TITLE: D0129-01 Passage West / Monkstown 2013 AER.

PASSAGE WEST / MONKSTOWN AGGLOMERATION
ANNUAL ENVIRONMENTAL REPORT

1ST January 2013 – 31st December 2013

For Waste Water

LICENCE REG. NO. D0129-01

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A.Introduction

Cork County Council holds a Waste Water Discharge Licence (Register No. D0129-01) in respect of the agglomeration named Passage West/Monkstown. This licence was granted on 20th July 2010. The aim of this Annual Environmental Report (AER) is to provide a review of activities relevant to the discharge from 1st January 2013 to 31st December 2013.

The required scope of the report is outlined in Schedule D (Annual Environmental Report) of the Waste Water Discharge Licence.

B.Preparation of the AER for 2013

Condition 6 and Schedule D of the WWDL licence sets out the contents required of the AER. The range of contents required may differ from one licence to another so it is important to check the AER requirements of each licence (conditions and schedules).

The AER requirements and the format of the AER may be considered under the following seven categories;

1. Executive summary and introduction to 2013 AER
2. Monitoring reports summary
3. Operational reports summary
4. Infrastructural Assessment and Programme of Improvements
5. Licence specific reports
6. Certification and Sign Off
7. Appendix

The AER submitted should be prepared under the 7 different sections listed above. The remainder of this guidance document will briefly set out what is expected under each of these headings. Each licensee should ensure that the AER contains all the information that is required under the licence and is presented as outlined in this guidance document.

Important Note: From 2012 Environmental Liabilities Risk Assessment and Financial Provisions are no longer required from all Waste Water Discharge Authorisations (WWDL and COA). The Water Service Authority is required to prepare and submit an Annual Statement of Measures as part of the AER. This must contain the measures taken or adopted by the Licensee to prevent environmental damage anticipated following events or accidents/incidents associated with discharges or overflows from the waste water works. This should include including cessation / decommissioning of any discharge associated with the works if expected within 3 years. This statement must be signed by the Director(s) responsible for the WWDL each year. This should address the list of impacts /improvements identified in the Condition 5 assessment of the existing works, the storm water overflow identification and assessment and licence specific reports (e.g. drinking water abstraction risk assessment, shellfish impact risk assessment).

Where outstanding assessments and/or reports that were due in the 2013 or earlier AERs are being provided their findings should be included in the relevant summary report section of the AER. Where relevant the main reports on which the summary is based can be attached as an appendix to the AER.

It is a WWDL requirement that each AER report is **certified** as accurate and is representative by a nominated suitably qualified and experienced person.

Where the AER relies on colour coding to illustrate findings the pdf copy must be in colour. If you have further queries in relation to this guidance document or regarding the content of the AER please contact Brendan Kissane at b.kissane@epa.ie.

Section 1. Executive Summary and Introduction to the 2013 AER

1.1 Summary report on 2013

Cork County Council holds a Waste Water Discharge Licence (Register No. D0129-01) in respect of the agglomeration named Passage West/Monkstown. This licence was granted on 20th July 2010. The aim of this Annual Environmental Report (AER) is to provide a review of activities relevant to the discharge from 1st January 2013 to 31st December 2013.

This licence relates to the Passage West / Monkstown agglomeration serving the villages of Passage West, Glenbrook and Monkstown. The existing sewer network, with the exception of the newer residential estates, is served by a combined system.

There is no waste water treatment plant in Passage West / Monkstown and waste water discharges untreated to Lough Mahon through three outfall points. Comminutors are installed on these discharge points. The largest flow is discharged through Pembroke outfall (primary discharge) in Passage West. There are two other secondary discharges of untreated waste water from the agglomeration. There are five pumping stations and four pumping stations have emergency overflows which also act as combined storm water overflows. There is evidence of seawater and rainfall infiltration. The current load from the agglomeration is estimated at a population equivalent (p.e.) of 7,600, which includes an estimated load of 10% for pending development. The waste water is predominantly domestic with 10% attributed to commercial and institutional waste water

As the agglomeration is between 2,000 and 10,000 p.e., secondary treatment was required under the Urban Waste Water Regulations, 2001 (S.I. No. 254 of 2001) (UWW Regulations) by 31/12/05 but such treatment has not been provided. It is proposed to upgrade the Passage West / Monkstown sewer network and pump waste water to the proposed urban waste water treatment plant (UWWTP) at Shanbally which is expected to be operational by late 2016. Thyis proposal forms part of the Cork Lower Harbour Sewerage Scheme (also referred to as the Cork Harbour Main Drainage Scheme). It is proposed that storm water overflows will be designed in accordance with the DoECLG 'Procedures and Criteria in relation to storm water overflows', 1995.

Section 2. Monitoring Reports Summary

2.1 Summary report on monthly influent monitoring

Condition 4.1 states that *"The licensee shall carry out such sampling, analyses, measurement, examinations, maintenance and calibrations as set out below and in accordance with Schedule B: Monitoring of this licence".*

Influent monitoring is not carried out as there is no waste water treatment plant in Passage West / Monkstown and waste water discharges to Lough Mahon through three outfall points

Preferred format for the Influent Monitoring Summary Table:

	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							
Annual Max.							
Annual Mean							

2.2 Discharges from the agglomeration

Condition 4.1 states that *"The licensee shall carry out such sampling, analyses, measurement, examinations, maintenance and calibrations as set out below and in accordance with Schedule B: Monitoring of this licence".*

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2.2.1 Monitoring of Primary Waste Water Discharge

Schedule B, Section B.1 states that *"No Primary Waste Water Discharge monitoring is required in this licence"*.

2.2.2 Monitoring of Secondary Discharge

Schedule B, Section B.2 states that *"No Secondary Waste Water Discharge monitoring is required in this licence"*.

Interpretation of the discharge monitoring results is therefore not required.`

Preferred format for the Effluent Monitoring Summary Table

	BOD (mg/l)	COD (mg/l)	TSS (mg/l)	Total P (mg/l)	Total N (mg/l)	Other Parameters specified in the WWDL	Comment
WWDL ELV (Schedule A)							
ELV with Condition 2 Interpretation included							
Number of sample results							
Number of sample results above WWDL ELV						Insert a new column for	Include any relevant

						each extra parameter	explanatory notes
Number of sample results above ELV with Condition 2 Interpretation included							e.g. grab / composite taken
Annual Mean (for parameters where a mean ELV applies)							
Overall Compliance (Pass/Fail)							

2.3Ambient monitoring summary

Condition 4.8 states that *"The licensee shall report annually in the AER on the chemical and ecological status of the receiving water, etc".* Refer to Appendix 7.1.

A summary presentation of ambient monitoring results as set out in Schedule B of the licence. This must include an interpretation of the impact of the discharge(s) from the agglomeration on the receiving water i.e comparison of results against any designation of the receiving water (e.g. EQS, Pearl Mussel, Shellfish, Bathing Water Regulations).

If the licensee is not satisfied with the location of the licensed ambient monitoring points, they must apply to the EPA for a change to the location using Condition 4 (typically 4.13). Similarly if the ambient monitoring locations are not specified in the licence and are to be agreed by the Agency, the licensee should apply to the EPA for approval of these locations. A form for agreeing ambient monitoring locations is available on the WWDL guidance section of the EPA website.

Each Water Services Authority is advised to consider using any relevant and reliable ambient monitoring conducted by other organisations when completing their ambient monitoring programme or deciding on a relevant monitoring location.Licensees are required to submit all ambient monitoring from licenced and approved monitoring locations electronically via EDEN at https://www.edenireland.ie/. The codes for ambient monitoring locations to achieve this upload can only be created using the EPA's Feature Coding Tool on EDEN.

Preferred format for the Ambient Monitoring Report Summary Table:

Ambient Monitoring Point from WWDL (or as agreed with EPA)	***Irish Grid Reference***	**EPA Feature Coding Tool code**	**Does assessment of the ambient monitoring results indicate that the discharge is impacting on water quality?**
Insert a line for each ambient monitoring location		LE310	
		LE330	
		LE340	

The results for the upstream and downstream monitoring should be included as an appendix to the AER.

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

No data was collected under the UWWT Directive.

The monitoring data is to be submitted electronically via EDEN at https://www.edenireland.ie/and the plant and agglomeration data is to be submitted using the excel spread sheet circulated in early 2014. The spread-sheet replaces the on-line Urban Waste Water System used in previous years. As with previous years the EPA will separately make a request to the Water Services Authority requiring the submission of the annual urban waste water information for agglomerations and treatment plants for the previous year. This request will require submission of the relevant data by the 26th of February (to allow for confirmation of submission in the AER on the 28th February). It will be sufficient for the purposes of AER reporting to confirm the date the electronic submission was made. Note that data can be uploaded to EDEN once it is available and there is no need to wait to commence uploading until the EPA issues the formal request for data.If you have any queries on the preparation or submission of this data please contact wastewaterreturns@epa.ie

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

Important change from 2012: The requirement to submit a PRTR only applies to Waste Water Discharge Licences granted to agglomerations greater than 2000 p.e.

Please see Appendix 7.5

This means that all agglomerations greater than 2000 p.e. have to report their annual mass emissions to Air and Water, and their Waste Transfers using the AER/PRTR Emissions Reporting Workbook. Agglomerations less than 2000 p.e. have no PRTR reporting requirement from 2013. Sector Specific Guidance is provided for UWWTP operators on how to complete the AER / PRTR Emissions Reporting Workbook at the following link:
AER PRTR UWWTP Guidance V6.0 January 2013

The AER/PRTR Emissions Reporting Workbook can be downloaded from the AER reporting website using the site specific login details and when completed it should be submitted electronically via the AER reporting website at the following link: http://aer.epa.ie/reporting/pgLogon.aspx

Reporting Guidance on the: UWW PRTR Electronic Toolset V5.0is also available on the EPA website at the following link: Reporting Guidance for the UWW PRTR Electronic Toolset V5.0 Nov 2012

A reminder email regarding the AER/PRTR reporting requirements will be issued to all relevant Waste Water Discharge Licence holders early in the New Year. WWTPs that were newly licensed in the last quarter of the reporting year (**1St October to 31st December)** are not required to complete a PRTR Emissions Report for that reporting year but will be required to do so in subsequent years.

The AER/PRTR Emissions Reporting Workbook is designed to allow the information to be printed out and inserted directly into the AER without any additional formatting. When creating the pdf AER, the PRTR Emissions Reporting Workbook can be converted to pdf and merged with the pdf copy of the AER using Adobe Acrobat, or it can be scanned and added to the AER.

If you have any queries which are not addressed in theAER PRTR UWWTP Guidance V6.0 January 2013) or the other documents please contact the AER/PRTR Helpdesk at the following e-mail address aerreturns@epa.ie.

Section 3Operational Reports Summary

3.1Treatment Efficiency Report

This sub-section cannot be completed until a wastewater treatment plant is operational.

Preferred format for the Treatment Efficiency Report Summary Table

	cBOD (kg/yr)	COD (kg/yr)	SS (kg/yr)	Total P (kg/yr)	Total N (kg/yr)	Comment
Influent mass loading (kg/year)						
Effluent mass emission (kg/year)						
% Efficiency (% reduction of influent load)						

3.2 Treatment Capacity Report

This sub-section cannot be completed until a wastewater treatment plant is operational.

Preferred format for the Treatment Capacity Report Summary Table:

Hydraulic Capacity – Design / As Constructed (m3/year)	
Hydraulic Capacity – Current loading (m3/year)	
Hydraulic Capacity – Remaining (m3/year)	
Organic Capacity - Design / As Constructed (PE)	
Organic Capacity - Current loading (PE)	
Organic Capacity – Remaining (PE)	
Will the capacity be exceeded in the next three years? (Yes / No)	

A copy of the detailed assessment can be included as an appendix to the AER. Where relevant, findings from this assessment should be considered under the Programme of Improvements required under Condition 5.

3.3Extent of Agglomeration Summary Report – New for 2013 AER

In this section the Water Services Authority is required to report on the amount of urban waste water generated within an agglomeration depending on whether it is collected and treated in a municipal waste water works or in a private system (e.g a private housing estate with a Section 4 discharge licence):

Preferred format for Extent of Agglomeration Summary Report

	% of total load generated in the agglomeration
Load generated in the agglomeration that is collected in the sewer network	**98%Estimate**
Load collected in the agglomerations that enters treatment plant	**0%**
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	**2%Estimate**

treated.	

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

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

Load generated in the agglomeration going to individual and appropriate treatment systems is the total load generated within the boundary of the agglomeration which is managed by individual and appropriate treatment systems e.g. private or public small package plants within the agglomeration.

Load generated in the agglomeration that is not collected and not individually treated is the total load which is generated in the agglomeration and which is not collected in the sewer network nor is it treated in an individual and appropriate treatment plant.

Individual and Appropriate System (IAS) is one that provides the same level of environmental protection as provided for urban waste water discharged into the collection system.

Load generated in the agglomeration is the total amount of urban waste water generated within the boundary of the agglomeration = Load generated in the agglomeration that is collected in the sewer network +Load generated in the agglomeration going to individual and appropriate treatment systems + Load generated in the agglomeration that is not collected and not individually treated.

3.4Complaints Summary

Condition 6 of the WWDL requires that:

"The licensee shall record all complaints of an environmental nature related to the discharge(s) to waters from the waste water works in accordance with the national environmental complaints procedure. Each record shall give details of the date and time of the complaint, the name of the complainant (if provided), and the nature of the complaint. A record shall also be kept of the response made in the case of each complaint."

