enter all quantities in this section in KGs			
POLLUTANT					QUANTITY			
			Method Used					
No. Annex II	Name	M/C/E	Method Code	Designation or Description	Emission Point 1	T (Total) KG/Year	A (Accidental) KG/Year	F (Fugitive) KG/Year
					0.0	0.0	0.0	0.0

* Select a row by double-clicking on the Pollutant Name (Column B) then click the delete button

SECTION C : REMAINING POLLUTANT EMISSIONS (as required in your Licence)

RELEASES TO WATERS					Please enter all quantities in this section in KGs			
POLLUTANT					QUANTITY			
			Method Used					
Pollutant No.	Name	M/C/E	Method Code	Designation or Description	Emission Point 1	T (Total) KG/Year	A (Accidental) KG/Year	F (Fugitive) KG/Year
370	Selenium	M			0.326	0.326	0.0	0.0
205	Antimony (as Sb)	M			1.446	1.446	0.0	0.0
368	Molybdenum	M			0.612	0.612	0.0	0.0
358	Tin	M			1.427	1.427	0.0	0.0
373	Barium	M			2.549	2.549	0.0	0.0
374	Boron	M			46.901	46.901	0.0	0.0
356	Cobalt	M			0.408	0.408	0.0	0.0
386	Vanadium	M			0.816	0.816	0.0	0.0
388	Dichlobenil	E	ESTIMATE	EPA UWWTP Tool Version 5.0	0.001	0.001	0.0	0.0
383	Linuron	E	ESTIMATE	EPA UWWTP Tool Version 5.0	0.0	0.0	0.0	0.0
385	Mecoprop Total	E	ESTIMATE	EPA UWWTP Tool Version 5.0	0.022	0.022	0.0	0.0
380	2,4 Dichlorophenol (2,4 D)	E	ESTIMATE	EPA UWWTP Tool Version 5.0	0.01	0.01	0.0	0.0
384	MCPA	E	ESTIMATE	EPA UWWTP Tool Version 5.0	0.018	0.018	0.0	0.0
382	Glyphosate	E	ESTIMATE	EPA UWWTP Tool Version 5.0	0.313	0.313	0.0	0.0
389	Benzo[a]pyrene	E	ESTIMATE	EPA UWWTP Tool Version 5.0	0.0	0.0	0.0	0.0
390	Benzo[b]fluoranthene	E	ESTIMATE	EPA UWWTP Tool Version 5.0	0.0	0.0	0.0	0.0
391	Benzo[k]fluoranthene	E	ESTIMATE	EPA UWWTP Tool Version 5.0	0.0	0.0	0.0	0.0
392	Indeno[1,2,3-c,d]pyrene	E	ESTIMATE	EPA UWWTP Tool Version 5.0	0.0	0.0	0.0	0.0
393	Carbon tetrachloride	E	ESTIMATE	EPA UWWTP Tool Version 5.0	0.0	0.0	0.0	0.0
394	2,6-Dichlorobenzamide	E	ESTIMATE	EPA UWWTP Tool Version 5.0	0.016	0.016	0.0	0.0
395	Dicofol	E	ESTIMATE	EPA UWWTP Tool Version 5.0	0.0	0.0	0.0	0.0
396	Hexabromocyclodecane (HBCD)	E	ESTIMATE	EPA UWWTP Tool Version 5.0	0.0	0.0	0.0	0.0
397	PFOS	E	ESTIMATE	EPA UWWTP Tool Version 5.0	0.0	0.0	0.0	0.0
238	Ammonia (as N)	M	ALT		884.592	884.592	0.0	0.0
303	BOD	M	ALT		3658.271	3658.271	0.0	0.0
306	COD	M	ALT		8992.74	8992.74	0.0	0.0
362	Kjeldahl Nitrogen	E	ESTIMATE	EPA UWWTP Tool Version 5.0	0.0	0.0	0.0	0.0
327	Nitrate (as N)	E	ESTIMATE	EPA UWWTP Tool Version 5.0	0.0	0.0	0.0	0.0
372	Nitrite (as N)	E	ESTIMATE	EPA UWWTP Tool Version 5.0	0.0	0.0	0.0	0.0
332	Ortho-phosphate (as PO4)	M	ALT		129.691	129.691	0.0	0.0
240	Suspended Solids	M	ALT		2418.456	2418.456	0.0	0.0

