Annual Environmental Report 2014

Agglomeration Name:	**Campile**
Licence Register No.	**D0409**

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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 for D0409-01, Campile, in County Wexford in accordance with the requirements of the wastewater discharge licence for the agglomeration. Specified assessments are included as an appendix to the AER as follows:

- Priority substances assessment

The agglomeration is served by a wastewater treatment plant with a Design PE of 150. The treatment process includes the following:-

- Primary treatment

The final effluent from the Primary Discharge Point was non-compliant with the Emission Limit Values in 2014.

The following parameters exceeded the emission limit values in 2014:-

- cBOD
- COD
- Suspended solids

143 cubic meters of sludge @ 1.18 % Dm were removed from the wastewater treatment plant in 2014 as liquid sludge. Sludge was transferred to Wexford Sludge Centre for processing.

There were no major capital or operational changes undertaken in 2014

An Annual Statement of Measures is included in **Appendix 7.1.**

Section 2. Monitoring Reports Summary

2.1 Summary report on monthly influent monitoring

As there currently is not flow measurement installed and it is not possible to simulate flows with comparable site, data is based on geo directory information and estimated

Table 2.1 - Influent Monitoring Summary

	BOD (mg/l)	COD (mg/l)	SS (mg/l)	TP (mg/l)	TN (mg/l)	Hydraulic Loading (m3/d)	Organic Loading (PE/day)
Number of Samples	12	12	12	12	12		
Annual Max.	479	1660	984	13	71.8	Unknown	616
Annual Mean	149.42	404.8	176.45	4.82	31.96	Unknown	Unknown

Site is currently not equipped with flow measurement, additional collection system is partly combined

Significance of results

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

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

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)	Total N (mg/l)	PH	Temperature	Comment
WWDL ELV (Schedule A)	20% Removal	20% Removal	50% Removal	N/A	N/A	6 - 9	<25 C	
ELV with Condition 2 Interpretation included	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Number of sample results	12	12	12	12	12	11	12	
Number of sample results above WWDL ELV	5	3	4			0	0	
Number of sample results above ELV with Condition 2 Interpretation included	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Overall Compliance (Pass/Fail)	Fail	Fail	Fail	N/A	N/A	Pass	Pass	

Significance of results

The WWTP was non-compliant with the ELV's set in the wastewater discharge licence. There were 5 samples non-compliant with the ELV's in relation to BOD, 3 samples non-compliant with the ELV's in relation to COD and 4 samples non-compliant with the ELV's in relation to Suspended Solids These non-compliance is due to plant overloading. 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	272289 / 1156649	RS13C220990	Good Status	n/a
Downstream monitoring point	272014 / 115446	TW33002097SR6001	Good Status	No

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

Significance of results

The WWTP non-compliant with the ELV's set in the wastewater discharge licence as detailed in Section 2.2.

The discharge from the wastewater treatment plant doesn't have a observable negative impact on the water quality status.

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

The electronic submission of data was completed on: _21 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:-

As there is no available flow data, data below is based on annual Conc. only

Table 3.1 - Treatment Efficiency Report Summary

	cBOD (mg/l)	COD (mg/l)	SS (mg/l)	Total P (mg/l)	Total N (mg/l)	Comment
Influent Conc. mg/l	149.42	404.8	176.45	4.82	31.96	
Effluent Conc. mg/l	118.55	236.58	52.78	4.45	29.99	
% Efficiency (% reduction of influent load)	20.7	41.6	70.1			

3.2 Treatment Capacity Report

Table 3.2 - Treatment Capacity Report Summary

Hydraulic Capacity – Design / As Constructed (dry weather flow) (m3/year)	Unknown
Hydraulic Capacity – Design / As Constructed (peak flow) (m3/year)	Unknown
Hydraulic Capacity – Current loading (m3/year)	Unknown
Hydraulic Capacity – Remaining (m3/year)	0
Organic Capacity - Design / As Constructed (PE)	150
Organic Capacity - Current loading (PE)	96.96 (estimated)
Organic Capacity – Remaining (PE)	0
Will the capacity be exceeded in the next three years? (Yes / No)	N/A Capacity already exceeded

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 of an environmental nature in relation to wastewater treatment plant in 2014

A summary of complaints of an 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)
0	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 incidents	Corrective Action	Authorities Contacted Note 1	Reported to EPA (Yes/No)	Closed (Y/N)
Non Compliance	Breech of Interim ELV BOD	Upgrade required	5	None possible pending	EPA	Yes	Y

				upgrade			
Non Compliance	Breech of interim ELV Suspsended Solids	Upgrade required	4	None possible pending upgrade	EPA	Yes	Y
Non Compliance	Breech of interim ELV COD	Upgrade required	3	None possible pending upgrade	EPA	Yes	Y

Note 1: For shellfish waters notify the Marine Institute (MI) Sea Fisheries Protection Authority (SFPA) Food Safety Authority (FSAI) and An Bord Iascaigh Mhara (BIM). This should also include any other authorities that should be contacted arising from the findings of any Licence Specific Reports also e.g. Drinking Water Abstraction Impact Risk Assessment, Fresh Water Pearl Mussel Impact Assessments etc.

Table 3.5.2 - Summary of Overall Incidents

Number of Incidents in 2014	No. of 12
Number of Incidents reported to the EPA via EDEN in 2014	No. of 12
Explanation of any discrepancies between the two numbers above	n/a

3.6 Sludge / Other inputs to the WWTP

'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	n/a	n/a	n/a	n/a
Industrial / Commercial Sludge	0	n/a	n/a	n/a	n/a
Landfill Leachate (delivered by tanker)	0	n/a	n/a	n/a	n/a
Landfill Leachate (delivered by sewer network)	0	n/a	n/a	n/a	n/a
Other (specify)	0	n/a	n/a	n/a	n/a

Notes:

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

Storm water overflow inspection and assessment report was submitted as part of the 2013 AER report for Compile, which demonstrated full compliance .As there has be no material changes in the interim period, inline with Condition 4.11.2 of granted License, a review is not required till the 2016 AER , which is due for submission by 28th February 2017

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 (m3)	Total volume discharged in 2014 (P.E.)	Estimated /Measured data
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Table 4.1.2 - SWO Identification and Inspection Summary Report

How much sewage was discharged via SWOs in the agglomeration in the year (m3/yr)?	N/A
How much sewage was discharged via SWOs in the agglomeration in the year (p.e.)?	N/A
What % of the total volume of sewage generated in the agglomeration was discharged via SWOs in the agglomeration in 2014?	N/A
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	N/A
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.

The Improvement Programme is included in Appendix 7.3.