Please find below a suggested format for reporting this information.The Water Services Authority is advised to consider their obligations under the Data Protection Act (as amended) when submitting data in the complaints summary.

No reportable incidents occurred in 2013 relating to the discharge(s) to water from waste water works.

Preferred format for the Complaints Summary Table:

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

3.5Reported Incidents Summary

Condition 6 of the WWDL requires that:
"The licensee shall make a record of any incident. This record shall include details of the nature, extent and impact of, and circumstances giving rise to, the incident. The record shall include all corrective actions taken to manage the incident, to minimize the effects on the environment, and to avoid recurrence. The licensee shall, as soon as practicable following incident notification, submit to the Agency the incident record including clean up and recurrence prevention measures."

No reportable incidents occurred in 2013 relating to the discharge(s) to water from waste water works.

The Glossary of Terms in the introduction of each licence defines an incident as follows:
"The following shall constitute an incident (as defined in the licence) for the purpose of this licence
- *any discharge that does not comply with the requirements of this licence;*
- *any incident with the potential for environmental contamination of surface water, or groundwater, or posing an environmental threat to land, or requiring and emergency response by the relevant Water Services Authority."*

Preferred format for the Summary of Incidents table:

Incident Type (e.g. Non-compliance, Emission, spillage, pollution incident)	**Incident Description**	**Cause**	**No. of incidents**	**Corrective Action**	**Authorities Contacted** Note 1	**Reported to EPA (Yes/No)**	**Closed (Y/N)**

Note 1: For designated Shellfish Water 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 contacted arising from the findings of any Licence Specific Reports also e.g. Drinking Water Abstraction Impact Risk Assessment

In addition the following details must be provided:

Number of Incidents in 2013	No. of
Number of Incidents reported to the EPA via EDEN in 2013	No. of
Explanation of any discrepancies between the two numbers above	Explanatory comment for any deviations between the above two numbers

3.6Sludge / Other inputs to the WWTP – New for 2013 AER

This sub-section cannot be completed until a wastewater treatment plant is operational.

All agglomerations are required to provide a report detailing all 'other inputs' to the waste water treatment plant.
Other Inputs include; septic tank sludge, industrial /commercial sludge, landfill leachate and any other sludge that is collected and added to the treatment plant.
Do not include any sludge that is added to a dedicated sludge reception facility at a waste water treatment plant. Only include sludge which is added to the waste water treatment process stream.
Preferred format for Other Inputs table

Input type	**m3/year**	**PE/year**	**% of load**
Domestic /Septic Tank Sludge			
Industrial / Commercial Sludge			
Landfill Leachate (delivered by tanker)			
Landfill Leachate (delivered by sewer network)			
Other (specify)			

Section 4.Infrastructural Assessments and Programme of Improvements

4.1Storm water overflow identification and inspection report

Condition 4 of the licence details the specific information required in this report. The Storm Water Overflow Identification & Inspection report findings should be summarised in the 2nd AER and reviewed every three years thereafter. **The AER should contain an update for the years between full reviews** (e.g. years 3,4,6,7,9, 10, 12). The report should detail progress at achieving compliance with criteria.A copy of the detailed assessment can be included as an appendix to the AER.

Additional SWOs and/or changes to Schedule A3: Discharges to be discontinued or, Schedule C: Specified Improvement Programme, requirements (including compliance dates) must be notified to the EPA under Condition 1.7 as a Technical Amendment or Licence Review may be required to accommodate the change. A report in the AER does not satisfy this requirement.

To facilitate the EPA to establish a better national understanding of the status and impact of storm water overflows in Ireland each Water Services Authority is requested to **provide the following information for all storm water overflows in each agglomeration regardless of whether the SWO Identification & Inspection Report is required.**

Preferred format for the SWO Identification and Inspection Summary Report Table A:

WWDL Name / Code for Storm Water Overflow	Irish Grid Reference	Included in Schedule A4 of the WWDL	Compliance with DoEHLG Criteria	No. of times activated in 2013 (No. of events)	Total volume discharged in 2013 (m3)	Total volume discharged in 2013 (P.E.)	Estimated /Measured data
SW04PASS	175621E 069656N	Yes	Not yet assessed	No.6	30	200	E
SW05PASS	176987E 068831N	Yes	Not yet assessed	No. 2	20	135	E
SW06PASS	177116E 067734N	Yes	Not yet assessed	No. 10	250	1667	E
SW07PASS	177114E 066095N	Yes	Not yet assessed	No. 2	20	135	E

Preferred format for the SWO Identification and Inspection Summary Report Table B:

How much sewage was discharged via SWOs in the agglomeration in the year (m3/yr)?	320
How much sewage was discharged via SWOs in the agglomeration in the year (p.e.)?	2137
What % of the total volume of sewage generated in the agglomeration was discharged via SWOs in the agglomeration in 2013?	0.1%%
Is each SWO identified as non-compliant with DoEHLG Guidanceincluded in the Programme of Improvements?	Yes See 4.2 below
The SWO assessment includes the requirements of Schedule A3 & C3	
Have the EPA been advised of any additional SWOs / changes to Schedule C3 and A4 under Condition 1.7?	No. There are NO additional SWOs.

4.2Report on progress made and proposals being developed to meet the improvement programme requirements.

The Passage West/Monkstown agglomeration is made up of the towns and villages of Passage West, Glenbrook and Monkstown. These adjacent coastal population centres stretch for approximately 4km along the western side of Cork Harbour and are mainly residential with little significant industrial development.

At present sewage produced in the towns and villages in the Lower Harbour area discharges untreated into Cork Harbour at a number of locations.

There are plans in place to provide a wastewater treatment plant (WWTP) for the Lower Harbour area as part of the proposed Cork Lower Harbour Sewerage Scheme.

An Bord Pleanála granted approval for the proposed Cork Lower Harbour Sewerage Scheme during June 2009 and the Preliminary Report "Cork Harbour Main Drainage Scheme Preliminary Report March 2008" was submitted to the Department of Environment, Heritage and Local Government (DOEHLG) for approval. Cork County Council issued an addendum report to the Preliminary Report to the DOEHLG in January 2011. Cork County Council advertised to pre-qualify Consultants for the Design, Tender, Construction and Handover Stages in February 2011. The Council submitted a brief to Consultants in February 2012. A Consultant was appointed in February 2013. Site Investigation Contracts will be completed by February 2014 and Detailed Design will also be completed by February 2014. Commencement of construction is expected in early 2015.

A revised project programme is attached in Appendix 7.2. The timeframe for completion is now late 2016.

The Programme of improvements will be subject to Irish Water's approval and funding. For further information please refer to Irish Water's Capital Investment Plan.

For further information see copy of the letter to the EPA dated 7th of December 2010 in Appendix 7.3.

Preferred format for Specified Improvement Programme (Schedule A and C) summary report, <u>to be submitted annually</u>:

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	Licensee Timeframe for Completing the Work	Comments
Construction of a WWTP and collection system	**A & C**	**1st January 2015**	**N**	**(ii) At Planning Stage**		**21st October 2016**	

A summary of the status of any improvements identified by the Licensee under Condition 5.2 must also be included. The suggested format for reporting this information is outlined below.

Preferred format for Improvement Programme summary table:

Improvement Identifier	Improvement Description	Improvement Source	Progress (% completed)	Expected Completion Date
Schedule C: C.1	***Upgrade collecting system:reduce infiltration, remediate structural damage, separate storm water and install major pumping station.***	*Project Plan(Condition 5.2).*	**PLANNING**	**21st October 2016**
Schedule C:	***Infrastructural works necessary***	*Project Plan(Condition*	**PLANNING**	**21st October**

C.1	***to cease discharges***	*5.2).*		**2016**
	Insert rows as required	*Secondary discharges assessment (Condition 5.2).*		
		SWO assessment (Condition 4 &5.2).		
		Drinking Water Abstraction Risk Assessment (Condition 4)		
		Shellfish Impact Risk Assessment (Condition 5)		
		Pearl Mussel Impact Assessment (Condition 4)		
		Improved Operational Control		
		Incident Reduction		
		Elimination/Reduction of Priority Substances		

To assist the Water Services Authority to complete the Condition 5.2(b) assessment of the existing works the EPA has developed the Sewer Integrity Risk Assessment Tool and associated guidance document. This should be used by all agglomerations when completing the assessment of the existing work. Any outstanding assessments from previous years should also be completed using the risk assessment tool. Where the sewer integrity tool is used the relevant summary table must be completed and included in the AER. Copies of the completed risk assessment tool should be included as an appendix to the AER.

Sewer Integrity Risk Assessment ToolImprovement Programme (Works) summary table:

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***	***Reference to relevant section of AER (e.g. Appendix 2 Section4.***
Hydraulic Risk Assessment Score	*Medium*	*78*	*Appendix 7.4 Section 2.1*
Environmental Risk Assessment Score	*High*	*435*	*Appendix 7.4 Section 3.1*
Structural Risk Assessment Score	*High*	*125*	*Appendix 7.4 Section 4.1*
Operation & Maintenance Risk Assessment Score	*Medium*	*140*	*Appendix 7.4 Section 5.1*
Overall Risk Score for the agglomeration	*High*	*778*	*Appendix 7.4 Section 6.1*

Section 5. Licence Specific Reports

Some or all of the following reports may be required, check each licence for specific requirements.
These assessments should be completed in accordance with EPA guidance (where published). Licensees are advised to review their WWDL's to ensure that these reports are submitted where specified in the licence.Licensees should include and complete the table below in the AER indicating whether any of these reporting requirements apply and listing where they are contained in the report.

Where a licence specific report is overdue from a previous AER or has been submitted separately to the EPA a copy of this report should be included as an appendix to the 2013AER.

Where actions arising from a report previously submitted have not been completed the relevant table should be updated on the current status of the actions and necessary improvement works.

Preferred format for the Licence Specific Reports Summary Table:

Licence Specific Report	**Required in 2013 AER or outstanding from previous AER**	**Included in 2013 AER**	*Reference to relevant section of AER (e.g. Appendix 2 Section4.*
Priority Substances Assessment	No	No	Summary of finding on page XX. Full report in Appendix XX
Drinking Water Abstraction Point Risk Assessment	No	No	
Habitats Impact Assessment	No	No	
Shellfish Impact Assessment	No	No	
Pearl Mussel Report	No	No	
Toxicity/Leachate Management	No	No	
Toxicity of Final Effluent Report	No	No	

5.1 Priority Substances Assessment

Condition 4 of the licence details the specific information required in this report. This assessment must include an assessment of the significance of the discharge on the receiving water (e.g. assessment against the EQS Regulations). The EPA has published guidance on how to complete this assessment on their website at:Priority Substance Assessment Guidance

This sub-section cannot be completed until a wastewater treatment plant is operational.

Preferred format for Priority Substance Assessment summary table:

	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 *and/or* Screening Analysis
Does the assessment include a review of Trade inputs to the works?	Yes / No
Does the assessment include a review of other inputs to the works?	Yes / No
Does the report include an assessment of the significance of the results where a listed material is present in the discharge? (e.g. impact on the relevant EQS standard for the receiving water)	Yes / No

Does the assessment identify that priority substances may be impacting the receiving water?	Yes / No
Does the Improvement Programme for the agglomeration include the elimination / reduction of all priority substances identified as having an impact on receiving water quality?	Yes / No

A copy of the detailed assessment should be included as an appendix to the AER. Where relevant, findings from this assessment should be considered under the Programme of Improvements required under Condition 5.

5.2 Drinking Water Abstraction Point Risk Assessment.

Condition 4 of the licence details the specific information required in this report. This assessment must be carried out where discharges from the agglomeration have the potential to impact on a drinking water abstraction. This assessment must include all discharges as well as periods of normal and abnormal operation.The EPA guidance on Drinking Water Safety Plansand the Disinfection Manual provide background information that the licensee must consider when carrying out this assessment.

This sub-section cannot be completed until a wastewater treatment plant is operational

Preferred format for Drinking Water Abstraction Point Risk Assessment summary table:

	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 2013 AER (or outstanding from a previous AER)	No. This is discharging to a tidal zone
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 include operational control measures e.g? incident notification to DW source	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

A copy of the detailed assessment should be included as an appendix to the AER. Where relevant, findings from this assessment should be considered under the Programme of Improvements required under Condition 5.

5.3Shellfish Impact Assessment Report.

Condition 5 of the licence details the specific information required in this report. This assessment must include an assessment of the significance of the discharge on the designated shellfish water and where relevant identify a plan for the installation of an appropriate disinfection system on the discharge. The EPA has published guidance on how to complete this assessment on their website at: Shellfish Assessment Guidance Document

Condition 5 of this licence does not request a Shellfish Impact Assessment Report. This sub-section cannot be completed until a wastewater treatment plant is operational.

Preferred format for Shellfish Impact Assessment summary table:

Is a Shellfish Impact assessment required in the 2013 AER (or outstanding from a previous AER)?	No
List prescribed organisations consulted when preparing the assessment (BIM, SFPA, MI)	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

A copy of the detailed assessment should be included as an appendix to the AER. Where relevant, findings from this assessment should be considered under the Programme of Improvements required under Condition 5.

5.4Toxicity / Leachate Management

Condition 4 of the licence details the specific information required in this report. This requirement is typically applied where there is a potential for the discharge to contain priority/dangerous substances and/or accepts landfill leachate for treatment at the WWTP.

This sub-section cannot be completed until a wastewater treatment plant is operational.