* Select a row by double-clicking on the Pollutant Name (Column B) then click the delete button

4.3 RELEASES TO WASTEWATER OR SEWER

Link to previous years emissions data

SECTION A : PRTR POLLUTANTS

OFFSITE TRANSFER OF POLLUTANTS DESTINED FOR WASTE-WATER TREATMENT OR SEWER					Please enter all quantities in this section in KGs			
POLLUTANT		METHOD			QUANTITY			
			Method Used					
No. Annex II	Name	M/C/E	Method Code	Designation or Description	Emission Point 1	T (Total) KG/Year	A (Accidental) KG/Year	F (Fugitive) KG/Year
					0.0	0.0	0.0	0.0

* Select a row by double-clicking on the Pollutant Name (Column B) then click the delete button

SECTION B : REMAINING POLLUTANT EMISSIONS (as required in your Licence)

OFFSITE TRANSFER OF POLLUTANTS DESTINED FOR WASTE-WATER TREATMENT OR SEWER					Please enter all quantities in this section in KGs			
POLLUTANT		METHOD			QUANTITY			
			Method Used					
Pollutant No.	Name	M/C/E	Method Code	Designation or Description	Emission Point 1	T (Total) KG/Year	A (Accidental) KG/Year	F (Fugitive) KG/Year
					0.0	0.0	0.0	0.0

* Select a row by double-clicking on the Pollutant Name (Column B) then click the delete button

4.4 RELEASES TO LAND

Link to previous years emissions data

SECTION A : PRTR POLLUTANTS

RELEASES TO LAND					Please enter all quantities in this section in KGs		
POLLUTANT		METHOD			QUANTITY		
			Method Used				
No. Annex II	Name	M/C/E	Method Code	Designation or Description	Emission Point 1	T (Total) KG/Year	A (Accidental) KG/Year
					0.0	0.0	0.0

* Select a row by double-clicking on the Pollutant Name (Column B) then click the delete button

SECTION B : REMAINING POLLUTANT EMISSIONS (as required in your Licence)

RELEASES TO LAND					Please enter all quantities in this section in KGs		
POLLUTANT		METHOD			QUANTITY		
			Method Used				
Pollutant No.	Name	M/C/E	Method Code	Designation or Description	Emission Point 1	T (Total) KG/Year	A (Accidental) KG/Year
					0.0	0.0	0.0

* Select a row by double-clicking on the Pollutant Name (Column B) then click the delete button

5. ONSITE TREATMENT & OFFSITE TRANSFERS OF WASTE

| PRTR# : D0262 | Facility Name : Stamullen Waste Water Treatment Plant | Filename : D0262_2013(1).xls | Return Year : 2013 | 25/02/2014 13:11

Please enter all quantities on this sheet in Tonnes 3

Transfer Destination	European Waste Code	Hazardous	Quantity (Tonnes per Year)	Description of Waste	Waste Treatment Operation	Method Used		Location of Treatment	Haz Waste : Name and Licence/Permit No of Next Destination Facility Non Haz Waste: Name and Licence/Permit No of Recover/Disposer	Haz Waste : Address of Next Destination Facility Non Haz Waste: Address of Recover/Disposer	Name and License / Permit No. and Address of Final Recoverer / Disposer (HAZARDOUS WASTE ONLY)	Actual Address of Final Destination i.e. Final Recovery / Disposal Site (HAZARDOUS WASTE ONLY)
						M/C/E	Method Used					
Within the Country	19 08 01	No		screenings	D5	E	Volume Calculation	Offsite in Ireland	Panda Waste Services,WCP/DC/09/118/01	Rathdrinagh,Beauparc, Navan, Co. Meath,Ireland		
Within the Country	19 08 05	No		sludges from treatment of urban waste water	R10	E	Volume Calculation	Offsite in Ireland	Boyne Waste Services,WCPMH/009/21	Rathdrinagh,Beauparc Business Park,Navan,Co. Meath,Ireland		