The Improvement Programme report included in Appendix 7.3 addresses the **Specified Improvement Programmes** as detailed in Schedules A3 and C of the WWDL. It should details other improvements identified through assessments required under the licence

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
Provision of flow measure and composite sampling	B.1	14/Feb / 2012	Yes	Not Started	0	31/12/2015	Part of IW national programme for flow measurement and sampling
Provision of Primary treatment	C.1	31st Dec 2014	No	N/A	**0**	Unknown	*The improvement programme will be reviewed by Irish Water to assess the works required to comply with the licence condition on a prioritised basis*
Provision of Secondary Treatment	C.1	31st Dec 2015	No	Not Started	0	Unknown	*The improvement programme will be reviewed by Irish Water to assess the works required to comply with the licence condition on a prioritised basis*

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
		WWTP assessment (Condition 5.2).	**100**		
		Sewer Integrity Tool (Condition 5.2).	**100**		
	Insert rows as required	*Secondary discharges assessment (Condition 5.2).*	**N/A**		
		SWO assessment (Condition 4 & 5.2).	**100**		**Completed in 2013 AER**
		Drinking Water Abstraction Risk Assessment (Condition 4)	N/A		
		Shellfish Impact Risk Assessment (Condition 5)		unknown	
		Pearl Mussel Impact Assessment (Condition 4)	N/A		
		Improved Operational Control	0	unknown	
		Incident Reduction	0	unknown	
		Elimination/Reduction of Priority Substances	100		

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 which summarises the Annual Statement of Measures.

Table 4.2.3 - Sewer Integrity Risk Assessment Tool Summary

A Sewer Tool Risk assessment report was submitted as part of the 2012 AER report for Compile, which demonstrated full compliance .As there has be no material changes in the interim period, inline with Condition 4.11.2 of granted License, a review is not required till the 2015 AER , which is due for submission by 28th February 2016

Summary of 2012 assessement

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*	*70*	

Environmental Risk Assessment Score	*Low*	*155*	
Structural Risk Assessment Score	*Medium*	*80*	
Operation & Maintenance Risk Assessment Score	*Low*	*22*	
Overall Risk Score for the agglomeration	*Low*	*327*	

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 (e.g. Appendix 2 Section4.*
Priority Substances Assessment	Yes	Yes	Summary of finding on page 14. Full report in Appendix 7.4
Drinking Water Abstraction Point Risk Assessment	No		
Habitats Impact Assessment	No		
Shellfish Impact Assessment	Yes		Letter of Clarification from IW attached in Apppendix 7.5
Pearl Mussel Report	No		
Toxicity/Leachate Management	No		
Toxicity of Final Effluent Report	No		

Licence Specific Reports Summary of Findings

Licence Specific Report	Recommendations in Report	Summary of Recommendations in Report
Priority Substances Assessment	Yes	No impact is assessed as result of discharge, there is potential for impact additional monitoring is considered to be required
Drinking Water Abstraction Point Risk Assessment	N/A	
Habitats Impact Assessment	N/A	
Shellfish Impact Assessment	N/A	Letter of Clarification from IW attached in Apppendix 7.5
Pearl Mussel Report	N/A	
Toxicity/Leachate Management	N/A	
Toxicity of Final Effluent Report	N/A	

5.1 Priority Substances Assessment

The Priority Substances Assessment report is included in Appendix7.4 _.. 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?	Yes
Does the assessment include a review of other inputs to the works?	Yes
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)	Yes
Does the assessment identify that priority substances may be impacting the receiving water?	Yes
Does the Improvement Programme for the agglomeration include the elimination / reduction of all priority substances identified as having an impact on receiving water quality?	N/A

5.2 Drinking Water Abstraction Point Risk Assessment.

A Drinking Water Abstraction Point Risk Assessment report is not required for inclusion in AER Report_____.. A summary of the findings of this report is included below.

Table 5.2 - Drinking Water Abstraction Point Risk Assessment Summary

	Licensee self- assessment checks to determine whether all relevant information is included in the Assessment.
Is a Drinking Water Abstraction Risk Assessment required in the 2014 AER (or outstanding from a previous AER)	No
Does the Drinking Water Abstraction Risk Assessment identify whether any of the discharges in Schedule A of the licence pose a risk to a drinking water abstraction	N/A
Does the assessment identify if any other discharge(s) from the works pose a risk to a drinking water abstraction (includes emergency overflows)	N/A
What is the overall risk ranking applied by the licensee	N/A

Does the risk assessment consider the impacts of normal operation	N/A
Does the risk assessment consider the impacts of abnormal operation (e.g. incidents /overflows)	N/A
Does the risk assessment include control measures for each risk identified	N/A
Does the risk assessment consider operational control measures e.g? waste water incident notification to drinking water abstraction operator	N/A
Does the risk assessment include infrastructural control measures	N/A
Does the Improvement Programme for the agglomeration include control measures / corrective actions to eliminate / reduce priority substances identified as having an impact on receiving water quality?	N/A

5.3 Shellfish Impact Assessment Report.

A Shellfish Impact Assessment Report report is not required for inclusion in AER Report .. A summary of the findings of this report is included below.

Table 5.3 - Preferred format for Shellfish Impact Assessment Summary

Is a Shellfish Impact assessment required in the 2014 AER (or outstanding from a previous AER)?	Yes
List prescribed organisations consulted when preparing the assessment (BIM, SFPA, MI)	BIM, SFPA, MI
Does the assessment consider the impact of all discharges from the works?	N/A
Does the assessment identify that any of the discharges from the works are impacting on the microbiological quality of the shellfish?	N/A
Does the assessment recommend that there is a requirement to install UV/other disinfection equipment on any of the discharges?	N/A
Provide details on disinfection system to be employed	N/A
Has this been completed?	N/A
If not yet complete what is the expected date for completion?	N/A
Where disinfection is required, is there a programme in place to demonstrate the efficiency of any disinfection system in place?	N/A
What is the demonstrated efficiency of the disinfection system?	N/A
Is there a shellfish monitoring programme in place?	N/A
Does the shellfish or shellfish water monitoring programme include results generated by other organisations	N/A
List organisations contributing data to the assessment	N/A
Does the Improvement Programme for the agglomeration include the findings and recommendations of the shellfish impact risk assessment?	N/A

5.4 Toxicity / Leachate Management

A Toxicity / Leachate Management Assessment report is not required for inclusion in the AER Report A summary of the findings of this report is included below.