Preferred format for Toxicity / Leachate Management Report summary table:

Is a Toxicity / Leachate Management Report required in the 2013 AER (or outstanding from previous AER)	N/A
What % of the total influent is leachate?	N/A
Does the study identify any constituents of the leachate 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

A copy of the detailed assessment can be included as an appendix to the AER.

5.5 Toxicity of the Final Effluent Report

In some WWDLs there is a requirement to determine the toxicity of the final effluent on 4 species in 3 trophic levels.

This sub-section cannot be completed until a wastewater treatment plant is operational.

Preferred format for Toxicity of the final effluent assessment summary table:

Is a Toxicity report required? (Condition 4)	N/A
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?	Yes

A copy of the detailed assessment can be included as an appendix to the AER. Where relevant, findings from this assessment should be considered under the Programme of Improvements required under Condition 5.

5.6Pearl Mussel Measures Report

In relation to Pearl Mussel waters Condition 4 of the licence requires the Water Services Authority to (check licence condition for specific details):

- Report on progress at achieving the measures relevant to the WWDL identified in the Pearl Mussel Protection Measures Report for the receiving water body.
- Report on an ecological assessment of the significance of the discharge on the designated shellfish water in conjunction with National Parks & Wildlife Service. The report must identify if any of the discharges are causing an impact on the pearl mussel population and must prepare an implementation plan to minimise any negative impacts on the pearl mussel population

This is a tidal zone which is not the habitat of the Fresh Water pearl Mussel.

Preferred formats for Pearl Mussel Measure Report summary table (check licence condition to see which format is appropriate):

Is a progress report on implementation of the findings of Pearl Mussel Protection Measures report required in the 2013 AER (or outstanding from previous AER)	N/A
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 works as having a potential impact on the Pearl Mussel water?	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 populations?	N/A

5.7 Habitats Impact Assessment Report

Condition 4 of the licence details the specific information required in this report. This assessment must be carried out where discharges from the agglomeration have the potential to impact on a sensitive species or habitats. Where required this assessment must be specified and carried out in accordance with any guidance provided the National Parks and Wildlife Service (NPWS).

This sub-section cannot be completed until a wastewater treatment plant is operational.

Preferred format for Habitats Impact Assessment summary table:

	Licensee self- assessment checks to determine whether all relevant information is included in the Assessment.
Is a Habitats Assessment required in the 2013 AER (includes outstanding assessments from previous years)?	N/A
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

A copy of the detailed assessment should be included as an appendix to the AER. Where relevant, findings from this assessment should be considered under the Programme of Improvements required under Condition 5.

Section 6. Certification and Sign Off

As part of the requirements of the WWDL, each licensee shall ensure that the AER report is certified as accurate and is representative by a nominated and suitably qualified person.

The AER must contain the following;

- Introduction and background to 2013 AER
- Monitoring reports summary.
- Operational reports summary.
- Infrastructural Assessment and Programme of Improvements.
- Licence specific reports.

- Certification and Sign Off
- Appendix

Also the reporting obligation will not be satisfied until all relevant steps are completed as listed on page 3 of this guidance.

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)?	No
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)*	N/A
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?	N/A
List outstanding reports *(insert lines as required)*	

Reference to all the above must be included in the certification and sign off page submitted by licensees.

The Final page of each AER should be signed by the nominated official.

I hereby submit the Annual Environmental Report for the Passage West / Monkstown Agglomeration for 2013 (Waste Water Licence No. D0129-01).

I hereby certify that the information contained within this AER is accurate and representative.

Signed by: David Keane

Date: 25/2/14

Print Signature Name:

Position in Organisation: County Engineer / DOS

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 Reports on the Chemical and Ecological Status of the Receiving Waters**
Appendix 7.2	**Revised Project Programme**
Appendix 7.3	**Letter to the EPA dated 7th December 2010**
Appendix 7.4	**Integrity Assessment of Sewers**
Appendix 7.5	**Pollutant Release and Transfer Register (PRTR)**

Appendix 7.1 Annual Reports on the Chemical and Ecological Status of the Receiving Waters

Counter	Station No	Sample Label	Survey Date	Time Clock	Depth Bed	Sample Depth S	Salinity S ‰	Temp S ℃	pH	Secchi m	SS mg/l	DO S % Sat	B.O.D. mg/l O2	TON mg/l N	NH3 mg/l N	PO4 µg/l P	Chlorophyll a mg/m	Si_est µg/l Si	Lab. Number	DIN mg/l N	Free NH3 mg/l N	TON:NH3	DIN:PO4 µMol	DO mg/
			09/02/2010	10:57																				
103457	LE330	LE330S			9.4	0	9.93	5.75	7.8	1.7		91.4	0.9999	2.4	0.13	36	3	3000	1000703	2.53	0.00131	18.46	155.41	10.
			09/02/2010	10:42																				
103465	LE310	LE310B			8.4	8	30.86	8.05	7.9	1		89		0.4	0.17	54	2.9	900	1000702	0.57	0.00259	2.35	23.34	8.
			09/02/2010	15:43																				
103546	LE330	LE330SR			10.3	0	10.55	6.03	7.8	1.5		95.1	0.9999	2.2	0.13	35	2.3	3000	1000723	2.33	0.00134	16.92	147.21	1
			09/02/2010	10:42																				
103568	LE310	LE310S			8.4	0	12.19	6.21	7.7	1		94.7		2.3	0.13	40	2.1	3100	1000701	2.43	0.00108	17.69	134.34	10.
			09/02/2010	15:43																				
103603	LE330	LE330BR			10.3	10.1	32.07	8.9	7.9	1.5		92.1	0.9999	0.3	0.1	30	1.9	800	1000724	0.4	0.00163	3	29.48	8.
103606	LE340	LE340S	09/02/2010	11:01	10.2	0	10.27	5.77	7.8	1.9		94		2.2	0.13	37	1.9	2800	1000705	2.33	0.00131	16.92	139.26	1

			09/02/2010	10:57																		
103650	LE330	LE330B			9.4	9.1	31.01	8.05	7.9	1.7	90.1	0.9999	0.4	0.15	38	1.6	900	1000704	0.55	0.00228	2.67	32.01	8.
103651	LE340	LE340B	09-Feb-10	11:01:00	10.2	9.9	32.34	8.11	7.9	1.9	92.5		0.3	0.07	25	1.6	800.00	1000706	0.37	0.00107	4.29	32.73	8.
107808	LE310	LE310S	24-Jan-11	10:59:00	8.5	0	6.3	6.27	7.7	1.5	93.7	0.999	3.39	0.132	27	1	3300.00	1100502	3.522	0.00111	25.68	288.46	11.
107809	LE310	LE310B	24-Jan-11	10:55:00	8.5	7.8	27	7	7.9	1.5	91.7	0.999	0.75	0.127	19	1.8	1100.00	1100503	0.877	0.00178	5.91	102.07	9.
107810	LE330	LE330S	24-Jan-11	11:17:00	9.9	0	20.93	6.45	7.8	1.6	91.1		1.93	0.167	23	1.3	2100.00	1100504	2.097	0.00178	11.56	201.62	9.

107811	LE330	LE330B	24-Jan-11	11:13:00	9.9	9.6	29.69	7.23	7.9	1.6	92.6		0.55	0.08	12	1.3	900.00	1100505	0.63	0.00114	6.88	116.1	9.
107812	LE340	LE340S	24-Jan-11	11:32:00	13.2	0	14.23	6.28	7.8	1.6	92.2	0.999	2.42	0.146	23	1.4	2400.00	1100506	2.566	0.00154	16.58	246.71	10.
107813	LE340	LE340B	24-Jan-11	11:27:00	13.2	12.8	27.29	6.87	7.9	1.6	90.1	0.999	0.82	0.108	15	2.1	1200.00	1100507	0.928	0.0015	7.59	136.81	9.
107827	LE330	LE330SR	24-Jan-11	15:41:00	7.7	0	14.3	6.65	7.8	1.5	95.7	0.999	2.76	0.155	24	1.3	2600.00	1100521	2.915	0.00168	17.81	268.59	10.
107828	LE330	LE330BR	24-Jan-11	15:37:00	7.7	7.3	27.51	7.04	7.9	1.5	90.8	0.999	0.7	0.121	13	1.5	1100.00	1100522	0.821	0.0017	5.79	139.66	9.
107829	LE340	LE340SR	24-Jan-11	15:55:00	9.4	0	20.15	6.72	7.9	1.6	92.9	0.999	1.47	0.188	24	1.5	1900.00	1100523	1.658	0.00258	7.82	152.77	9.

107830	LE340	LE340BR	24-Jan-11	15:50:00	9.4	9	27.88	7.06	7.9	1.6	90.6	0.999	0.76	0.143	16	1.8	1100.00	1100524	0.903	0.00201	5.31	124.8	9.
110130	LE310	LE310S	01-Feb-12	11:17:00	10.5	0	4.62	6.85	7.8	1.5	95.7		3.36	0.086	40	0.5	3890.00	1200638	3.446	0.00095	39.07	190.51	11.
110131	LE310	LE310B	01-Feb-12	11:17:00	10.5	10	29.87	9.05	7.9	1.5	91.9		0.55	0.17	37	0.9	850.00	1200639	0.72	0.0028	3.24	43.03	8.
110132	LE330	LE330S	01-Feb-12	11:34:00	9.5	0	11.32	6.93	7.8	1.5	95.1	0.999	0.83	0.077	16	1.8	3160.00	1200640	0.907	0.00085	10.78	125.36	10.
110133	LE330	LE330B	01-Feb-12	11:34:00	9.5	9	31.5	9.18	7.9	1.5	93.4	0.999	0.43	0.149	35	0.7	780.00	1200641	0.579	0.00248	2.89	36.58	8.
110134	LE340	LE340S	01-Feb-12	11:52:00	12.7	0	20.04	7.46	7.9	1.5	94.6		1.6	0.166	43	0.8	2110.00	1200642	1.766	0.00241	9.64	90.82	1

110135	LE340	LE340B	01-Feb-12	11:52:00	12.7	12	32.78	9.28	7.9	1.5	93.9		0.23	0.047	20	0.8	590.00	1200643	0.277	0.00079	4.89	30.63	8.
110148	LE330	LE330SR	01-Feb-12	16:24:00	8.5	0	10.39	7.14	7.8	1.1	96	0.999	2.26	0.123	44	0.9	3250.00	1200656	2.383	0.00139	18.37	119.76	10.
110149	LE330	LE330BR	01-Feb-12	16:24:00	8.5	8	30.45	9.08	7.9	1.1	92.7	0.999	0.32	0.112	28	0.7	860.00	1200657	0.432	0.00185	2.86	34.12	8.
103083	LE330	LE330SR	23/09/2010	16:00	9	0	31.16	15.84	8.2	1.2	130.7	7.1111	0.08	0.296	46	95.3	700	1005256	0.376	0.01589	0.27	18.08	10.
103084	LE330	LE330S	23/09/2010	10:05	8.3	0	30.4	15.71	8	0.9	104.6	6	0.19	0.235	39	57.6	800	1005236	0.425	0.00801	0.81	24.1	8.

103085	LE340	LE340S	23/09/2010	11:01	11	0	30.85	15.82	8.1	1.2	111.6		0.17	0.221	35	56.5	700	1005238	0.391	0.00949	0.77	24.7	9.
103088	LE340	LE340SR	23/09/2010	16:02	13	0	32.45	15.49	8.1	1.7	113.2		0.11	0.075	10	44.1	500	1005258	0.185	0.00315	1.47	40.91	9.
103100	LE340	LE340B	23/09/2010	11:01	11	10.5	31.84	15.66	8.1	1.2	107.7		0.13	0.151	19	26.5	600	1005239	0.281	0.00641	0.86	32.7	8.
103102	LE330	LE330B	23/09/2010	10:05	8.3	8	32.34	15.58	8.1	0.9	101.5	3	0.13	0.143	14	23.5	600	1005237	0.273	0.00604	0.91	43.12	8.
103129	LE330	LE330BR	23/09/2010	16:00	9	8.5	31.99	15.55	8.1	1.2	103.6	2	0.13	0.109	17	15.4	600	1005257	0.239	0.00459	1.19	31.09	8.
103148	LE310	LE310S	21/06/2010	10:04	8	0	29.22	18.65	8.3	1	144.6		0.22	0.119	9	12.9	49.999	1003188	0.339	0.00968	1.85	83.29	11.

103150	LE330	LE330S	21/06/2010	11:00	9.4	0	30.94	18.28	8.3	1.1	129.1	2	0.15	0.114	23	12.7	49.999	1003190	0.264	0.00904	1.32	25.38	10.
103152	LE340	LE340BR	23/09/2010	16:02	13	12	32.65	15.36	8.1	1.7	104.1		0.11	0.072	11	12.7	600	1005259	0.182	0.00299	1.53	36.59	8.
103156	LE310	LE310B	18/08/2010	10:30	9.7	9.2	32.31	15.76	8.1	2	95	0.9999	0.11	0.127	15	12.4	100	1004480	0.237	0.00543	0.87	34.94	7.
103158	LE330	LE330S	18/08/2010	10:50	9.5	0	31.15	16.03	8.1	1.9	107	2	0.17	0.161	21	12.3	49.999	1004481	0.331	0.00702	1.06	34.86	8.
103167	LE310	LE310B	21/06/2010	10:04	8	7.5	31.87	17.66	8.2	1	111.9		0.12	0.131	14	11.5	49.999	1003189	0.251	0.008	0.92	39.65	8.
103170	LE340	LE340S	21/06/2010	11:02	12	0	31.46	17.85	8.2	1.3	125.3		0.049999	0.071	12	11.4	100	1003192	0.120999	0.0044	0.7	22.3	9.