* Select a row by double-clicking the Description of Waste then click the delete button

SECTION 3:
OPERATIONAL REPORTS SUMMARY

SECTION 3.1: TREATMENT EFFICIENCY REPORT

Results:	***Units***	***cBOD***	***COD***	***TSS***	***Total P***	***Total N***	***Comment***
Average Influent Mass Loading	kg/year	49,926	125,058	36,839	1,878	14,738	-
Average Effluent Mass Emission	kg/year	3,660	8,998	2,420	191	5,060	-
Average Treatment % Efficiency	% reduction on Influent Load	93%	93%	93%	90%	66%	Note 1
Target Treatment % Efficiency	Minimum % reduction on Influent Load	70-90%	75%	90%	80%	70-80%	*Ref: Second Schedule (Part 1 and Part 2) of the Urban Waste Water Treatment Regulations, 2001.*

Note 1:

As can be seen from the above table Stamullen WwTP has failed to achieve the minimum % Total Nitrogen reduction as required under the Urban Waste Water Treatment Regulations, 2001. Meath County Council is currently undertaking a review of the Stamullen WWTP to indentify the reasons for the ELV exceedance. All ELV exceedances were reported to the Environmental Protection Agency (EPA) through the EDEN system and reports are available for inspection at the Environment & Water Services Offices in Navan, Co. Meath.

SECTION 3.2: TREATMENT CAPACITY REPORT

Parameter		m^3/day / PE
Hydraulic Capacity: (m^3/day)	Design	-
	Current	-
	Remaining	-
Organic Capacity: (PE)	Design	2,300
	Current	2,279
	Remaining	21
Will the capacity be exceeded in the next three years? (Yes / No)		Yes

SECTION 3.3: EXTENT OF AGGLOMERATION SUMMARY REPORT

	% of total load generated in the agglomeration
Load generated in the agglomeration that is collected in the sewer network	100
Load collected in the agglomerations that enters treatment plant	100
Load generated in the agglomeration going to individual and appropriate treatment systems	0
Load generated in the agglomeration that is not collected and not individually treated	0
Individual and Appropriate System (IAS)	0
Load generated in the agglomeration	100

SECTION 3.4: COMPLAINTS SUMMARY

Number	*Date &Time*	*Nature of Complaint*	*Cause of Complaint*	*Actions Taken*	*Closed (Y/N)*

There were no complaints recorded in during the reporting period 01/01/13 to 31/12/13.

SECTION 3.5: REPORTED INCIDENTS SUMMARY

Date & Time	*Incident Description*	*Cause*	*Corrective Action*	*Authorities Contacted*	*Reported to EPA (Yes/No)*	*Closed (Y/N)*
Apr-13	Ref 10046 – NH4 ELV Exceedance	Insufficient aeration	Replace the aeration mechanism with a new diffuser type system and is expected to be installed by the end of this year, 2013	ERFB*	Yes	Yes
Nov-13	Ref 10078 – cBOD ELV and OP ELV Exceedances	Upgrade of plant aeration system currently being carried out	Complete this upgrade	No	Yes	Yes
Dec-13	Ref 10079 – NH4 ELV Exceedance	Difficulty achieving the emission level for Ammonia since the installation of the new aeration system	Working with the contractor to resolve this issue	No	Yes	Yes

Table 1

- **Eastern River Fisheries Board**

Number of Incidents	3
Number of Incidents Reported to EPA via EDEN in 2013	3
Explanation of any discrepancies between the two numbers	

Table 2

SECTION 3.6: SLUDGE/ OTHER INPUTS TO THE WWTP

Input Type	M3/Year	PE/Year	% of Load
Domestic/Septic Tank Sludge	N/A	N/A	N/A
Industrial/Commercial Sludge	N/A	N/A	N/A
Landfill Leachate (delivered by tanker)	N/A	N/A	N/A
Landfill Leachate (delivered by sewer network)	N/A	N/A	N/A
Other (specify)	N/A	N/A	N/A