Table 5.4 - Toxicity / Leachate Management Report Summary

Is a Toxicity / Leachate Management Report required in the 2014 AER (or outstanding from previous AER)	No
What % of the total influent for the year is leachate?	N/A
Does leachate addition exceed 4% ((volume) of the influent load at any time?	N/A
Maximum leachate loading rate	N/A
Does the leachate study identify any constituents of the material that present an environmental risk?	N/A
List leachate constituent identified and impact *(insert a row for each constituent)*	N/A
Has the WWTP suitability to treat the leachate been assessed?	N/A
What are the results of the assessment (Suitable / Not Suitable / Suitable subject to improvement programme works completion)	N/A
Has the study identified the max and operational loadings (mass, volume and rate of addition) for leachate to the WWTP?	N/A
Is there a monitoring programme for the priority substances identified above?	N/A
Have trigger and action levels for the concentration of identified leachate constituents been established to prevent impact on the receiving water?	N/A
Does the Improvement Programme for the agglomeration include any procedural and/or infrastructural works to reduce the impacts of leachate acceptance on the operation of the wwtp?	N/A

5.5 Toxicity of the Final Effluent Report

A Toxicity / Leachate Management Assessment report is not required for inclusion in AER Report .. A summary of the findings of this report is included below.

Table 5.5 - Toxicity of the Final Effluent Assessment Summary

Is a Toxicity report required? (Condition 4)	No
Has the study been carried out against 4 species in 3 trophic levels?	N/A
Does the report identify that the discharge is toxic to any of the species in the study?	N/A

List species impacted	N/A
Does the Improvement Programme for the agglomeration include any procedural and/or infrastructural works to reduce the toxicity of the final discharge?	N/A

5.6 Pearl Mussel Measures Report

A sub-basin management plan in relation to Pearl Mussels is not required for inclusion in the AER Report __.. A summary of the findings of this report is included below.

Table 5.6 - Pearl Mussel Measure Report Summary

Is a progress report on implementation of the findings of Pearl Mussel Protection Measures report required in the 2014 AER (or outstanding from previous AER)	No
Is there a Pearl Mussel Protection Measures Report for the receiving water body?	N/A
Include hyperlink to internet location of report	N/A
Does this report identify measures relevant to discharges from the waste water works as having a potential impact on the Pearl Mussel habitat?	N/A
List measures relevant to discharges from the waste water works	N/A
Does the Improvement Programme for the agglomeration include any procedural and/or infrastructural works to reduce the impacts of discharge on pearl mussel habitat / populations?	N/A
List Condition 5 Improvement Programme reference	N/A

5.7 Habitats Impact Assessment Report

A Habitats Impact Assessment Report is not required for inclusion in AER Report A summary of the findings of this report is included below.

Table 5.7 - Habitats Impact Assessment Summary

	Licensee self- assessment checks to determine whether all relevant information is included in the Assessment.
Is a Habitats Assessment required in the 2014 AER (includes outstanding assessments from previous years)?	No
Was the scope of the study agreed in advance with NPWS	N/A
Does the report include a Stage 1 screening assessment?	N/A
Does the screening identify that discharges are causing an impact on listed sites?	N/A

Does the report require a Stage 2 Appropriate assessment?	N/A
Does the report identify any European Sites (e.g. SPA, SAC, NHA) that discharges from the works could have an impact on?	N/A
List European sites identified (insert a line for each site identified)	N/A
Does the report include mitigation measures for each identified impact?	N/A
Does each measure explain how the adverse impact will be avoided/reduced?	N/A
Does the Improvement Programme for the agglomeration include any procedural and/or infrastructural works to reduce the impacts of discharges on the a listed site (NHA, SAC, SPA)?	N/A

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 *(insert lines as required)*	
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 *(insert lines as required)*	
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
List outstanding reports *(Shellfish assessment report)*	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: 26/02/2015

Gerry Galvin
Chief Technical Advisor

Section 7. Appendix

In the appendix include all the detailed or site specific reports that are relevant to the AER. Reports omitted from previous AERs should also be appended here.

Appendix 7.1 - Annual Statement of Measures
Appendix 7.2 - Ambient monitoring summary
Appendix 7.3 – Specified Improvement Programme
a) Specified Improvement Programme
b) Programme of Improvements
Appendix 7.4 - Priority substances assessment
Appendix 7.5 Shellfish Assessment Letter

Appendix 7.1 - Annual Statement of Measures

As this agglomeration does not have secondary treatment in place, the discharge license has set interim ELVs for both BOD, TSS and COD which is 20%, 50% and 20% reduction in these parameters respectively. There have been high failure rates with regard to these in all cases. This is all due to the lack of Secondary treatment.

No works have been carried out to the plant in this agglomerations during the period of this AER.

All required reports associated with this agglomeration are now in place except for the Shellfish assessment which is to be complete by a consultant appointed by Irish Water under a national programme.

Improvement programme and specified improvements are outlined in appendix 7.3

No changes have been made to the agglomeration in terms of WWTP upgrade, stormwater discharge or process optimisation . And as such n*o additional measures have been taken in 2014 in relation to prevention of environmental damage. The need for measures to prevent environmental damage will be is reviewed on an annual basis*."

Appendix 7.2 - Ambient monitoring summary

Campile upstream SW1		Ammonia N	BOD, 5 days with Inhibition (Carbonaceous)	COD Chemical Oxygen Demand	Ortho-Phosphate P	pH	Suspended Solids	Total Kejdahl Nitrogen	Total Nitrogen N	Total Oxidised Nitrogen N	Total Phosphate P	Temperature	Dissolved Oxygen	Visual Inspection
		NH3-N		O2	P			N	N	N03-N	P			
Sample Date	Sample Method	mg/l	mg/l	mg/l	mg/l	pH units	mg/l	mg/l	mg/l	mg/l	mg/l	Degrees C	mg/l	Descriptive
18-Feb-14	Grab	0.05	1.4	10	0.02	8	10	1	5.7	5.16	0.1	9	13.34	
17-Apr-14	Grab	0.02	1	10	0.03	7.5	10	1	5.9	5.84	0.19	11.4	14.26	
19-Jun-14	Grab	0.05	1	10	0.04	7.8	10	1.6	7.1	5.52	0.1	15.6	14.35	
12-Aug-14	Grab	0.04	1	13	0.04	7.8	10	1	3.8	3.64	0.1	12.9	14.01	clear,floc/sed, N
17-Sep-14	Grab	48.37	1	10	0.03	8	10	1	5.5	5.1	0.19	15.8	11.21	Clear, no floc/sed, N
07-Oct-14	Grab	0.05	1	11	0.03	7.8	10	1	6.4	5.78	0.16	11	9.94	Clear, no floc/sed, N
26-Nov-14	Grab	0.08	1	10	0.03	7.8	10	2.1	8	5.87	0.1	10.5	10.98	
04-Dec-14	Grab	0.05	1	10	0.03	7.8	10	1	6.8	6.64	0.1	8.7	9.82	Clear, floc/sed, N
Median		0.05	1	10	0.03	7.8	10	1	6.15	5.65	0.1	11.2	12.275	
95%ile		31.4685	1.26	12.3	0.04	8	10	1.925	7.685	6.3705	0.19	15.73	14.3185	