103178	LE340	LE340S	18/08/2010	11:10	11.9	0	31.97	15.73	8.1	2	106.4		0.12	0.098	14	10.6	49.999	1004483	0.218	0.00418	1.22	34.43	8.
103180	LE330	LE330SR	21/06/2010	15:04	9.5	0	31.14	18.94	8.3	1.2	149.7	3	0.12	0.126	13	10.4	49.999	1003206	0.246	0.01045	0.95	41.85	11.
103189	LE330	LE330B	21-Jun-10	11:00:00	9.4	8.5	31.76	17.72	8.2	1.1	114.3	2	0.11	0.11	21	9.5	100	1003191	0.216	0.0065	1.04	22.75	9.0
103193	LE330	LE330SR	18-Aug-10	15:55:00	9.1	0	29.59	16.63	8.2	1.7	128.1	3	0.22	0.03	6	9.2	49.999	1004499	0.251	0.00176	7.1	92.51	10.4
103194	LE310	LE310S	18-Aug-10	10:30:00	9.7	0	27.53	16.07	8	2	104	2	0.44	0.08	14	9.2	200	1004479	0.519	0.00277	5.57	81.98	8.7
103203	LE330	LE330B	18-Aug-10	10:50:00	9.5	9	32.41	15.63	8.1	1.9	97.4	0.9999	0.11	0.11	10	8.6	100	1004482	0.217	0.00453	1.03	47.99	7.9

103216	LE340	LE340B	21-Jun-10	11:02:00	12	11.5	32.31	17.26	8.3	1.3	111.7		0.13	0.05	8	8.1	49.999	1003193	0.183	0.00391	2.45	50.58	8.8
103222	LE330	LE330BR	21-Jun-10	15:04:00	9.5	9	32.26	17.33	8.2	1.2	113	0.9999	0.049999	0.11	17	7.8	100	1003207	0.162999	0.00675	0.44	21.2	8.9
103246	LE340	LE340B	18-Aug-10	11:10:00	11.9	11.5	33.06	15.34	8.1	2	96.8		0.07	0.07	6	6.8	100	1004484	0.139	0.00286	1.01	51.23	7.9
0 0000 01 03 314	LE330	LE330BR	18-Aug-10	00.66	9.1	8.5	33.0	15.4	8.1	1.7	95	1.0	0.1	0.08	7	4.6	100	1004500	0.151	0.0034	0.9	47.7	7.7
0 0000 01 07 973	LE330	LE330S	16-May-11	00.48	7.0	0	24.0	12.7	7.9	1.5	94	1.0	1.1	0.17	30	4.4	1300	1102652	1.3	0.0037	6.7	95.8	8.6

107974	LE330	LE330B	16-May-11	11:30:00	7	6.5	30.18	11.64	7.9	1.5	86.2	0.999	0.4	0.16	25	3.7	600	1102653	0.563	0.00327	2.45	49.8	7.7
107975	LE340	LE340S	16-May-11	12:00:00	9.2	0	27.47	12.57	7.9	1.1	93.5	0.999	0.7	0.21	32	5.6	900	1102654	0.913	0.00459	3.29	63.09	8.4
107976	LE340	LE340B	16-May-11	12:00:00	9.2	8.5	29.76	11.88	7.9	1.1	89.1	0.999	0.42	0.18	27	4.2	700	1102655	0.6	0.00368	2.33	49.14	8.0
108226	LE310	LE310S	06-Jul-11	11:41:00	10	0	21.96147	15.22	8	1.6	102.2		0.88	0.22	42	16	1200	1103747	1.098	0.00717	4.04	57.81	9.0
108227	LE310	LE310B	06-Jul-11	11:41:00	10	9.5	30.53805	15.93	8.2	1.6	108		0.18	0.15	27	5	300	1103748	0.325	0.00783	1.24	26.62	8.9
0 0000 01 08 228	LE330	LE330S	06-Jul-11	00.50	10.0	0	29.7	16.0	8.3	1.6	116	2.0	0.2	0.10	22	18.7	300	1103749	0.285	0.0064	2.0	28.7	9.6

108229	LE330	LE330B	06-Jul-11	11:58:00	10	9.5	32.38352	15.56	8.3	1.6	110.9	0.999	0.11	0.06	10	6.3	200	1103750	0.173	0.00413	1.75	38.26	9.1
108230	LE340	LE340S	06-Jul-11	12:11:00	11.5	0	30.58662	15.75	8.3	1.6	117.2		0.15	0.09	23	15.3	300	1103751	0.243	0.00617	1.61	23.36	9.6
108231	LE340	LE340B	06-Jul-11	12:11:00	11.5	11.2	31.92701	15.4	8.3	1.6	110.5		0.08	0.08	14	4.7	200	1103752	0.159	0.00511	1.01	25.11	9.1
0 0000 01 08 244	LE310	LE310CR	06-Jul-11	16:34:00	6	0	14.89041	16.57	8.1	1.4	88.2		0.76	0.19	43	5.2	900	1103765	0.953	0.00875	3.94	49.01	7.9
0 0000 01 08 244	LE310	LE310CR	06-Jul-11	00.69	6.0	5.7	30.0	16.1	8.1	1.4	106		0.8	0.19	43	5.2	900	1103765	0.953	0.0084	3.9	49.0	8.7
108245	LE330	LE330CR	06-Jul-11	16:49:00	7.5	0	25.6427	16.4	8.2	1.6	105.9		0.32	0.21	47	9.6	500	1103766	0.53	0.01173	1.52	24.94	8.9

108245	LE330	LE330CR	06-Jul-11	16:49:00	7.5	7.2	30.1981	15.97	8.2	1.6	105.6		0.32	0.21	47	9.6	500	1103766	0.53	0.01138	1.52	24.94	8.7
108246	LE340	LE340CR	06-Jul-11	17:01:00	9.5	0	27.65329	16.32	8.2	1.5	116.8	2	0.27	0.13	27	11.6	300	1103767	0.402	0.00733	2.05	32.92	9.7
108246	LE340	LE340CR	06-Jul-11	17:01:00	9.5	8.9	30.40207	15.92	8.2	1.5	108.4	2	0.27	0.13	27	11.6	300	1103767	0.402	0.00713	2.05	32.92	8.9
0 0000 01 08 596	LE310	LE310S	19-Sep-11	11:03:00	9	0	26.14	14.36	7.8	1.7	84.9		0.55	0.32	27	8.9	960	1105361	0.873	0.00635	1.7	71.5	7.4
0 0000 01 08 597	LE310	LE310B	19-Sep-11	11:03:00	9	8.5	31.76	13.49	7.8	1.7	81.2		0.22	0.33	34	3.3	540	1105362	0.545	0.00599	0.68	35.45	6.9
0 0000	LE330	LE330S	19-Sep-11	11:15:00	9.5	0	24.65	14.14	7.8	2.4	86.6	0.999	0.42	0.34	32	5.1	820	1105363	0.761	0.0066	1.23	52.59	7.6

01 08 598																						
0 0000 01 08 599	LE330	LE330B	19-Sep-11	00.47	9.5	9	32.5	13.3	7.9	2.4	83	1.0	0.2	0.21	29	3.5	440	1105364	0.403	0.0049	0.9	30.7	7.1
0 0000 01 08 600	LE340	LE340S	19-Sep-11	00.47	11.7	0	24.4	14.07	7.9	2.2	89		0.5	0.32	30	4.0	890	1105365	0.832	0.0078	1.6	61.3	7.8
108601	LE340	LE340B	19-Sep-11	11:20:00	11.7	11	33.07	13.11	7.9	2.2	82.7		0.22	0.31	28	3.6	430	1105366	0.527	0.00689	0.72	41.62	7.1
108610	LE340	LE340SR	19-Sep-11	14:30:00	10	0	27.85	14.34	7.9	2.1	90.2		0.32	0.36	32	4.8	670	1105375	0.681	0.00889	0.89	47.06	7.8
108611	LE340	LE340BR	19-Sep-11	14:30:00	10	9.5	32.06	13.39	7.9	2.1	82.5		0.21	0.26	30	4.3	490	1105376	0.466	0.00587	0.82	34.35	7.1

108612	LE330	LE330SR	19-Sep-11	14:45:00	8.5	0	28.72	14.21	7.9	1.7	92.5	0.999	0.3	0.35	32	6.1	610	1105377	0.649	0.00851	0.86	44.85	7.9
0 0000 01 08 613	LE330	LE330BR	19-Sep-11	14:45:00	8.5	8	32.25	13.36	7.9	1.7	75.9	0.999	0.2	0.38	58	4.9	510	1105378	0.576	0.0086	0.53	21.96	6.5
0 0000 01 08 614	LE310	LE310SR	19-Sep-11	15:00:00	8	0	21.62	14.84	7.8	1.3	83.6	0.45	0.53	33	6.6	930	1105379	0.982	0.01084	0.85	65.8	7.4
0 0000 01 08 615	LE310	LE310BR	19-Sep-11	15:00:00	8	7.5	31.47	13.58	7.7	1.3	70.1	0.21		47	5.1	770	1105380					6.0
0 0000 01 10 845	LE310	LE310S	27-Jun-12	11:19:00	11	0	15.77	14.63	7.8	1.8	92.3	2.11	0.15	40	3.2	2350	1203836	2.258	0.00297	14.26	124.83	8.5
0 0000 01 10 846	LE310	LE310B	27-Jun-12	00.47	11.0	10.5	29.2	13.1	8.0	1.8	89	0.5	0.20	29	2.3	620	1203837	0.689	0.0056	2.5	52.5	7.8

0 0000 01 10 847	LE330	LE330S	27-Jun-12	11:35:00	11.1	0	23.94	14.36	8	2.3	95.5	0.999	0.45	0.10	23	4.3	1290	1203838	0.553	0.00318	4.37	53.17	8.4
0 0000 01 10 848	LE330	LE330B	27-Jun-12	11:35:00	11.1	10.5	30.68	12.95	8	2.3	92.8	0.999	0.34	0.11	17	2.2	470	1203839	0.45	0.00306	3.09	58.54	8.1
110849	LE340	LE340S	27-Jun-12	11:45:00	12	0	24.95	14.45	8	2.4	96.1		0.27	0.07	17	2.7	830	1203840	0.344	0.0023	3.65	44.75	8.4
110850	LE340	LE340B	27-Jun-12	11:45:00	12	11.5	31.61	12.84	8	2.4	93.1		0.11	0.05	11	1	380	1203841	0.159	0.00135	2.24	31.96	8.1
110865 0 0000 01 10 866	LE330	LE330SR	27-Jun-12	17:17:00	8	0	23.49	14.78	8	1.7	96.7	0.999	0.75	0.11	29	4.2	1670	1203856	0.857	0.00341	7.01	65.35	8.5
	LE330	LE330BR	27-Jun-12	17:17:00	8	7.5	29.45	13.1	8	1.7	90.8	0.999	0.48	0.20	28	0.8	630	1203857	0.677	0.00554	2.44	53.47	7.9

0 0000 01 11 056	LE310	LE310S	25-Jul-12	11:26:00	10.3	0	21.68	15.67	7.9	2.2	93.4	1.84	0.12	33	2.5	1930	1204457	1.959	0.00323	15.46	131.27	8.1
0 0000 01 11 057	LE310	LE310B	25-Jul-12	11:26:00	10.3	9.8	29.93	14.84	8	2.2	94.5	0.33	0.14	22	3.4	280	1204458	0.473	0.00457	2.31	47.54	7.9
0 0000 01 11 058	LE330	LE330S	25-Jul-12	11:35:00	10.2	0	25.06	15.78	7.9	2	95.6	0.999	0.62	0.08	23	2	1710	1204459	0.704	0.0023	7.38	67.69	8.1
0 0000 01 11 059	LE330	LE330B	25-Jul-12	11:35:00	10.2	9.8	31.77	14.02	8	2	94.8	0.999	0.1	0.07	13	4.2	170	1204460	0.167	0.00202	1.49	28.41	8.0
111060	LE340	LE340S	25-Jul-12	11:55:00	12.1	0	22.27	16.01	8	2.1	94.4	0.999	0.63	0.08	20	2.5	1240	1204461	0.711	0.00282	7.78	78.61	8.1

111061	LE340	LE340B	25-Jul-12	11:55:00	12.1	11.5	32.08	13.94	8	2.1	94.4	0.999	0.09	0.06	11	2.7	160	1204462	0.146	0.00168	1.61	29.35	8.0
111072	LE330	LE330SR	25-Jul-12	16:38:00	8	0	22.39	16.8	8	1.5	101.7	0.999	0.95	0.13	28	2.5	950	1204473	1.084	0.00495	7.09	85.61	8.6
111073	LE330	LE330BR	25-Jul-12	16:38:00	8	7.5	29.72	14.89	8	1.5	93.3	0.999	0.21	0.09	20	4.2	270	1204474	0.303	0.00299	2.26	33.5	7.9
111224	LE310	LE310S	22-Aug-12	11:22:00	10.9	0	14.32	16.47	7.7	1.5	83		2.34	0.15	47	2.4	2890	1205134	2.492	0.00279	15.39	117.25	7.4
111225	LE310	LE310B	22-Aug-12	11:22:00	10.9	9.6	28	16.22	8	1.5	86.5		0.31	0.10	26	2.3	830	1205135	0.41	0.00354	3.1	34.87	7.2
111226	LE330	LE330S	22-Aug-12	11:45:00	10	0	18.38	16.69	7.8	1.4	86	0.999	1.22	0.18	42	3.1	1970	1205136	1.395	0.00409	6.97	73.45	7.5