SECTION 4:

INFRASTRUCTURAL ASSESSMENTS AND PROGRAMME OF IMPROVEMENTS

SECTION 4.1: STORM WATER OVERFLOW IDENTIFICATION AND INSPECTION REPORT

SWO Identification and Inspection Summary Report Table:

WWDL Name/ Code for Storm Water Overflow	Irish Grid Reference	Included in Schedule A.4 of the WWDL	Compliance with DoEHLG Criteria	No. of times activated in 2013 (No. of events)	Total volume discharged in 2013 (m^3)	Total volume discharged in 2013 (PE)	Estimated/ Measured data
D0262-01/SW2	E315133 N265905	Yes					
D0262-01/SW3	E315143 N265862	Yes					

Table A

Note: It is proposed to undertake a storm water assessment review in 2014.

How much sewage was discharged via SWOs in the agglomeration in the year (m^3/yr)	
How much sewage was discharged via SWOs in the agglomeration in the year (p.e.)	
What % of the total volume of sewage generated in the agglomeration was discharged via SWOs in the agglomeration in 2013?	
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 ScheduleA.3 & C.3	A.3
Have the EPA been advised of any additional SWOs/ changes to Schedule C.3 and A.4 under Condition 1.7?	N/A

Table B

SECTION 4.2: REPORT ON PROGRESS MADE AND PROPOSALS BEING DEVELOPED TO MEET THE IMPROVEMENT PROGRAMME REQUIREMENTS.

Licence Condition 5.1: Programme of Infrastructural Improvements.
There is planned programme for infrastructure improvements at Stamullen WwTP.

Licence Condition 5.2: Assessing the Programme of Infrastructural Improvements.
There is planned programme for infrastructure improvements at Stamullen WwTP.

Licence Condition 5.3: Plan for Implementation of Infrastructural Improvements.
There is planned programme for infrastructure improvements at Stamullen WwTP.

Licence Condition 5.4: Programme of Measures for Gathering, Recording, and Retention of Information

SECTION 5:
LICENCE SPECIFIC REPORTS

SECTION 5: LICENCE SPECIFIC REPORTS SUMMARY

Licence Specific Reports	*Required in 2013 AER*	*Included in 2013 AER*	*Location in 2013 AER*
Priority Substances Assessment	No	No	Report Not Required
Drinking Water Abstraction Point Risk Assessment Report	No	No	Report Not Required
Habitats Impact Assessment Report	No	No	Report Not Required
Shellfish Impact Assessment Report.	No	No	Report Not Required
Pearl Mussel Report	No	No	Report Not Required
Toxicity / Leachate Management.	No	No	Report Not Required
Toxicity of the Final Effluent Report	No	No	Report Not Required

SECTION 6:
CERTIFICATION AND SIGN OFF

SECTION 6.1: REPORT CHECK LIST

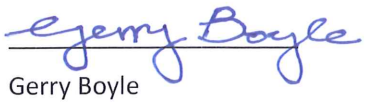
Does the AER include an executive summary?	Yes
Does the AER include an assessment of the performance of the Waste Water Works (i.e. have the results of assessments been interpreted against WWDL requirements and or Environmental Quality Standards?	Yes
Is there a need to advise the EPA for consideration 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 modifications to the existing WWDL? (See Condition 1.7 (changes to works/discharges) & Condition 4 (changes to monitoring location, frequency etc.)	No
List the reason (e.g. failure to complete specified works within dates specified in the licence, changes to monitoring requirements)	No
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?	No

SECTION 6.2: CERTIFICATION AND SIGN OFF

As required under EPA Waste Water Discharge Licensing, I certify that the above report is true and accurate.