Campile Dowmstream SW1		Ammonia N	BOD, 5 days with Inhibition (Carbonaceous)	COD Chemical Oxygen Demand	Ortho-Phosphate P	pH	Suspended Solids	Total Kejdahl Nitrogen	Total Nitrogen N	Total Oxidised Nitrogen N	Total Phosphate P	Temperature	Dissolved Oxygen	Visual Inspection
		NH3-N		O2	P			N	N	N03-N	P			
Sample Date	Sample Method	mg/l	mg/l	mg/l	mg/l	pH units	mg/l	mg/l	mg/l	mg/l	mg/l	Degrees C	mg/l	Descriptive
18-Feb-14	Grab	0.06	2	10	0.03	7.8	10	1	6.2	5.2	0.29	8.8	12.06	
17-Apr-14	Grab	0.29	2	10	0.06	7.8	10	1	5.5	5.46	0.32	11.6	14.41	
19-Jun-14	Grab	0.93	4	10	0.11	7.6	13	1	6.1	5.41	0.33	15.6	14.1	
12-Aug-14	Grab	0.09	1	23	0.04	7.7	36	2.7	6.2	3.5	0.16	13.6	13.49	clear, floc/sed, Y
17-Sep-14	Grab	0.03	3	11	0.11	7.8	18	1.3	6.2	4.92	0.27	16.1	10.91	Clear, no floc/sed, N
07-Oct-14	Grab	0.18	2	14	0.05	7.7	10	1.9	8.7	6.83	0.21	11.1	10.94	Clear, no floc/sed, N
26-Nov-14	Grab	0.1	1	10	0.04	7.2	10	1.1	6.9	5.84	0.1	10.4	10.75	
04-Dec-14	Grab	0.31	2	24	0.03	7.7	97	1	7.1	6.97	0.37	8.8	10.57	Clear, floc/sed, N
Median		0.14	2	10.5	0.045	7.7	11.5	1.05	6.2	5.435	0.28	11.35	11.5	
95%ile		0.713	3.65	23.65	0.11	7.8	75.65	2.42	8.14	6.921	0.356	15.925	14.3015	

Campile Downstream		Faecal Coliforms
		FC
Sample Date	Sample Method	no./100mls
17-Apr-14	Grab	> 6000
25-Nov-14	Grab	10000

Appendix 7.3 – Specified Improvement Programme

a) With regard to Schedule C: Specified Improvement Programme,
Provision of Primary treatment by 31/12/13, the site currently has primary treatment which is of insufficient capacity.

Provision of Secondary treatment by 31/12/15,
These improvement works were on the DoEHLG, Village bundle scheme. This is now included in Category C of Irish Water's Capital Investment programme. Works to be completed by 31/12/2015.

b) Programme of Improvements
The only immediate improvement plans for this site are the installation of continuous Flow measurement and a composite sampler. There are no other plans to carry out improvements to this works within the period of the next AER.

Appendix 7.4 - Priority substances assessment

Priority Substances Assessment

Agglomeration Name:	**Campile**
Licence Register No.	**D0409**

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Introduction

This report has been prepared for D0409-01, Campile, in County Wexford in accordance with the requirements of Technical Amendment A / Amended Schedule A.1 to the wastewater discharge licence for the agglomeration.

This desk top study has been undertaken to determine the necessity, if any, for analysis of the discharge to comply with the condition in the wastewater discharge licence based on the *Guidance on the Screening for Priority Substances for Waste Water Discharge Licences*, issued by the EPA. Relevant inputs to the waste water works and estimates of emissions from the discharge point have been taken into account in the preparation of this report. Relevant inputs to the waste water works, any relevant measurements / calculations / estimates of emissions from the discharge point and any relevant measurements undertaken at representative downstream monitoring locations have been taken into account in the preparation of this report.

Details of the emissions concentration for the primary discharge and impact on the receiving water are included in Appendix 1.

Desktop Study

1.1 Assessment of Analysis Required

A. Review of all industrial inputs into WWTP

A review of all inputs into WWTP has indicated that there are no industrial type discharges, other discharges with a likelihood of priority substances, leachate discharges or other imports. The wastewater discharged to the wastewater treatment plant, is domestic in nature.

B. Discharge monitoring

There is no recent available monitoring data available for the relevant parameters

C. Downstream monitoring location's participation in relevant monitoring programme

Representative data available from Maine Institute conducted on the Barrow Suir Nore Estuary at Waterford Harbour (Cheekpoint/Arthurstown/Creadan) is attached in Appendix 3

D. Participation in PRTR reporting

The emissions of specific organic compounds and metals (priority substances) have been estimated for the discharge utilising the EPA's urban WWTP calculation tool for PRTR reporting. It is noted from the EPA's report, *An Inventory of Emissions to Waters in Ireland,* that extensive assessment of emission factors was undertaken during 2011 / 2012 that focussed on the evaluation of inputs / output concentrations and removal efficiency using a variety of different sized plants and wastewater treatment options. This has led to the significant refinement of the electronic templates toolkit used for WWTP assessment using the PRTR tool.

All parameters listed in Appendix 1 have emissions data available for the discharge from the PRTR tool. The Total Halogenated Organic Compound Value from the PRTR reporting has been used to give a conservative estimate for Trichloromethane.

The emission concentration from the PRTR has been included in the table in Appendix 1 where analysis data is not available.

1.2 Review outcome of Desktop study

Following the desktop study, all parameters in Appendix 1 have been assessed to establish any potential impact on the receiving waters. Due to the domestic nature of the wastewater in the catchment it is considered that the PRTR tool provides full characterisation of the wastewater and the potential impact on the receiving waters. A review of the national monitoring programme for priority substances in wastewater is proposed to be undertaken by Irish Water in 2015 in consultation with the EPA. It is proposed that this review, in consultation with the EPA, will recommend parameters to be monitored and frequency of monitoring at Irish Water WWTP's.

Assessment of Significance and Recommendations

The assessment carried out above indicates that data is available for all parameters based on either analysis or the PRTR toolkit. The level of dilution is based on 95 percentile flows and the EQS is based on Annual Average concentration requirements. As such the results of the analysis undertaken are conservative.

No parameters have been identified as potentially being higher than the required EQS following dilution at 95 percentile flows therefore no impact on the receiving waters is anticipated.

There is a potential for some impact on the receiving waters based on the assessment carried out. Further analysis is considered necessary to establish the impact, if any, on the receiving waters. A sampling and monitoring programme will be developed by Irish Water in 2015 to assess parameters which may exceed the EQS and require further sampling and analysis.