111227	LE330	LE330B	22-Aug-12	11:45:00	10	9.2	29.54	16.07	8	1.4	87.7	0.999	0.31	0.10	21	2.3	630	1205137	0.412	0.00357	3.04	43.38	7.2
111228	LE340	LE340S	22-Aug-12	11:50:00	9.5	0	17.68	16.69	7.9	1.3	86.7		0.94	0.15	43	3.3	1930	1205138	1.09	0.00439	6.27	56.06	7.6
111229	LE340	LE340B	22-Aug-12	11:50:00	9.5	8.8	28.75	16.12	8	1.3	87.4		0.18	0.06	25	3.1	840	1205139	0.242	0.00218	2.9	21.41	7.2
111242	LE330	LE330SR	22-Aug-12	15:46:00	7.4	0	14.07	17.07	7.8	1.2	88.3	0.999	0.77	0.11	45	2.4	2120	1205152	0.883	0.00272	6.81	43.39	7.8
111243	LE330	LE330BR	22-Aug-12	15:46:00	7.4	6.8	28.02	16.21	8	1.2	85.1	0.999	0.43	0.15	27	2.7	750	1205153	0.582	0.00538	2.83	47.67	7.0
111244	LE340	LE340SR	22-Aug-12	16:10:00	9.4	0	19.7	17.15	7.9	1.2	87.5		0.68	0.13	39	3.6	1740	1205154	0.808	0.00387	5.31	45.81	7.5

111245	LE340	LE340BR	22-Aug-12	16:10:00	9.4	8.8	27.72	16.24	8	1.2	84.5	0.56	0.19	32	3.1	1040	1205155	0.747	0.00663	2.99	51.62	7.0

Station	Sample	Date	Month	Programme	Latitude	Longitude	WFD WB	SWD Area	Depth (m)	1,2,3-trichlorobenzene (ug/l)	1,2,4-trichlorobenzene (ug/l)	1,2-dichloroethane (ug/l)	1,3,5-trichlorobenzene (ug/l)	dichlorophenoxyacetic acid (ug/l)	4-Nonylphenol (ug/l)	4-Octylphenol (ug/l)	c acid (4-chloro-2-mp) (ug/l)	anthracene (ug/l)	arsenic (ug/l)	atrazine (ug/l)	benzene (ug/l)	Benzo[a]pyrene (ug/l)	benzo[b]fluoranthene (ug/l)
Adrigole Harbour	2265	19/06/13	June	SWD	51.6788	-9.725	Adrigole Harbour	Adrigole Harbour	0.5										1.34				
	2663	03/12/13	December	SWD	51.679	-9.7244	Adrigole Harbour	Adrigole Harbour	0.5														
Ballymacoda	2279	14/06/1	June	SWD	51.901	-7.8877	Youghal Bay	Ballymacoda Bay	0.5										1.34				
	2678	05/12/13	December	SWD	51.9004	-7.8877	Youghal Bay	Ballymacoda Bay	0.5														
Baltimore Harbour \ Sherkin	2040	14/01/1	January	SWD	51.497	-9.408			0.5										1.16				
	2300	09/09/1	Septemb	SWD	51.497	-9.408			0.5														
Bandon Estuary Lower	2018	09/01/1	January	WFD	51.7027	-8.513	Lower Bandon		0.5	<0.03	<0.03	<0.05	<0.03	<0.01	<0.0	<0.0	<0.0	<0.00	0.97	<0.0	<0.05	<0.00	<0.005
	2069	07/02/1	February	WFD	51.702	-8.5135	Lower Bandon		0.5	<0.03	<0.03	<0.05	<0.03	<0.01	<0.0	<0.0	<0.0	<0.00	0.81	<0.0	<0.05	<0.00	<0.005
	2097	20/03/1	March	WFD	51.7027	-8.513	Lower Bandon		0.5	<0.03	<0.03	<0.05	<0.03	<0.01	<0.0	<0.0	<0.0	<0.00	1.11	<0.0	<0.05	<0.00	<0.005
	2197	23/04/1	April	WFD	51.7024	-8.513	Lower Bandon		0.9	<0.03	<0.03	<0.05	<0.03	<0.01	<0.0	<0.0	<0.0	<0.00	1.82	<0.0	<0.05	<0.00	<0.005
	2213	19/05/1	May	WFD	51.7025	-8.513	Lower Bandon		0.5	<0.03	<0.03	<0.05	<0.03	<0.01	<0.0	<0.0	<0.0	<0.00	1.54	<0.0	<0.05	<0.00	<0.005
	2272	12/06/1	June	WFD	51.7024	-8.5132	Lower Bandon		0.5	<0.03	<0.03	<0.05	<0.03	<0.01	<0.0	<0.0	<0.0	<0.00	1.41	<0.0	<0.05	<0.00	<0.005
	2324	04/07/1	July	WFD	51.7025	-8.513	Lower Bandon		0.5	<0.03	<0.03	<0.05	<0.03	<0.01	<0.0	<0.0	<0.0	<0.00	1.42	<0.0	<0.05	<0.00	<0.005
	2383	09/08/1	August	WFD	51.7028	-8.513	Lower Bandon		0.5	<0.03	<0.03	<0.05	<0.03	<0.01	<0.0	<0.0	<0.0	<0.00	1.37	<0.0	<0.05	<0.00	<0.005
	2418	03/09/1	Septemb	WFD	51.7029	-8.5131	Lower Bandon		0.5	<0.03	<0.03	<0.05	<0.03	<0.01	<0.0	<0.0	<0.0	<0.00	1.42	<0.0	<0.05	<0.00	<0.005
	2464	02/10/13	October	WFD	51.7029	-8.5121	Lower Bandon Estuary		0.5	<0.03	<0.03	<0.05	<0.03	<0.01	<0.0 1	<0.0 1	<0.0 2	<0.00 5	1.5	<0.0 1	<0.05	<0.00 2	<0.005
	2504	03/11/1	Novembe	WFD	51.7028	-8.5121	Lower Bandon		0.5	<0.03	<0.03	<0.05	<0.03	<0.01	<0.0	<0.0	<0.0	<0.00	1	<0.0	<0.05	0.002	<0.005
	2671	05/12/1	Decembe	WFD	51.7025	-8.5129	Lower Bandon		0.49	<0.03	<0.03	<0.05	<0.03	<0.01	<0.0	<0.0	<0.0	<0.00		<0.0	<0.05	<0.00	<0.005
Bantry Bay Inner	2267	19/06/1	June	SWD	51.6885	-9.4752	Inner Bantry Bay	Bantry Bay	0.5										1.42				
	2665	03/12/1	Decembe	SWD	51.6881	-9.4755	Inner Bantry Bay	Bantry Bay	0.48														
Bantry Bay South	2268	19/06/13	June	SWD	51.6163	-9.6886	Outer Bantry Bay	Bantry Bay South	0.5										1.3				
	2666	03/12/13	December	SWD	51.616	-9.6912	Outer Bantry Bay	Bantry Bay South	0.54														
Castletownbere	2038	14/02/13	February	SWD	51.646	-9.868	Berehaven	Castletownbere	0.5										1.44				
Cork Harbour	2019	10/01/1	January	WFD	51.8372	-8.2623	Cork Harbour		0.5	<0.03	<0.03	<0.05	<0.03	<0.01	<0.0	<0.0	<0.0	<0.00	1.24	<0.0	<0.05	<0.00	<0.005
	2070	06/02/1	February	WFD	51.8367	-8.264	Cork Harbour		0.5	<0.03	<0.03	<0.05	<0.03	<0.01	<0.0	<0.0	<0.0	<0.00	0.94	<0.0	<0.05	<0.00	<0.005
	2098	21/03/1	March	WFD	51.8368	-8.2575	Cork Harbour		0.5	<0.03	<0.03	<0.05	<0.03	<0.01	<0.0	<0.0	<0.0	<0.00	1.36	<0.0	<0.05	<0.00	<0.005
	2157	10/04/1	April	WFD	51.8367	-8.2632	Cork Harbour		0.5	<0.03	<0.03	<0.05	<0.03	<0.01	<0.0	<0.0	<0.0	<0.00	1.93	<0.0	<0.05	<0.00	<0.005
	2214	20/05/1	May	WFD	51.8369	-8.2628	Cork Harbour		0.5	<0.03	<0.03	<0.05	<0.03	<0.01	<0.0	<0.0	<0.0	<0.00	1.89	<0.0	<0.05	<0.00	<0.005
	2274	17/06/1	June	WFD	51.8367	-8.2644	Cork Harbour		0.5	<0.03	<0.03	<0.05	<0.03	<0.01	<0.0	<0.0	<0.0	<0.00	1.29	<0.0	<0.05	<0.00	<0.005
	2325	03/07/1	July	WFD	51.837	-8.2622	Cork Harbour		0.5	<0.03	<0.03	<0.05	<0.03	<0.01	<0.0	<0.0	<0.0	<0.00	1.37	<0.0	<0.05	<0.00	<0.005
	2385	14/08/1	August	WFD	51.8366	-8.2633	Cork Harbour		0.5	<0.03	<0.03	<0.05	<0.03	<0.01	<0.0	<0.0	<0.0	<0.00	1.47	<0.0	<0.05	<0.00	<0.005
	2419	12/09/1	Septemb	WFD	51.8367	-8.263	Cork Harbour		0.5	<0.03	<0.03	<0.05	<0.03	<0.01	<0.0	<0.0	<0.0	<0.00	1.45	<0.0	<0.05	<0.00	<0.005
	2465	01/10/1	October	WFD	51.837	-8.2634	Cork Harbour		0.5	<0.03	<0.03	<0.05	<0.03	<0.01	<0.0	<0.0	<0.0	<0.00	1.46	<0.0	<0.05	<0.00	<0.005
	2505	04/11/1	Novembe	WFD	51.8366	-8.2633	Cork Harbour		0.53	<0.03	<0.03	<0.05	<0.03	<0.01	<0.0	<0.0	<0.0	<0.00	1.12	<0.0	<0.05	<0.00	<0.005
	2673	06/12/1	Decembe	WFD	51.8368	-8.2631	Cork Harbour		0.5	<0.03	<0.03	<0.05	<0.03	<0.01	<0.0	<0.0	<0.0	<0.00		<0.0	<0.05	<0.00	<0.005