Prepared By: Declan Mooney

Reviewed By: David Byrne

Approved By: 

Gerry Boyle
Senior Engineer
Environment and Water Services Section
Meath County Council

SECTION 7:
APPENDIX

SECTION 7.1:
PRIORITY SUBSTANCE SCREENING RESULTS

ALS Environmental Ltd
Torrington Avenue,
Coventry, CV4 9GU

T: +44 (0)24 7642 1213
F: +44 (0)24 7685 6575

www.alsenvironmental.co.uk

Mr McMoreland
Meath County Council
Meath CoCo. Projects Office
Unit 41/42
Enterprise Centre
Navan Meath

21 October 2013

Test Report: COV/959436/2013

Dear Mr McMoreland

Analysis of your sample(s) submitted on 02 October 2013 is now complete and we have pleasure in enclosing the appropriate test report(s).

An invoice for the analysis carried out will be sent under separate cover.

Should you have any queries regarding this report(s) or any part of our service, please contact Customer Services on +44 (0)24 7642 1213 who will be happy to discuss your requirements.

If you would like to arrange any further analysis, please contact Customer Services. To arrange container delivery or sample collection, please call the Couriers Department directly on 024 7685 6562.

Thank you for using ALS Environmental Ltd and we look forward to receiving your next samples.

Yours Sincerely,

Signed:

Name: J. Fell

Title: Chemistry Operations Manager

Report Summary

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4409

Mr Kealan McMoreland
Meath County Council
Meath CoCo. Projects Office
Unit 41/42
Enterprise Centre
Navan
Meath

Date of Issue: **21 October 2013**

Report Number: **COV/959436/2013** Issue **1**

Job Description: WW Discharge

Number of Samples included in this report **1**

Number of Test Results included in this report **134**

Job Received: **02 October 2013**

Analysis Commenced: **04 October 2013**

Signed:

Name: **J. Fell** Date: **21 October 2013**

Title: **Chemistry Operations Manager**

ALS Environmental Ltd was not responsible for sampling unless otherwise stated. Sampling is not covered by our UKAS accreditation.

Information on the methods of analysis and performance characteristics are available on request.
Opinions and interpretations expressed herein are outside the scope of UKAS accreditation. The results relate only to the items tested.
Tests marked 'Not UKAS Accredited' in this Report/Certificate are not included in the UKAS Accreditation Schedule for our laboratory.

Certificate of Analysis

1314
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4409

Report Number: **COV/959436/2013** Issue **1**
Laboratory Number: **13724698** Sample **1** of **1**

Sample Source: **Meath County Council**
Sample Point Description:
Sample Description: **D0262**
Sample Matrix: **Waste waters**
Sample Date/Time: **01 October 2013**
Sample Received: **02 October 2013**
Analysis Complete: **21 October 2013**

Test Description	Result	Units	Accreditation		Method
Glyphosate	<0.50	ug/l	N	S	SUBCON
Di(2-ethylhexyl)phthalate	<10	ug/l	N	S	SUBCON
2,6-dichlorobenzamide (BAM)	<0.10	ug/l	N	S	SUBCON
Barium, Total as Ba	0.0125	mg/l	Y	Cov	WAS049
Boron, Total as B	<0.23	mg/l	Y	Cov	WAS049
Cadmium , Total as Cd	<0.0006	mg/l	Y	Cov	WAS049
Chromium , Total as Cr	<0.0020	mg/l	Y	Cov	WAS049
Cobalt , Total as Co	<0.0020	mg/l	Y	Cov	WAS049
Copper, Total as Cu	0.016	mg/l	Y	Cov	WAS049
Lead , Total as Pb	<0.006	mg/l	Y	Cov	WAS049
Mercury, Total as Hg	<0.10	ug/l	Y	Cov	WAS013
Molybdenum , Total as Mo	<0.003	mg/l	Y	Cov	WAS049
Nickel , Total as Ni	0.007	mg/l	Y	Cov	WAS049
Tin , Total as Sn	<0.007	mg/l	Y	Cov	WAS049
Vanadium , Total as V	<0.004	mg/l	Y	Cov	WAS049
Zinc, Total as Zn	0.137	mg/l	Y	Cov	WAS049
pH	7.1	pH units	Y	Cov	WAS039
Conductivity- Electrical 20C	1010	uS/cm	Y	Cov	WAS039
Total Hardness as CaCO3	287	mg/l	Y	Cov	WAS049
Chloride as Cl	155	mg/l	Y	Cov	WAS036
TOC as C	8.6	mg/l	Y	Cov	WAS005
Cyanide, Total as CN	<0.009	mg/l	Y	Cov	WAS018
Fluoride as F	0.5	mg/l	Y	Cov	WAS029
Diuron	<0.10	ug/l	Y	Cov	GEO37
Isoproturon	Analyst Comment	ug/l	Y	Cov	GEO37
Dichlobenil	<2	ng/l	Y	Cov	GEO47
Dieldrin	<4	ng/l	Y	Cov	GEO47
Isodrin	<4	ng/l	Y	Cov	GEO47
PCB 28	<2	ng/l	Y	Cov	GEO47
Linuron	<0.05	ug/l	Y	Cov	GEO37
PCB 52	<2	ng/l	Y	Cov	GEO47