The EPA have prepared a report on priority substances, *An Inventory of Emissions to Waters in Ireland.* This document states that Ireland appears to have relatively few problems associated with the presence of Priority / Priority Hazardous substances in its surface waters. It identifies that wastewater discharges are a potential source of metals in receiving waters with lead being the main metal identified as associated with wastewater discharges. However, metals exceedences, in particular those for cadmium, lead, and nickel are primarily associated with areas of historic mining activity. Similarly PAH's have been identified in stormwater overflows but the most significant source is considered to be rainfall.
A consultation process with the EPA is proposed to be undertaken by Irish Water in 2015 to establish appropriate levels of monitoring for priority and dangerous substances, taking into account the particular requirements of the Water Framework Directive. This will allow a targeted monitoring programme to be undertaken in areas where priority substances have been identified or industrial discharges or imports provide a potential source, and where there is a shortfall of existing monitoring data.

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?	Yes
Does the assessment include a review of other inputs to the works?	Yes
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)	Yes

Does the assessment identify that priority substances may be impacting the receiving water?	Yes
Does the Improvement Programme for the agglomeration include the elimination / reduction of all priority substances identified as having an impact on receiving water quality?	n/a /

Appendix 1 – Screening of Parameters for Priority Substances

Appendix 1.1 PTRT Estimated Conc. mg/l

UWWT Facility Details:	<10000 p.e., No saline intrusion, Primary Treatment Only, No Nutrient Removal

PRTR substances estimated by tool:			
PRTR Nr.	**CAS No.**	**Parameter**	**Treated Effluent Concentration (mg/l)**
12		Total nitrogen (as N)	34.322
13		Total phosphorus (as P)	4.801
76		Total organic carbon	54.597
79		Chlorides (as total Cl)	75.828
82		Cyanides (as total CN)	0.003
83		Fluorides (as total F)	0.300
17		Arsenic and compounds (as As)	0.468
18		Cadmium and compounds (as Cd)	0.000
19		Chromium and compounds (as Cr)	0.003
20		Copper and compounds (as Cu)	0.046
21		Mercury and compounds (as Hg)	0.000
22		Nickel and compounds (as Ni)	0.006
23		Lead and compounds (as Pb)	0.008
24		Zinc and compounds (as Zn)	0.147
31	85535-84-8	Chloroalkanes (C10-C13)	0.000
25	15972-60-8	Alachlor	0.000
26	309-00-2	Aldrin	0.000
36	60-57-1	Dieldrin	0.000
39	72-20-8	Endrin	0.000
41	76-44-8	Heptachlor	0.000
28	57-74-9	Chlordane	0.000
29	143-50-0	Chlordecone	0.000
46	2385-85-5	Mirex	0.016
38	115-29-7	Endosulphan	0.000

45	58-89-9	Lindane (1,2,3,4,5, 6 -hexachlorocyclohexane)	0.000
89	465-73-6	Isodrin	0.000
33	50-29-3	DDT - sum of all isomers	0.000
77	1582-09-8	Trifluralin	0.000
42	118-74-1	Hexachlorobenzene (HCB)	0.000
43	87-68-3	Hexachlorobutadiene (HCBD)	0.000
30	470-90-6	Chlorfenvinphos	0.000
32	2921-88-2	Chlorpyrifos	0.000
27	1912-24-9	Atrazine	0.000
51	122-34-9	Simazine	0.000
37	330-54-1	Diuron	0.000
67	34123-59-6	Isoproturon	0.000
75		Triphenyltin	0.000
69		Organotin	0.000
74		Tributyltin	0.000
72		PAH, Total	0.000
91	191-24-2	Benzo[ghi]perylene	0.000
61	120-12-7	Anthracene	0.000
68	91-20-3	Naphthalene	0.000
88	206-44-0	Flouranthene	0.000
50	1336-36-3	Polychlorinated biphenyls (PCBs) - sum of 11 congenors	0.000
40		Halogenated organic compounds (as AOX)	0.002
52	127-18-4	Tetrachloroethylene (PER)	0.000
53	56-23-5	Tetrachloromethane (TCM)	0.000
57	79-01-6	Trichloroethylene	0.000
60	75-01-4	Vinyl chloride	0.000
34	107-06-2	1,2-dichloroethane (EDC)	0.000
35	75-09-2	Dichloromethane (DCM)	0.001
71	108-95-2	Phenols (as total C)	0.041
87	1806-	Octylphenols and Octylphenol Ethoxylates	0.000

	26-4		
64		Nonylphenol and Nonylphenol ethoxylates (NP/NPEs)	0.000
54	12002-48-1	Trichlorobenzenes (TCBs) (all isomers)	0.000
49	87-86-5	Pentachlorophenol (PCP)	0.000
48	608-93-5	Pentachlorobenzene	0.000
62	71-43-2	Benzene as BTEX	0.000
73	108-88-3	Toluene as BTEX	0.007
78	1330-20-7	Xylenes (total mass of ortho, para and meta-xylene)BTEX	0.000
65	100-41-4	Ethyl benzene (BTEX)	0.000
70	117-81-7	Di(2-ethylhexyl)phthalate	0.009
59	8001-35-2	Toxaphene	0.000
90	36355-1-8	Hexabromobiphenyl	0.000
63		Brominated diphenylethers (PBDE)	0.000
N/A		Total Hardness (mg/l CaCO3)	183.000
N/A		Selenium	0.000
N/A		Antimony	0.000
N/A		Molybdenum	0.000
N/A		Tin	0.002
N/A		Barium	0.045
N/A		Boron	0.073
N/A		Cobalt	0.000
N/A		Vanadium	0.002
N/A		Dichlobenil	0.000
N/A		Linuron	0.000
N/A		Mecoprop	0.000
N/A		2,4-D	0.000
N/A		MCPA	0.000
N/A		Glyphosate	0.010
N/A		Benzo[a]pyrene	0.000
N/A		Benzo[b]fluoranthene	0.000
N/A		Benzo[k]fluoranthene	0.000
N/A		Indeno[1,2,3-c,d]pyrene	0.000
N/A		Carbon tetrachloride	0.000
N/A		2,6-Dichlorobenzamide	0.000
N/A		Dicofol	-
N/A		Hexabromocyclododecane (HBCD)	0.000

Parameters to be Screened for in Waste Water Discharges Parameters to be Screened for in Waste Water Discharges
AA: average annual
EQS: environmental quality standards
Dilution factor in receiving water: 10