Cork Harbour North Channel	2021	10/01/13	January	WFD	51.8817	-8.2038	North Channel Great Island		0.5	<0.03	<0.03	<0.05	<0.03	<0.01	<0.01	<0.01	<0.02	<0.005	1.23	<0.01	<0.05	<0.002	<0.005
	2072	06/02/13	February	WFD	51.881	-8.2043	North Channel Great Island		0.5	<0.03	<0.03	<0.05	<0.03	<0.01	<0.01	<0.01	<0.02	<0.005	1.07	<0.01	<0.05	0.009	<0.005
	2100	21/03/13	March	WFD	51.8812	-8.2043	North Channel Great Island		0.5	<0.03	<0.03	<0.05	<0.03	<0.01	<0.01	<0.01	<0.02	<0.005	1.32	<0.01	<0.05	<0.002	<0.005
	2159	10/04/13	April	WFD	51.8813	-8.2045	North Channel Great Island		0.5	<0.03	<0.03	<0.05	<0.03	<0.01	<0.01	<0.01	<0.02	<0.005	1.79	<0.01	<0.05	<0.002	<0.005
	2216	20/05/13	May	WFD	51.8812	-8.2042	North Channel Great Island		0.5	<0.03	<0.03	<0.05	<0.03	<0.01	<0.01	<0.01	<0.02	<0.005	1.65	<0.01	<0.05	<0.002	<0.005
	2276	17/06/13	June	WFD	51.8808	-8.2045	North Channel Great Island		0.5	<0.03	<0.03	<0.05	<0.03	<0.01	<0.01	<0.01	<0.02	<0.005	1.36	<0.01	<0.05	<0.002	<0.005
	2327	03/07/13	July	WFD	51.8807	-8.204	North Channel Great Island		0.5	<0.03	<0.03	<0.05	<0.03	<0.01	<0.01	<0.01	<0.02	<0.005	1.41	<0.01	<0.05	<0.002	<0.005
	2387	14/08/13	August	WFD	51.8814	-8.2041	North Channel Great Island		0.5	<0.03	<0.03	<0.05	<0.03	<0.01	<0.01	<0.01	<0.02	<0.005	1.42	<0.01	<0.05	<0.002	<0.005
	2421	12/09/13	Septembr	WFD	51.8817	-8.2041	North Channel Great Island		0.5	<0.03	<0.03	<0.05	<0.03	<0.01	<0.01	<0.01	<0.02	<0.005	1.5	<0.01	<0.05	<0.002	<0.005
	2467	01/10/13	October	WFD	51.8813	-8.2042	North Channel Great Island		0.5	<0.03	<0.03	<0.05	<0.03	<0.01	<0.01	<0.01	<0.02	<0.005	1.43	<0.01	<0.05	<0.002	<0.005
	2507	04/11/13	Novembr	WFD	51.8809	-8.2042	North Channel Great Island		0.51	<0.03	<0.03	<0.05	<0.03	<0.01	<0.01	<0.01	<0.02	<0.005	1.03	<0.01	<0.05	0.002	<0.005
	2675	06/12/13	Decembr	WFD	51.8812	-8.2041	North Channel Great Island		0.54	<0.03	<0.03	<0.05	<0.03	<0.01	<0.01	<0.01	<0.02	<0.005		<0.01	<0.05	<0.002	<0.005
Dunmanus Bay Inner	2270	12/06/1	June	SWD	51.608	-9.5518	Dunmanus Bay	Dunmanus Inner	0.5										1.57				
	2380	10/08/1	August	SWD	51.6077	-9.5516	Dunmanus Bay	Dunmanus Inner	0.5										1.71				
	2668	03/12/1	Decembe	SWD	51.6073	-9.5514	Dunmanus Bay	Dunmanus Inner	0.51														
Glengariff	2266	19/06/13	June	SWD	51.7278	-9.5432	Glengarriff Harbour	Glengarriff Harbour	0.5										1.3				
	2664	03/12/13	Decembr	SWD	51.7272	-9.5435	Glengarriff Harbour	Glengarriff Harbour	0.53														
Kinsale	2041	15/01/1	January	SWD	51.693	-8.532	Lower Bandon		0.5										0.8				
	2301	10/09/1	Septemb	SWD	51.693	-8.532	Lower Bandon		0.5														
Kinvara	2035	05/03/13	March	SWD	53.167	-8.957	Kinvarra Bay	Clarinbridge / Kinvara Bay	0.5										1.07				
	2295	02/07/13	July	SWD	53.167	-8.957	Kinvarra Bay	Clarinbridge / Kinvara Bay	0.5														
League Point	2269	19/06/1	June	SWD	51.6583	-9.5467	Outer Bantry Bay	League Point	0.5										1.22				
	2667	03/12/1	Decembe	SWD	51.6579	-9.55	Outer Bantry Bay	League Point	0.54														
Lough Mahon	2020	10/01/1	January	WFD	51.8788	-8.3377	Lough Mahon		0.5	<0.03	<0.03	<0.05	<0.03	<0.01	<0.0	<0.0	<0.0	<0.00	0.96	<0.0	<0.05	<0.00	<0.005
	2071	06/02/1	February	WFD	51.878	-8.3373	Lough Mahon		0.5	<0.03	<0.03	<0.05	<0.03	<0.01	<0.0	<0.0	<0.0	<0.00	0.97	<0.0	<0.05	0.004	<0.005
	2099	21/03/1	March	WFD	51.8773	-8.3362	Lough Mahon		0.5	<0.03	<0.03	<0.05	<0.03	<0.01	<0.0	<0.0	<0.0	<0.00	1.16	<0.0	<0.05	<0.00	<0.005
	2158	10/04/1	April	WFD	51.879	-8.3385	Lough Mahon		0.5	<0.03	<0.03	<0.05	<0.03	<0.01	<0.0	<0.0	<0.0	<0.00	1.25	<0.0	<0.05	<0.00	<0.005
	2215	20/05/1	May	WFD	51.878	-8.3374	Lough Mahon		0.5	<0.03	<0.03	<0.05	<0.03	<0.01	<0.0	<0.0	<0.0	<0.00	1.51	<0.0	<0.05	<0.00	<0.005
	2326	03/07/1	July	WFD	51.8782	-8.3371	Lough Mahon		0.5	<0.03	<0.03	<0.05	<0.03	<0.01	<0.0	<0.0	<0.0	<0.00	1.31	<0.0	<0.05	<0.00	<0.005
	2386	14/08/1	August	WFD	51.8781	-8.3358	Lough Mahon		0.5	<0.03	<0.03	<0.05	<0.03	<0.01	<0.0	<0.0	<0.0	<0.00	1.38	<0.0	<0.05	<0.00	<0.005
	2275	07/08/1	August	WFD	51.879	-8.3385	Lough Mahon		0.5	<0.03	<0.03	<0.05	<0.03	<0.01	<0.0	<0.0	<0.0	<0.00	1.35	<0.0	<0.05	<0.00	<0.005
	2420	12/09/1	Septemb	WFD	51.8776	-8.3363	Lough Mahon		0.5	<0.03	<0.03	<0.05	<0.03	<0.01	<0.0	<0.0	<0.0	<0.00	1.5	<0.0	<0.05	<0.00	<0.005
	2466	01/10/1	October	WFD	51.8784	-8.3369	Lough Mahon		0.5	<0.03	<0.03	<0.05	<0.03	<0.01	<0.0	<0.0	<0.0	<0.00	1.29	<0.0	<0.05	<0.00	<0.005
	2506	04/11/1	Novembe	WFD	51.8779	-8.3367	Lough Mahon		0.51	<0.03	<0.03	<0.05	<0.03	<0.01	<0.0	<0.0	<0.0	<0.00	1.13	<0.0	<0.05	<0.00	<0.005
	2674	06/12/1	Decembe	WFD	51.8779	-8.3367	Lough Mahon		0.48	<0.03	<0.03	<0.05	<0.03	<0.01	<0.0	<0.0	<0.0	<0.00		<0.0	<0.05	<0.00	<0.005

Owenacurra Estuary	2022	10/01/1	January	WFD	51.9045	-8.1745	Owenacurra Estuary		0.5	<0.03	<0.03	<0.05	<0.03	<0.01	<0.0	<0.0	<0.0	<0.00	0.35	<0.0	<0.05	0.004	<0.005
	2073	06/02/1	February	WFD	51.9045	-8.1745	Owenacurra Estuary		0.5	<0.03	<0.03	<0.05	<0.03	<0.01	<0.0	<0.0	<0.0	<0.00	0.33	<0.0	<0.05	0.004	<0.005
	2101	21/03/1	March	WFD	51.9043	-8.1746	Owenacurra Estuary		0.5	<0.03	<0.03	<0.05	<0.03	<0.01	<0.0	<0.0	<0.0	<0.00	0.38	<0.0	<0.05	0.005	<0.005
	2164	10/04/1	April	WFD	51.9044	-8.1747	Owenacurra Estuary		0.5	<0.03	<0.03	<0.05	<0.03	<0.01	<0.0	<0.0	<0.0	<0.00	0.57	<0.0	<0.05	<0.00	<0.005
	2217	20/05/1	May	WFD	51.9045	-8.1745	Owenacurra Estuary		0.5	<0.03	<0.03	<0.05	<0.03	<0.01	<0.0	<0.0	<0.0	<0.00	1.01	<0.0	<0.05	<0.00	<0.005
	2280	17/06/1	June	WFD	51.9044	-8.1744	Owenacurra Estuary		0.5	<0.03	<0.03	<0.05	<0.03	0.08	<0.0	<0.0	0.32	<0.00	0.67	<0.0	<0.05	0.004	<0.005
	2328	03/07/1	July	WFD	51.9044	-8.1746	Owenacurra Estuary		0.5	<0.03	<0.03	<0.05	<0.03	<0.01	<0.0	<0.0	<0.0	<0.00	0.68	<0.0	<0.05	<0.00	<0.005
	2391	14/08/1	August	WFD	51.9044	-8.1748	Owenacurra Estuary		0.5	<0.03	<0.03	<0.05	<0.03	<0.01	<0.0	<0.0	<0.0	<0.00	0.88	<0.0	<0.05	0.002	<0.005
	2422	12/09/1	Septemb	WFD	51.9043	-8.1746	Owenacurra Estuary		0.5	<0.03	<0.03	<0.05	<0.03	<0.01	<0.0	<0.0	<0.0	<0.00	1.23	<0.0	<0.05	0.004	<0.005
	2468	01/10/1	October	WFD	51.9042	-8.1746	Owenacurra Estuary		0.5	<0.03	<0.03	<0.05	<0.03	<0.01	<0.0	<0.0	<0.0	<0.00	1.07	<0.0	<0.05	0.009	0.007
	2508	04/11/1	Novembe	WFD	51.9044	-8.1746	Owenacurra Estuary		0.51	<0.03	<0.03	<0.05	<0.03	<0.01	<0.0	<0.0	<0.0	<0.00	0.97	<0.0	<0.05	0.004	<0.005
	2679	06/12/1	Decembe	WFD	51.9041	-8.1746	Owenacurra Estuary		0.55	<0.03	<0.03	<0.05	<0.03	<0.01	<0.0	<0.0	<0.0	<0.00		<0.0	<0.05	0.003	<0.005
Oysterhaven	2273	13/06/1	June	SWD	51.6999	-8.4598	Oysterhaven	Oyster Haven	0.5										1.35				
	2672	05/12/1	Decembe	SWD	51.7002	-8.4601	Oysterhaven	Oyster Haven	0.51														
Roaringwater Bay Inner	2039	14/01/13	January	SWD	51.526	-9.428	Roaring Water Bay	Roaringwater Bay	0.5										1.24				
	2299	09/09/13	September	SWD	51.526	-9.428	Roaring Water Bay	Roaringwater Bay	0.5														
Roaringwater Bay Outer Stn 1	2017	09/01/1	January	WFD	51.5032	-9.5285	Roaring Water Bay		0.5	<0.03	<0.03	<0.05	<0.03	<0.01	<0.0	<0.0	<0.0	<0.00	1.32	<0.0	<0.05	<0.00	<0.005
	2067	07/02/1	February	WFD	51.5037	-9.5297	Roaring Water Bay		0.5	<0.03	<0.03	<0.05	<0.03	<0.01	<0.0	<0.0	<0.0	<0.00	1.68	<0.0	<0.05	<0.00	<0.005
	2095	20/03/1	March	WFD	51.5035	-9.529	Roaring Water Bay		0.5	<0.03	<0.03	<0.05	<0.03	<0.01	<0.0	<0.0	<0.0	<0.00	1.44	<0.0	<0.05	<0.00	<0.005
	2154	23/04/1	April	WFD	51.5059	-9.5254	Roaring Water Bay		0.5	<0.03	<0.03	<0.05	<0.03	<0.01	<0.0	<0.0	<0.0	<0.00	2.05	<0.0	<0.05	<0.00	<0.005
	2212	19/05/1	May	WFD	51.5039	-9.5282	Roaring Water Bay		0.5	<0.03	<0.03	<0.05	<0.03	<0.01	<0.0	<0.0	<0.0	<0.00	1.86	<0.0	<0.05	<0.00	<0.005
	2271	19/06/1	June	WFD	51.5038	-9.5282	Roaring Water Bay		0.5	<0.03	<0.03	<0.05	<0.03	<0.01	<0.0	<0.0	<0.0	<0.00	1.43	<0.0	<0.05	<0.00	<0.005
	2322	08/07/1	July	WFD	51.5044	-9.5265	Roaring Water Bay		0.5	<0.03	<0.03	<0.05	<0.03	<0.01	<0.0	<0.0	<0.0	<0.00	1.38	<0.0	<0.05	<0.00	<0.005
	2381	09/08/1	August	WFD	51.5034	-9.5278	Roaring Water Bay		0.5	<0.03	<0.03	<0.05	<0.03	<0.01	<0.0	<0.0	<0.0	<0.00	1.5	<0.0	<0.05	<0.00	<0.005
	2417	02/09/13	September	WFD	51.5037	-9.5278	Roaring Water Bay		0.5	<0.03	<0.03	<0.05	<0.03	<0.01	<0.01	<0.01	<0.02	<0.005	1.45	<0.01	<0.05	<0.002	<0.005
	2462	09/10/13	October	WFD	51.5033	-9.5278	Roaring Water Bay		0.5	<0.03	<0.03	<0.05	<0.03	<0.01	<0.01	<0.01	<0.02	<0.005	1.62	<0.01	<0.05	<0.002	<0.005
	2502	21/11/1	Novembe	WFD	51.5035	-9.5279	Roaring Water Bay		0.48	<0.03	<0.03	<0.05	<0.03	<0.01	<0.0	<0.0	<0.0	<0.00		<0.0	<0.05	<0.00	<0.005
	2669	04/12/1	Decembe	WFD	51.5037	-9.5203	Roaring Water Bay		0.5	<0.03	<0.03	<0.05	<0.03	<0.01	<0.0	<0.0	<0.0	<0.00		<0.0	<0.05	<0.00	<0.005
Rostellan North	2277	17/06/1	June	SWD	51.8567	-8.1954	Cork Harbour	Rostellan North	0.5										1.31				
	2676	06/12/1	Decembe	SWD	51.8563	-8.195	Cork Harbour	Rostellan North	0.51														
Rostellan West	2278	17/06/1	June	SWD	51.8499	-8.2008	Cork Harbour	Rostellan West	0.5										1.33				
	2677	06/12/1	Decembe	SWD	51.8491	-8.1999	Cork Harbour	Rostellan West	0.5														