Certificate of Analysis

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Report Number: **COV/959436/2013** Issue **1**
Laboratory Number: **13724698** Sample **1** of **1**

Sample Source: **Meath County Council**
Sample Point Description:
Sample Description: **D0262**
Sample Matrix: **Waste waters**
Sample Date/Time: **01 October 2013**
Sample Received: **02 October 2013**
Analysis Complete: **21 October 2013**

Test Description	Result	Units	Accreditation	Method
PCB 101	<2	ng/l	Y Cov	GEO47
PCB 118	<3	ng/l	Y Cov	GEO47
PCB 138	<2	ng/l	Y Cov	GEO47
PCB 153	<2	ng/l	Y Cov	GEO47
PCB 180	<3	ng/l	Y Cov	GEO47
Atrazine	<0.020	ug/l	Y Cov	GEO47
Simazine	<0.020	ug/l	Y Cov	GEO47
2,4 - D	<0.05	ug/l	Y Cov	GEO20
MCPA	<0.05	ug/l	Y Cov	GEO20
Mecoprop	<0.04	ug/l	Y Cov	GEO20
2 - Chlorophenol	<1.00	ug/l	Y Cov	GEO18
2 - Methylphenol	<1.00	ug/l	Y Cov	GEO18
2,4 - Dichlorophenol	<1.00	ug/l	Y Cov	GEO18
2,4 - Dimethylphenol	<1.00	ug/l	Y Cov	GEO18
2,4,6 - Trichlorophenol	<1.00	ug/l	Y Cov	GEO18
3,5-Dimethylphenol	<1.00	ug/l	Y Cov	GEO18
4-Chlorophenol	<1.00	ug/l	Y Cov	GEO18
3+4-Methylphenol	<1.00	ug/l	Y Cov	GEO18
Phenol	<5.00	ug/l	Y Cov	GEO18
Acenaphthene	<0.01	ug/l	Y Cov	GEO19
Acenaphthylene	<0.01	ug/l	Y Cov	GEO19
Anthracene	<0.01	ug/l	Y Cov	GEO19
Benzo (a) anthracene	<0.01	ug/l	Y Cov	GEO19
Benzo (g,h,i) perylene	<0.01	ug/l	Y Cov	GEO19
Benzo (a) pyrene	<0.01	ug/l	Y Cov	GEO19
Benzo (b) fluoranthene	<0.01	ug/l	Y Cov	GEO19
Benzo (k) fluoranthene	<0.01	ug/l	Y Cov	GEO19
Chrysene	<0.01	ug/l	Y Cov	GEO19
Dibenz (a,h) anthracene	<0.01	ug/l	Y Cov	GEO19
Fluoranthene	<0.01	ug/l	Y Cov	GEO19
Fluorene	<0.01	ug/l	Y Cov	GEO19
Indeno (1,2,3) cd pyrene	<0.01	ug/l	Y Cov	GEO19