No.	Compound	Group of compounds	AA-EQS Inland SW (µg/l)	AA-EQS Other SW (µg/l)	Measured /Estimated Conc. (µg/l)[1]	Data Source [Sample / PRTR / Other (state)]	Sample Date (if applicable)	Effluent Concentration above AA concentration (Yes/No)	Effluent Concentration above AA concentration after dilution (Yes/No)
1	Benzene	VOCs	10	8	Estimate	PTRT		N	N
2	Carbon tetrachloride	VOCs	12	12	Estimate	PTRT		N	N
3	1,2-Dichloroethane	VOCs	10	10	Estimate	PTRT		N	N
4	Dichloromethane	VOCs	20	20	Estimate	PTRT		N	N
5	Tetrachloroethylene	VOCs	10	10	Estimate	PTRT		N	N
6	Trichloroethylene	VOCs	10	10	Estimate	PTRT		N	N
7	Trichlorobenzenes	VOCs	0.4	0.4	Estimate	PTRT		N	N
8	Trichloromethane	VOCs	2.5	2.5	Estimate	PTRT		N	N
9	Xylenes (all isomers)	VOCs	10	10	Estimate	PTRT		N	N
10	Ethyl Benzene	VOCs	10	10	Estimate	PTRT		N	N
11	Toluene	VOCs	10	10	Estimate	PTRT		N	N
12	Naphthlene	PAHs	2.4	1.2	Estimate	PTRT		N	N
13	Fluoranthene	PAHs	0.1	0.1	Estimate	PTRT		N	N
14	Benzo[k]fluoranthene	PAHs	0.03	0.03	Estimate	PTRT		N	N
15	Benzo[ghi]perylene	PAHs	0.002	0.002	Estimate	PTRT		N	N
16	Indeno[1,2,3-c,d]pyrene	PAHs	0.002	0.002	Estimate	PTRT		N	N
17	Benzo[b]fluoranthene	PAHs	0.03	0.03	Estimate	PTRT		N	N
18	Benzo[a]pyrene	PAHs	0.05	0.05	Estimate	PTRT		N	N
19	Di(2-ethylhexyl)phthalate (DEHP)	Plasticiser	1.3	1.3	Estimate	PTRT		N	N
20	Isodrin	Pesticides	0.01	0.005	Estimate	PTRT		N	N
21	Dieldrin	Pesticides	0.01	0.005	Estimate	PTRT		N	N

No.	Compound	Group of compounds	AA-EQS Inland SW (µg/l)	AA-EQS Other SW (µg/l)	Measured /Estimated Conc. (µg/l)[1]	Data Source [Sample / PRTR / Other (state)]	Sample Date (if applicable)	Effluent Concentration above AA concentration (Yes/No)	Effluent Concentration above AA concentration after dilution (Yes/No)
22	Diuron	Pesticides	0.2	0.2	Estimate	PTRT		N	N
23	Isoproturon	Pesticides	0.3	0.3	Estimate	PTRT		N	N
24	Atrazine	Pesticides	0.6	0.6	Estimate	PTRT		N	N
25	Simazine	Pesticides	1	1	Estimate	PTRT		N	N
26	Glyphosate	Pesticides	60	-	Estimate	PTRT		N	N
27	Mecoprop	Pesticides	0.02	0.02	Estimate	PTRT		N	N
28	2,4-D	Pesticides	n/a	n/a				n/a	n/a
29	MCPA	Pesticides	n/a	n/a				n/a	n/a
30	Linuron	Pesticides	0.7	0.7	Estimate	PTRT		N	N
31	Dichlobenil	Pesticides	n/a	n/a				n/a	n/a
32	2,6-Dichlorobenzamide	Pesticides	n/a	n/a				n/a	n/a
33	PCBs	PCBs	0.1	0.1	Estimate	PTRT		N	N
34	Phenols (as Total C)	Phenols	8	8	Estimate	PTRT		y	N
35	Lead	Metals	7.2	7.2	Estimate	PTRT		y	N
36	Arsenic	Metals	25	20	Estimate	PTRT		N	N
37	Copper	Metals	5 or 100[2]	5	Estimate	PTRT		N	N
38	Zinc	Metals	8 or 50 or 100[3]	40	Estimate	PTRT		N	N
39	Cadmium	Metals	0.08	0.2	Estimate	PTRT		N	N
40	Mercury	Metals	0.05	0.05	Estimate	PTRT		N	N
41	Chromium	Metals	3.4	0.6	Estimate	PTRT		N	N
42	Selenium	Metals	5.3	5.3	Estimate	PTRT		N	N
43	Antimony	Metals	0.4	0.4	Estimate	PTRT		N	N
44	Molybdenum	Metals	4.3	4.3	Estimate	PTRT		N	N
45	Tin	Metals	0.2	0.2	Estimate	PTRT		N	N
46	Barium	Metals	1	1	Estimate	PTRT		y	N