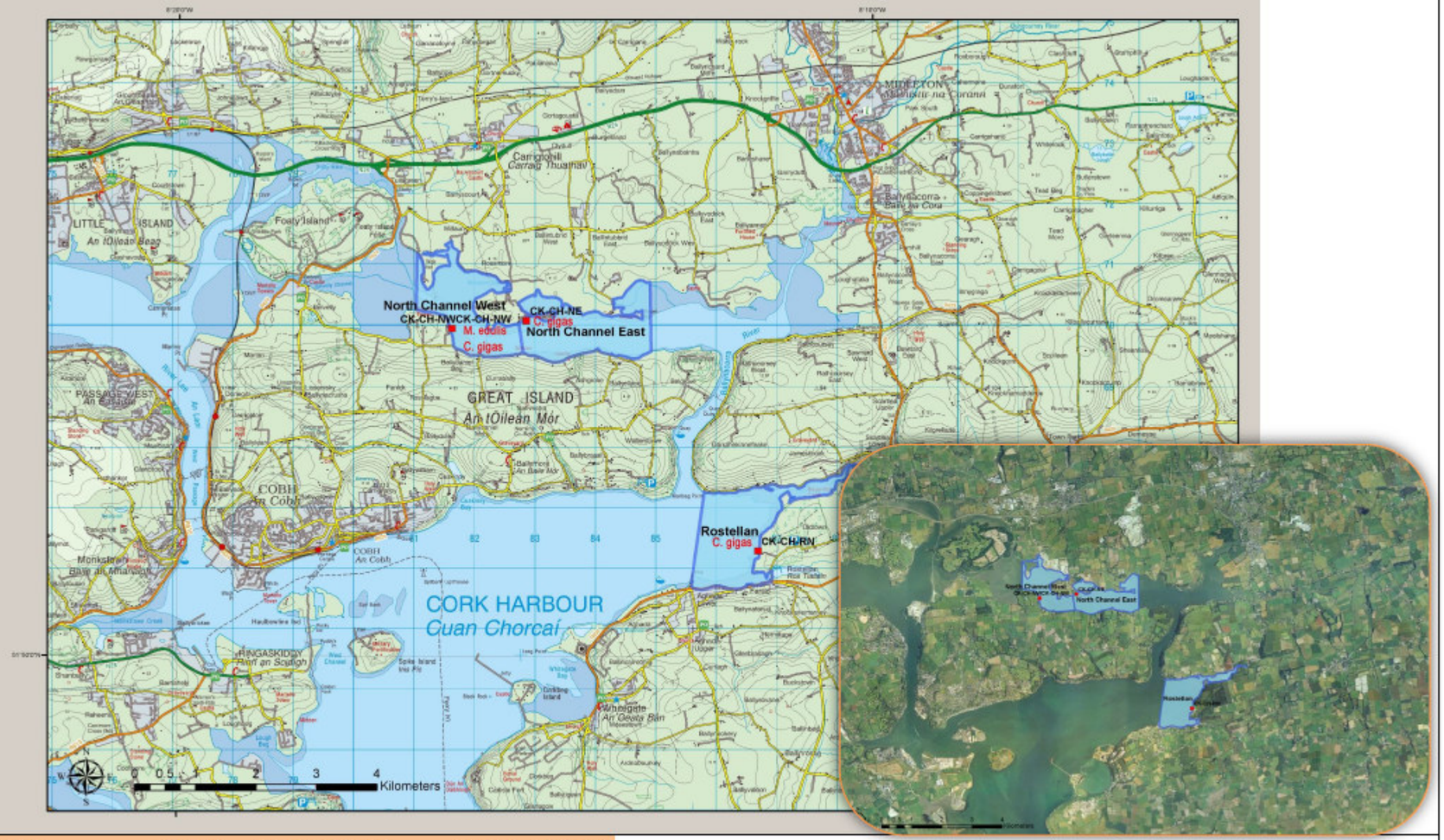
benzo[b+k]fluoranthene (ug/l)	benzo[ghi]perylene (ug/l)	benzo[k]fluoranthene (ug/l)	cadmium (ug/l)	chromium (ug/l)	copper (ug/l)	Dichloromethane (ug/l)	Diuron (ug/l)	fluoranthene (ug/l)	glyphosate (ug/l)	indeno[1,2,3-cd]pyrene (ug/l)	lead (ug/l)	linuron (ug/l)	m- & p-xylene (ug/l)	Mecoprop (ug/l)	mercury (ug/l)	mercury (ng/l)	naphthalene (ug/l)	nickel (ug/l)	nonylphenoldiethoxylates (ug/l)	nonylphenolmonoethoxylates (ug/l)	Nonylphenols (ug/l)	o-xylene (ug/l)	alic acid bis(2-eh)ester (ug/l)	silver (ug/l)	simazine (ug/l)	sum BGHIP and INDP (ug/l)	toluene (ug/l)	trichlorobenzene mixture (ug/l)	xylene (ug/l)	zinc (ug/l)
			<0.05	0.15	<0.1						<0.1				<0.01			0.14						<0.002						<0.13
																0.64														
			<0.05	0.12	0.10						0.33				<0.01			0.15						<0.00						<0.5
																<0.5														
			<0.05	0.20	0.18						<0.1							0.16						<0.00						
															<0.01															
<0.00	<0.00	<0.005	<0.05	0.14	0.52	<0.05	<0.03	<0.00	<0.04	<0.00	<0.1	<0.03	<0.05	<0.02	<0.01		<0.005	0.26	<0.01	<0.01	<0.01	<0.05	<0.05	<0.00	<0.01	<0.00	<0.05	<0.03	<0.05	<0.5
<0.00	<0.00	<0.005	<0.05	0.22	0.35	<0.05	<0.03	<0.00	<0.04	<0.00	<0.1	<0.03	<0.05	<0.02	<0.01		<0.005	0.25	<0.01	<0.01	<0.01	<0.05	<0.05	<0.00	<0.01	<0.00	<0.05	<0.03	<0.05	23.0
<0.00	<0.00	<0.005	<0.05	0.17	0.30	<0.05	<0.03	<0.00	<0.04	<0.00	<0.1	<0.03	<0.05	<0.02	<0.01		<0.005	0.21	<0.01	<0.01	<0.01	<0.05	<0.05	<0.00	<0.01	<0.00	<0.05	<0.03	<0.05	15.2
<0.00	<0.00	<0.005	<0.05	0.13	0.28	<0.05	<0.03	<0.00	<0.04	<0.00	0.30	<0.03	<0.05	<0.02	<0.01		<0.005	0.27	<0.01	<0.01	<0.01	<0.05	<0.05	<0.00	<0.01	<0.00	<0.05	<0.03	<0.05	26.5
<0.00	<0.00	<0.005	<0.05	0.10	0.44	<0.05	<0.03	<0.00	<0.04	<0.00	<0.1	<0.03	<0.05	<0.02	<0.01		<0.005	0.21	<0.01	<0.01	<0.01	<0.05	<0.05	<0.00	<0.01	<0.00	<0.05	<0.03	<0.05	<0.5
<0.00	<0.00	<0.005	<0.05	0.12	0.28	<0.05	<0.03	<0.00	<0.04	<0.00	<0.1	<0.03	<0.05	<0.02	<0.01		<0.005	0.18	<0.01	<0.01	<0.01	<0.05	<0.05	<0.00	<0.01	<0.00	<0.05	<0.03	<0.05	<0.5
<0.00	<0.00	<0.005	<0.05	0.12	0.28	<0.05	<0.03	<0.00	<0.04	<0.00	<0.1	<0.03	<0.05	<0.02	<0.01		<0.005	0.17	<0.01	<0.01	<0.01	<0.05	<0.05	<0.00	<0.01	<0.00	<0.05	<0.03	<0.05	<0.5
<0.00	<0.00	<0.005	<0.05	0.11	0.30	<0.05	<0.03	<0.00	<0.04	<0.00	<0.1	<0.03	0.11	<0.02	<0.01		<0.005	0.18	<0.01	<0.01	<0.01	0.07	<0.05	<0.00	<0.01	<0.00	0.25	<0.03	0.18	<0.5
<0.00	<0.00	<0.005	<0.05	0.14	0.31	<0.05	<0.03	<0.00	<0.04	<0.00	<0.1	<0.03	<0.05	<0.02	0.011		<0.005	0.18	<0.01	<0.01	<0.01	<0.05	<0.05	<0.00	<0.01	<0.00	<0.05	<0.03	<0.05	<0.5
<0.00	<0.00	<0.005	<0.05	0.10	0.34	<0.05	<0.03	<0.00	<0.04	<0.00	<0.004	<0.03	<0.05	<0.02	<0.01		<0.005	0.31	<0.01	<0.01	<0.01	<0.05	<0.05	<0.00	<0.01	<0.00	<0.05	<0.03	<0.05	0.94
5	2							5		2														2		2				
<0.00	<0.00	<0.005	0.18	0.10	0.46	<0.05	<0.03	<0.00	<0.04	<0.00	<0.1	<0.03	<0.05	<0.02	<0.01		<0.005	0.25	<0.01	<0.01	<0.01	<0.05	<0.05	<0.00	<0.01	<0.00	<0.05	<0.03	<0.05	<0.5
<0.00	<0.00	<0.005				<0.05	<0.03	<0.00	<0.04	<0.00		<0.03	<0.05	<0.02		0.59	<0.005		<0.01	<0.01	<0.01	<0.05	<0.05		<0.01	<0.00	<0.05	<0.03	<0.05	
			<0.05	0.13	0.20						<0.1				<0.01			0.15						<0.00						<0.5
																0.94														
			<0.05	0.15	<0.1						<0.1				<0.01			0.13						<0.002						<0.13
																0.66														
			<0.05	0.16	<0.1						<0.004				0.017			0.14						<0.002						
<0.00	<0.00	<0.005	<0.05	0.16	0.24	<0.05	<0.03	<0.00	<0.04	<0.00	<0.1	<0.03	<0.05	<0.02	<0.01		<0.005	0.16	<0.01	<0.01	<0.01	<0.05	<0.05	<0.00	<0.01	<0.00	<0.05	<0.03	<0.05	<0.5
<0.00	<0.00	<0.005	<0.05	0.25	0.19	<0.05	<0.03	<0.00	<0.04	<0.00	<0.1	<0.03	<0.05	<0.02	<0.01		<0.005	0.18	<0.01	<0.01	<0.01	<0.05	<0.05	<0.00	<0.01	<0.00	<0.05	<0.03	<0.05	19.7
<0.00	<0.00	<0.005	<0.05	0.16	0.16	<0.05	<0.03	<0.00	<0.04	<0.00	<0.1	<0.03	<0.05	<0.02	<0.01		<0.005	0.16	<0.01	<0.01	<0.01	<0.05	<0.05	<0.00	<0.01	<0.00	<0.05	<0.03	<0.05	<0.5
<0.00	<0.00	<0.005	<0.05	0.11	0.40	<0.05	<0.03	<0.00	<0.04	<0.00	0.27	<0.03	<0.05	<0.02	<0.01		<0.005	0.27	<0.01	<0.01	<0.01	<0.05	<0.05	<0.00	<0.01	<0.00	<0.05	<0.03	<0.05	24.8
<0.00	<0.00	<0.005	<0.05	0.11	0.27	<0.05	<0.03	<0.00	<0.04	<0.00	<0.1	<0.03	<0.05	<0.02	<0.01		<0.005	0.22	<0.01	<0.01	<0.01	<0.05	<0.05	<0.00	<0.01	<0.00	<0.05	<0.03	<0.05	<0.13
<0.00	<0.00	<0.005	<0.05	0.12	0.31	<0.05	<0.03	<0.00	<0.04	<0.00	<0.1	<0.03	<0.05	<0.02	<0.01		<0.005	0.14	<0.01	<0.01	<0.01	<0.05	0.1	<0.00	<0.01	<0.00	<0.05	<0.03	<0.05	<0.5
<0.00	<0.00	<0.005	<0.05	0.13	0.28	<0.05	<0.03	<0.00	<0.04	<0.00	<0.1	<0.03	<0.05	<0.02	<0.01		<0.005	0.17	<0.01	<0.01	<0.01	<0.05	<0.05	<0.00	<0.01	<0.00	<0.05	<0.03	<0.05	<0.5
<0.00	<0.00	<0.005	<0.05	0.12	0.20	<0.05	<0.03	<0.00	<0.04	<0.00	<0.1	<0.03	<0.05	<0.02	<0.01		<0.005	0.15	<0.01	<0.01	<0.01	<0.05	<0.05	<0.00	<0.01	<0.00	<0.05	<0.03	<0.05	<0.5
<0.00	<0.00	<0.005	<0.05	0.13	0.22	<0.05	<0.03	<0.00	<0.04	<0.00	<0.1	<0.03	<0.05	<0.02	0.02		<0.005	0.14	<0.01	<0.01	<0.01	<0.05	<0.05	<0.00	<0.01	<0.00	<0.05	<0.03	<0.05	<0.5
<0.00	<0.00	<0.005	<0.05	0.12	0.31	<0.05	<0.03	<0.00	<0.04	<0.00	<0.1	<0.03	<0.05	<0.02	0.043		<0.005	0.18	<0.01	<0.01	<0.01	<0.05	<0.05	<0.00	<0.01	<0.00	<0.05	<0.03	<0.05	<0.5
<0.00	<0.00	<0.005	0.16	0.11	0.43	<0.05	<0.03	<0.00	<0.04	<0.00	<0.1	<0.03	<0.05	<0.02	<0.01		<0.005	0.22	<0.01	<0.01	<0.01	<0.05	<0.05	<0.00	<0.01	<0.00	<0.05	<0.03	<0.05	0.58
<0.00	<0.00	<0.005				<0.05	<0.03	<0.00	<0.04	<0.00		<0.03	<0.05	<0.02		<0.5	<0.005		<0.01	<0.01	<0.01	<0.05	0.79		<0.01	<0.00	<0.05	<0.03	<0.05	