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Report Number: **COV/959436/2013** Issue **1**
Laboratory Number: **13724698** Sample **1** of **1**

Sample Source: **Meath County Council**
Sample Point Description:
Sample Description: **D0262**
Sample Matrix: **Waste waters**
Sample Date/Time: **01 October 2013**
Sample Received: **02 October 2013**
Analysis Complete: **21 October 2013**

Test Description	Result	Units	Accreditation	Method
Naphthalene	<0.01	ug/l	Y Cov	GEO19
Phenanthrene	<0.01	ug/l	Y Cov	GEO19
Pyrene	<0.01	ug/l	Y Cov	GEO19
PAH, Total	<0.01	ug/l	N Cov	GEO19
VOC	Y	ug/l	Y Cov	GEO32
Dichlorodifluoromethane	<1.0	ug/l	Y Cov	GEO32
Chloromethane	<1.0	ug/l	Y Cov	GEO32
Chloroethane	<1.0	ug/l	Y Cov	GEO32
Bromomethane	<1.0	ug/l	Y Cov	GEO32
Trichlorofluoromethane	<1.0	ug/l	Y Cov	GEO32
1,1-Dichloroethene	<1.0	ug/l	Y Cov	GEO32
Dichloromethane	<1.0	ug/l	Y Cov	GEO32
1,1-Dichloroethane	<1.0	ug/l	Y Cov	GEO32
cis-1,2-Dichloroethene	<1.0	ug/l	Y Cov	GEO32
2,2-Dichloropropane	<1.0	ug/l	N Cov	GEO32
Chloroform	<1.0	ug/l	Y Cov	GEO32
Bromochloromethane	<1.0	ug/l	Y Cov	GEO32
1,1,1-Trichloroethane	<1.0	ug/l	Y Cov	GEO32
1,1-Dichloropropene	<1.0	ug/l	Y Cov	GEO32
1,2-Dichloroethane	<1.0	ug/l	Y Cov	GEO32
Benzene	<1.0	ug/l	Y Cov	GEO32
1,2-Dichloropropane	<1.0	ug/l	Y Cov	GEO32
Trichloroethene	<1.0	ug/l	Y Cov	GEO32
Bromodichloromethane	<1.0	ug/l	Y Cov	GEO32
Dibromomethane	<1.0	ug/l	Y Cov	GEO32
cis-1,3-Dichloropropene	<1.0	ug/l	Y Cov	GEO32
Toluene	4.2	ug/l	Y Cov	GEO32
trans-1,3-Dichloropropene	<1.0	ug/l	Y Cov	GEO32
1,1,2-Trichloroethane	<1.0	ug/l	Y Cov	GEO32
Carbon Tetrachloride	<1.0	ug/l	Y Cov	GEO32
Vinyl Chloride	<0.5	ug/l	Y Cov	GEO32
1,3-Dichloropropane	<1.0	ug/l	Y Cov	GEO32

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Report Number: **COV/959436/2013** Issue **1**
Laboratory Number: **13724698** Sample **1** of **1**

Sample Source: **Meath County Council**
Sample Point Description:
Sample Description: **D0262**
Sample Matrix: **Waste waters**
Sample Date/Time: **01 October 2013**
Sample Received: **02 October 2013**
Analysis Complete: **21 October 2013**