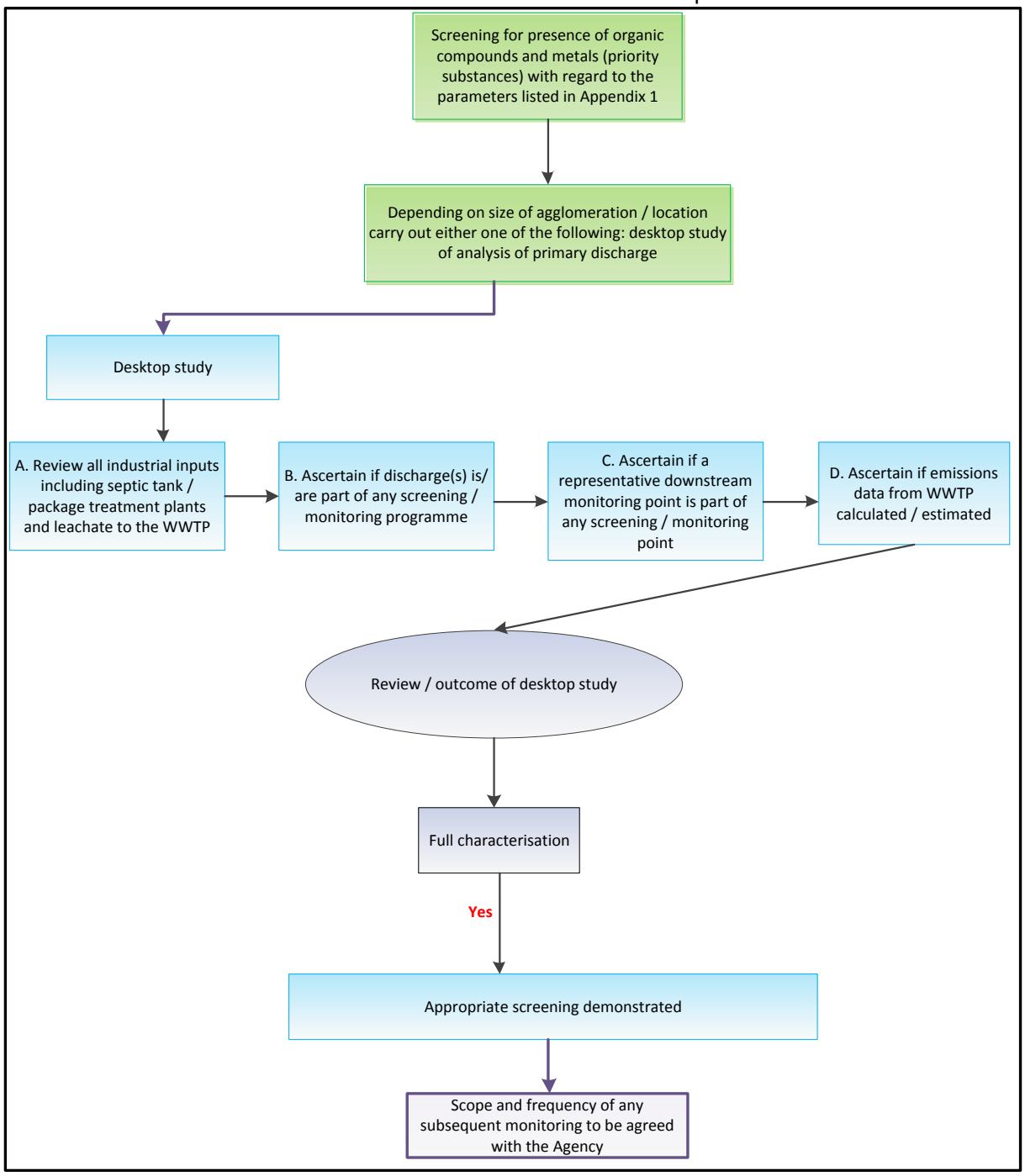
No.	Compound	Group of compounds	AA-EQS Inland SW (µg/l)	AA-EQS Other SW (µg/l)	Measured /Estimated Conc. (µg/l)[1]	Data Source [Sample / PRTR / Other (state)]	Sample Date (if applicable)	Effluent Concentration above AA concentration (Yes/No)	Effluent Concentration above AA concentration after dilution (Yes/No)
47	Boron	Metals	6.5	6.5	Estimate	PTRT		y	N
48	Cobalt	Metals	0.2	0.2	Estimate	PTRT		N	N
49	Vanadium	Metals	0.9	0.9	Estimate	PTRT		Y	N
50	Nickel	Metals	20	20	Estimate	PTRT		N	N
51	Fluoride	General	500	500	Estimate	PTRT		N	N
52	Chloride	General	250000	250000	Estimate	PTRT		N	N
53	TOC	General	n/a	n/a				n/a	n/a
54	Cyanide	General	10	10	Estimate	PTRT		N	N
	Conductivity	General	n/a	n/a				n/a	n/a
	Hardness (mg/l $CaCO_3$)	General	n/a	n/a				n/a	n/a
	pH	General	n/a	n/a				n/a	n/a

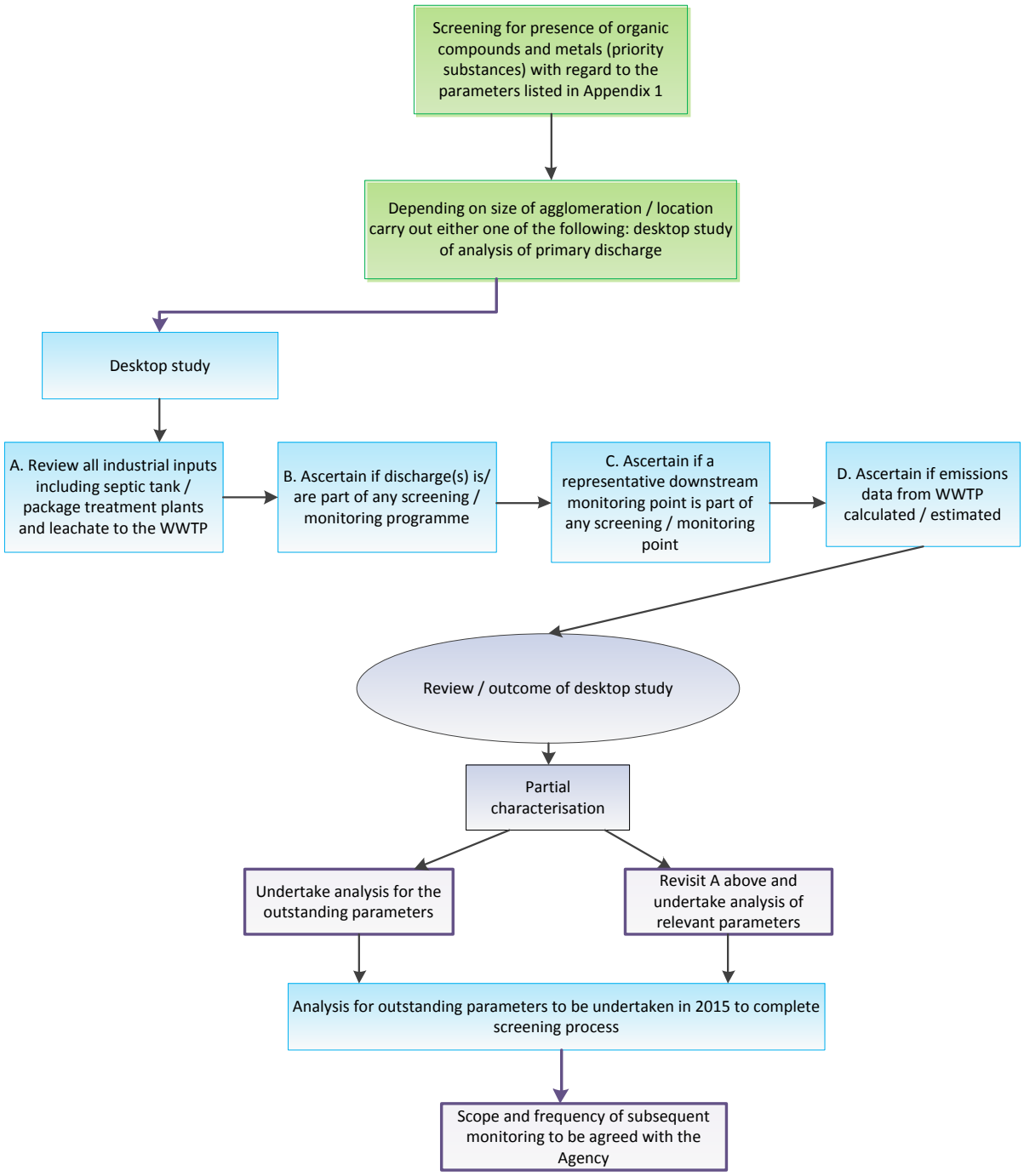
Notes:

1. Where measured values are available these should be used instead of estimated values from PRTR tool.
2. In the case of Copper the value 5 applies where the water hardness measured in mg/l $CaCO_3$ is less than or equal to 100; the value 30 applies where the water hardness exceeds 100 mg/l $CaCO_3$. Estimated $CaCO_3$ value > 100 where no sampling data available (based on PRTR tool)
3. In the case of Zinc, the standard shall be 8 µg/l for water hardness with annual average values less than or equal to 10 mg/l CaCO3, 50 µg/l for water hardness greater than 10 mg/l $CaCO_3$ and less than or equal to 100 mg/l CaCO3 and 100 µg/l elsewhere. Estimated $CaCO_3$ value > 100 where no sampling data available

Appendix 2 – Priority Substance Screening Flowchart

A flow chart for the screening of the presence of organic compounds and metals (Priority Substances) from WWTP is included below. This flowchart shows that appropriate screening has been demonstrated in line with the assessment undertaken in this report.