Test Description	Result	Units	Accreditation	Method
Tetrachloroethene	<1.0	ug/l	Y Cov	GEO32
Dibromochloromethane	<1.0	ug/l	Y Cov	GEO32
1,2-Dibromoethane	<1.0	ug/l	Y Cov	GEO32
Chlorobenzene	<1.0	ug/l	Y Cov	GEO32
1,1,1,2-Tetrachloroethane	<1.0	ug/l	Y Cov	GEO32
Ethyl Benzene	<1.0	ug/l	Y Cov	GEO32
m&p-Xylene	<1.0	ug/l	Y Cov	GEO32
o-Xylene	<1.0	ug/l	Y Cov	GEO32
Styrene	<1.0	ug/l	Y Cov	GEO32
Bromoform	<1.0	ug/l	Y Cov	GEO32
trans-1,2-Dichloroethene	<1.0	ug/l	Y Cov	GEO32
Isopropylbenzene	<1.0	ug/l	Y Cov	GEO32
1,1,2,2-Tetrachloroethane	<1.0	ug/l	Y Cov	GEO32
1,2,3-Trichloropropane	<1.0	ug/l	Y Cov	GEO32
n-Propylbenzene	<1.0	ug/l	Y Cov	GEO32
Bromobenzene	<1.0	ug/l	Y Cov	GEO32
2-Chlorotoluene	<1.0	ug/l	Y Cov	GEO32
1,3,5-Trimethylbenzene	<1.0	ug/l	Y Cov	GEO32
4-Chlorotoluene	<1.0	ug/l	Y Cov	GEO32
tert-Butylbenzene	<1.0	ug/l	Y Cov	GEO32
1,2,4-Trimethylbenzene	<1.0	ug/l	Y Cov	GEO32
sec-Butylbenzene	<1.0	ug/l	Y Cov	GEO32
p-Isopropyltoluene	<1.0	ug/l	Y Cov	GEO32
1,3-Dichlorobenzene	<1.0	ug/l	Y Cov	GEO32
1,4-Dichlorobenzene	<1.0	ug/l	Y Cov	GEO32
n-Butylbenzene	<1.0	ug/l	Y Cov	GEO32
1,2-Dichlorobenzene	<1.0	ug/l	Y Cov	GEO32
1,2-Dibromo-3-chloropropane	<2.0	ug/l	Y Cov	GEO32
1,2,4-Trichlorobenzene	<1.0	ug/l	Y Cov	GEO32
Hexachlorobutadiene	<1.0	ug/l	Y Cov	GEO32
Naphthalene	<1.0	ug/l	Y Cov	GEO32
1,2,3-Trichlorobenzene	<1.0	ug/l	Y Cov	GEO32

Certificate of Analysis

1314
0897
4409

Report Number: **COV/959436/2013** Issue **1**
Laboratory Number: **13724698** Sample **1** of **1**

Sample Source: **Meath County Council**
Sample Point Description:
Sample Description: **D0262**
Sample Matrix: **Waste waters**
Sample Date/Time: **01 October 2013**
Sample Received: **02 October 2013**
Analysis Complete: **21 October 2013**

Test Description	Result	Units	Accreditation		Method
MTBE	<1.0	ug/l	Y	Cov	GEO32
Dibromofluoromethane	102.0	%Recovery	N	Cov	GEO32
Toluene-d8	101.0	%Recovery	N	Cov	GEO32
4-Bromofluorobenzene	95.8	%Recovery	N	Cov	GEO32
Antimony, Total as Sb	0.00709	mg/l	Y	Cov	WAS051
Selenium, Total as Se	<0.0016	mg/l	Y	Cov	WAS051
Arsenic, Total as As	<0.0014	mg/l	Y	Cov	WAS051

Analyst Comments for 13724698: This sample has been analysed for Pesticides method GEO47 & pH outside recommended stability times. It is therefore possible that the results provided may be compromised. Reporting limit raised for diuron due to interference. Unable to report Isoproturon due to quality failure.
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Accreditation Codes: Y = UKAS / ISO17025 Accredited, N = Not UKAS / ISO17025 Accredited, M = MCERTS.
Analysed at: Cov = Coventry(CV4 9GU), Run = Runcorn(WA7 1SL), S = Subcontracted, Wak = Wakefield(WF5 9TG).
For Microbiological determinands 0 or ND=Not Detected, For Legionella ND=Not Detected in volume of sample filtered. The LOD for the Legionella analysis will increase where the volume analysed is <1000g (1g is approximately equivalent to 1ml for sample volume analysed).
I/S=Insufficient sample For soil/sludge samples: AR=As received, DW=Dry weight.

Signed: Name: **J. Fell** Date: **21 October 2013**
Title: **Chemistry Operations Manager**

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