Screening for presence of organic compounds and metals (priority substances) with regard to the parameters listed in Appendix 1
Depending on size of agglomeration / location carry out either one of the following: desktop study of analysis of primary discharge
Desktop study
A. Review all industrial inputs including septic tank / package treatment plants and leachate to the WWTP
B. Ascertain if discharge(s) is/ are part of any screening / monitoring programme
C. Ascertain if a representative downstream monitoring point is part of any screening / monitoring point
D. Ascertain if emissions data from WWTP calculated / estimated
Review / outcome of desktop study
Partial characterisation
Undertake analysis for the outstanding parameters
Revisit A above and undertake analysis of relevant parameters
Analysis for outstanding parameters to be undertaken in 2015 to complete screening process
Scope and frequency of subsequent monitoring to be agreed with the Agency

Appendix 3 – Receiving Waters Priority Substance Data

Sample Point	Waterford Harbour (Cheekpoint/Arthurstown/Creadan)

Latitude	Longitude
52.2521	-6.9913

Sample Data	21/01/2014

1,2,3-trichlorobenzene (ug/l)	1,2,4-trichlorobenzene (ug/l)	1,2-dichloroethane (ug/l)	1,3,5-trichlorobenzene (ug/l)	2,4-dichlorophenoxyacetic acid (ug/l)	4-Nonylphenol (ug/l)	4-Octylphenol (ug/l)	acenaphthylene (pg/l)	acetic acid (4-chloro-2-mp) (ug/l)	anthracene (ug/l)	arsenic (ug/l)	atrazine (ug/l)
<0.03	<0.03	<0.05	<0.03	<0.01	<0.01	<0.01		<0.02	<0.005	1.166	<0.01

benzene (ug/l)	benzo[a]pyrene (ug/l)	benzo[b]fluoranthene (ug/l)	benzo[b+k]fluoranthene (ug/l)	benzo[ghi]perylene (ug/l)	benzo[k]fluoranthene (ug/l)	cadmium (ug/l)	chlorophyll-a (probe) (ug/l)	chromium (ug/l)	conductivity (ug/l)	copper (ug/l)	dichloromethane (ug/l)
<0.05	0.002	<0.005	<0.005	0.002	<0.005	<0.05	1.86	0.159	0.0213	0.38	<0.05

dissolved oxygen (%)	dissolved oxygen concentration (mg/l)	diuron (ug/l)	fluoranthene (ug/l)	glyphosate (ug/l)	indeno[1,2,3-cd]pyrene (ug/l)	lead (ug/l)	linuron (ug/l)	m- & p-xylene (ug/l)	mecoprop (ug/l)	mercury (ng/l)	naphthalene (ug/l)
94.1	9.74	<0.03	<0.005	<0.04	<0.002	<0.1	<0.03	<0.05	<0.02	1.37	<0.005

nickel (ug/l)	nonylphenoldiethoxylates (ug/l)
0.428	<0.01

Appendix 7.5 Letter of clarification on Shellfisk Assessment

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11th February 2015

RE: Shellfish Waters Impact Assessment Requirements

To whom it may concern,

Irish Water has a large number of EPA enforcement actions (>35) requiring the preparation of Shellfish Water Impact Assessments pursuant to conditions of discharge licenses and certificates, many of which have been outstanding for a number of years. Irish Water is currently developing a strategy for delivery of these Shellfish Impact Assessments.

The uncertainty surrounding the legal standing of the Shellfish Water Regulations S.I. No. 268/2006, given that the Shellfish Waters Directive 2006/113/EC has been repealed by the Water Framework Directive 2000/60/EC and the fact that there are currently no standards for bacteria and viruses in effluent or in shellfish waters, presents some difficulty in undertaking these assessments.

The EPA's guidance document "**Guidance on Conducting an Assessment of the Impact of Discharges from a Waste Water Works on the Microbiological Quality of Shellfish in Adjacent Designated Shellfish Waters"** requires the assessment of the impact of discharges on shellfish in adjacent designated Shellfish Waters, however as previously stated, relevant standards do not exist in Irish law.

The current work on Characterisation under the Water Framework Directive presents an opportunity for a more holistic and accurate assessment to be made of the impact (if any) on Shellfish Waters, and appropriate mitigation measures to be implemented.

On the 22nd of October, Irish Water consulted with the Sea Fisheries Protection Agency and the Marine Institute with regards to the preparation of Shellfish Impact Assessments. It was agreed that there is uncertainty with regards to the requirements of the Shellfish Waters Regulations and the setting of objectives for shellfish waters under the Water Framework Directive. Subsequent to this meeting Irish Water have met and written to the Department of Environment, Community and Local Government requesting clarification on the development of policies with regards to shellfish waters and their protection and any relevant standards that may be used under the Water Framework Directive.

Not withstanding the above Irish Water will continue to work with the Marine Institute, the Sea Fisheries Protection Agency, the EPA and other relevant stakeholders to identify those plants which may be impacting on shellfish production areas.

Irish Water has now collated national datasets to inform assessments which include

- 2013 data from the Marine Institute collected as a requirement of the Shellfish Waters Regulations which was provided to Irish Water in January 2015.
- 2013 EPA physiochemical data for coastal waters and transitional waters provided to Irish Water in December 2014.
- 2014 *E.Coli* datasets from the Sea Fisheries Protection Agency provided to irish Water in December 2014.

Irish Water are expecting feedback in early 2015 from the Marine Institute and Sea Fisheries Protection Agency on areas where they consider that discharges from Irish Water facilities may be impacting on shellfish production areas. This feedback in conjunction with analysis data from the Marine Institute and Sea Fisheries Protection Agency will be used to inform the next stage in the assessment process.

Irish Water propose to firstly complete detailed desk based assessments for these agglomerations. These reports will be provided to the EPA by the end of June 2015. These assessments will either screen out impact or identify the need for further assessment.

Irish Water would welcome an opportunity to participate in any expert or working group that may be established to advance the work on the setting of appropriate standards and assessment for shellfish waters in Ireland.

Best Regards,

Gerry Galvin

Chief Technical Advisor