<0.00	<0.00	<0.005	<0.05	0.15	0.19	<0.05	<0.03	<0.00	<0.04	<0.00	<0.1	<0.03	<0.05	<0.02	<0.01		<0.005	0.17	<0.01	<0.01	<0.01	<0.05	<0.05	<0.00	<0.01	<0.00	<0.05	<0.03	<0.05	14.9
<0.00	0.005	<0.005	<0.05	0.17	0.31	<0.05	<0.03	0.006	<0.04	0.002	<0.1	<0.03	<0.05	<0.02	<0.01		<0.005	0.23	<0.01	<0.01	<0.01	<0.05	<0.05	<0.00	<0.01	0.007	<0.05	<0.03	<0.05	21.4
<0.00	<0.00	<0.005	<0.05	0.16	0.23	<0.05	<0.03	<0.00	<0.04	<0.00	<0.1	<0.03	<0.05	<0.02	<0.01		0.013	0.17	<0.01	<0.01	<0.01	<0.05	<0.05	<0.00	<0.01	<0.00	<0.05	<0.03	<0.05	25.0
<0.00	<0.00	<0.005	<0.05	0.11	0.39	<0.05	<0.03	<0.00	<0.04	<0.00	0.27	<0.03	<0.05	<0.02	<0.01		<0.005	0.27	<0.01	<0.01	<0.01	<0.05	<0.05	<0.00	<0.01	<0.00	<0.05	<0.03	<0.05	21.5
<0.00	<0.00	<0.005	<0.05	0.09	0.30	<0.05	<0.03	<0.00	<0.04	<0.00	<0.1	<0.03	<0.05	<0.02	<0.01		<0.005	0.2	<0.01	<0.01	<0.01	<0.05	<0.05	<0.00	<0.01	<0.00	<0.05	<0.03	<0.05	<0.13
<0.00	<0.00	<0.005	<0.05	0.11	0.29	<0.05	<0.03	<0.00	<0.04	<0.00	<0.1	<0.03	<0.05	<0.02	<0.01		<0.005	0.2	<0.01	<0.01	<0.01	<0.05	<0.05	<0.00	<0.01	<0.00	<0.05	<0.03	<0.05	<0.5
<0.00	<0.00	<0.005	<0.05	0.12	0.34	<0.05	<0.03	<0.00	<0.04	<0.00	<0.1	<0.03	<0.05	<0.02	<0.01		<0.005	0.19	<0.01	<0.01	<0.01	<0.05	<0.05	<0.00	<0.01	<0.00	<0.05	<0.03	<0.05	<0.5
<0.00	<0.00	<0.005	<0.05	0.11	0.29	<0.05	<0.03	<0.00	<0.04	<0.00	<0.1	<0.03	<0.05	<0.02	<0.01		<0.005	0.17	<0.01	<0.01	<0.01	<0.05	<0.05	<0.00	<0.01	<0.00	<0.05	<0.03	<0.05	<0.5
<0.00	<0.00	<0.005	<0.05	0.12	0.31	<0.05	<0.03	<0.00	<0.04	<0.00	<0.1	<0.03	<0.05	<0.02	<0.01		<0.005	0.21	<0.01	<0.01	<0.01	<0.05	<0.05	<0.00	<0.01	<0.00	<0.05	<0.03	<0.05	<0.5
<0.00	<0.00	<0.005	<0.05	0.11	0.24	<0.05	<0.03	<0.00	<0.04	<0.00	<0.1	<0.03	<0.05	<0.02	<0.01		<0.005	0.17	<0.01	<0.01	<0.01	<0.05	<0.05	<0.00	<0.01	<0.00	<0.05	<0.03	<0.05	<0.5
<0.00	<0.00	<0.005	0.41	0.10	0.26	<0.05	<0.03	<0.00	<0.04	<0.00	<0.1	<0.03	<0.05	<0.02	<0.01		<0.005	0.17	<0.01	<0.01	<0.01	<0.05	<0.05	<0.00	<0.01	<0.00	<0.05	<0.03	<0.05	<0.5
<0.00	<0.00	<0.005				<0.05	<0.03	<0.00	<0.04	<0.00		<0.03	<0.05	<0.02		<0.5	<0.005		<0.01	<0.01	<0.01	<0.05	<0.05		<0.01	<0.00	<0.05	<0.03	<0.05	
			<0.05	0.15	<0.1						<0.1				<0.01			0.15						<0.05						<0.5
			<0.05	0.09	0.13						<0.1				0.134			0.15						<0.00						<0.13
																0.64														
			<0.05	0.13	<0.1						<0.1				<0.01			0.14						<0.00 2						<0.5
																0.66														
			<0.05	0.15	0.41						<0.1				<0.01			0.31						<0.00						
															<0.01															
			<0.05	0.15	0.12						<0.1				<0.01			0.19						<0.00 2						15.3
															<0.01															
			<0.05	0.19	<0.1						<0.1				<0.01			0.15						<0.00						<0.5
																0.68														
<0.00	<0.00	<0.005	<0.05	0.16	0.45	<0.05	<0.03	<0.00	<0.04	<0.00	<0.1	<0.03	<0.05	<0.02	<0.01		<0.005	0.28	<0.01	<0.01	<0.01	<0.05	<0.05	<0.00	<0.01	<0.00	<0.05	<0.03	<0.05	0.55
<0.00	0.003	<0.005	<0.05	0.20	0.49	<0.05	<0.03	<0.00	<0.04	<0.00	<0.1	<0.03	<0.05	<0.02	<0.01		<0.005	0.29	<0.01	<0.01	<0.01	<0.05	<0.05	<0.00	<0.01	0.003	<0.05	<0.03	<0.05	17.9
<0.00	<0.00	<0.005	<0.05	0.15	0.38	<0.05	<0.03	<0.00	<0.04	<0.00	<0.1	<0.03	<0.05	<0.02	<0.01		<0.005	0.19	<0.01	<0.01	<0.01	<0.05	<0.05	<0.00	<0.01	<0.00	<0.05	<0.03	<0.05	0.57
<0.00	<0.00	<0.005	<0.05	0.11	0.73	<0.05	<0.03	<0.00	<0.04	<0.00	0.33	<0.03	<0.05	<0.02	<0.01		<0.005	0.33	<0.01	<0.01	<0.01	<0.05	<0.05	<0.00	<0.01	<0.00	<0.05	<0.03	<0.05	27.7
<0.00	<0.00	<0.005	<0.05	0.15	0.75	<0.05	<0.03	<0.00	<0.04	<0.00	<0.1	<0.03	<0.05	<0.02	<0.01		<0.005	0.3	<0.01	<0.01	<0.01	<0.05	<0.05	<0.00	<0.01	<0.00	<0.05	<0.03	<0.05	<0.5
<0.00	<0.00	<0.005	<0.05	0.11	0.34	<0.05	<0.03	<0.00	<0.04	<0.00	<0.1	<0.03	<0.05	<0.02	<0.01		<0.005	0.18	<0.01	<0.01	<0.01	<0.05	<0.05	<0.00	<0.01	<0.00	<0.05	<0.03	<0.05	<0.5
<0.00	<0.00	<0.005	<0.05	0.11	0.35	<0.05	<0.03	<0.00	<0.04	<0.00	<0.1	<0.03	<0.05	<0.02	<0.01		<0.005	0.19	<0.01	<0.01	<0.01	<0.05	<0.05	<0.00	<0.01	<0.00	<0.05	<0.03	<0.05	<0.5
<0.00	<0.00	<0.005	<0.05	0.10	0.43	<0.05	<0.03	<0.00	<0.04	<0.00	<0.1	<0.03	<0.05	<0.02	<0.01		<0.005	0.24	<0.01	<0.01	<0.01	<0.05	<0.05	<0.00	<0.01	<0.00	<0.05	<0.03	<0.05	0.55
<0.00	<0.00	<0.005	<0.05	0.11	0.51	<0.05	<0.03	<0.00	<0.04	<0.00	<0.1	<0.03	<0.05	<0.02	0.014		<0.005	0.2	<0.01	<0.01	<0.01	<0.05	<0.05	<0.00	<0.01	<0.00	<0.05	<0.03	<0.05	0.83
<0.00	<0.00	<0.005	<0.05	0.11	0.37	<0.05	<0.03	<0.00	<0.04	<0.00	<0.1	<0.03	<0.05	<0.02	<0.01		<0.005	0.23	<0.01	<0.01	<0.01	<0.05	<0.05	<0.00	<0.01	<0.00	<0.05	<0.03	<0.05	0.85

<0.00	<0.00	<0.005	0.18	0.12	0.40	<0.05	<0.03	<0.00	<0.04	<0.00	<0.1	<0.03	<0.05	<0.02	<0.01		<0.005	0.24	<0.01	<0.01	<0.01	<0.05	<0.05	<0.00	<0.01	<0.00	<0.05	<0.03	<0.05	0.85
<0.00	<0.00	<0.005				<0.05	<0.03	<0.00	<0.04	<0.00		<0.03	<0.05	<0.02		0.73	<0.005		<0.01	<0.01	<0.01	<0.05	0.36		<0.01	<0.00	<0.05	<0.03	<0.05	
<0.00	<0.00	<0.005	<0.05	0.22	0.36	<0.05	<0.03	0.005	<0.04	<0.00	<0.1	<0.03	<0.05	<0.02	<0.01		<0.005	0.31	<0.01	<0.01	<0.01	<0.05	<0.05	<0.00	<0.01	<0.00	<0.05	<0.03	<0.05	26.5
<0.00	0.003	<0.005	<0.05	0.25	0.46	<0.05	<0.03	<0.00	<0.04	<0.00	<0.1	<0.03	<0.05	<0.02	<0.01		<0.005	0.35	<0.01	<0.01	<0.01	<0.05	0.1	<0.00	<0.01	0.003	<0.05	<0.03	<0.05	27.5
<0.00	0.006	<0.005	<0.05	0.18	0.48	<0.05	<0.03	0.009	<0.04	0.003	<0.1	<0.03	<0.05	<0.02	<0.01		0.008	0.24	<0.01	<0.01	<0.01	<0.05	<0.05	<0.00	<0.01	0.009	<0.05	<0.03	<0.05	1.54
<0.00	<0.00	<0.005	<0.05	0.18	0.45	<0.05	<0.03	<0.00	<0.04	<0.00	0.31	<0.03	<0.05	<0.02	<0.01		<0.005	0.31	<0.01	<0.01	<0.01	<0.05	<0.05	<0.00	<0.01	<0.00	<0.05	<0.03	<0.05	20.1
<0.00	<0.00	<0.005	<0.05	0.12	0.41	<0.05	<0.03	<0.00	<0.04	<0.00	<0.1	<0.03	<0.05	<0.02	<0.01		<0.005	0.27	<0.01	<0.01	<0.01	<0.05	<0.05	<0.00	<0.01	<0.00	<0.05	<0.03	<0.05	<0.5
<0.00	0.003	<0.005	<0.05	0.48	1.84	<0.05	<0.03	0.007	0.12	<0.00	0.16	<0.03	<0.05	0.29	<0.01		<0.005	0.98	<0.01	<0.01	<0.01	<0.05	<0.05	<0.00	<0.01	0.003	<0.05	<0.03	<0.05	1.71
<0.00	<0.00	<0.005	<0.05	0.18	0.39	<0.05	<0.03	<0.00	<0.04	<0.00	<0.1	<0.03	<0.05	<0.02	<0.01		<0.005	0.21	<0.01	<0.01	<0.01	<0.05	<0.05	<0.00	<0.01	<0.00	<0.05	<0.03	<0.05	0.79
<0.00	<0.00	<0.005	<0.05	0.17	0.46	<0.05	<0.03	<0.00	0.06	<0.00	<0.1	<0.03	<0.05	<0.02	<0.01		<0.005	0.26	<0.01	<0.01	<0.01	<0.05	0.28	<0.00	<0.01	<0.00	<0.05	<0.03	<0.05	1.06
<0.00	0.004	<0.005	<0.05	0.12	0.32	<0.05	<0.03	0.007	<0.04	0.002	<0.1	<0.03	<0.05	<0.02	0.039		<0.005	0.24	<0.01	<0.01	<0.01	<0.05	<0.05	<0.00	<0.01	0.006	<0.05	<0.03	<0.05	0.66
0.007	0.008	<0.005	<0.05	0.20	0.84	<0.05	<0.03	0.012	0.07	0.004	<0.1	<0.03	<0.05	<0.02	<0.01		<0.005	0.32	<0.01	<0.01	<0.01	<0.05	<0.05	<0.00	<0.01	0.012	<0.05	<0.03	<0.05	2.09
<0.00	0.003	<0.005	0.13	0.15	0.42	<0.05	<0.03	0.005	<0.04	<0.00	<0.1	<0.03	<0.05	<0.02	<0.01		<0.005	0.34	<0.01	<0.01	<0.01	<0.05	<0.05	<0.00	<0.01	0.003	<0.05	<0.03	<0.05	0.6
<0.00	0.002	<0.005				<0.05	<0.03	<0.00	<0.04	<0.00		<0.03	<0.05	<0.02		0.89	<0.005		<0.01	<0.01	<0.01	<0.05	<0.05		<0.01	0.002	<0.05	<0.03	<0.05	
			<0.05	0.12	0.10						<0.1				<0.01			0.15						<0.00						<0.13
																0.53														
			<0.05	0.72	<0.1						<0.004							0.16						<0.00 2						
															<0.01															
<0.00	<0.00	<0.005	<0.05	0.18	0.21	<0.05	<0.03	<0.00	<0.04	<0.00	<0.1	<0.03	<0.05	<0.02	<0.01		<0.005	0.14	<0.01	<0.01	<0.01	<0.05	<0.05	<0.00	<0.01	<0.00	<0.05	<0.03	<0.05	13.7
<0.00	<0.00	<0.005	<0.05	0.20	0.13	<0.05	<0.03	<0.00	<0.04	<0.00	<0.1	<0.03	<0.05	<0.02	<0.01		<0.005	0.16	<0.01	<0.01	<0.01	<0.05	<0.05	<0.00	<0.01	<0.00	<0.05	<0.03	<0.05	15.9
<0.00	<0.00	<0.005	<0.05	0.18	0.18	<0.05	<0.03	<0.00	<0.04	<0.00	<0.1	<0.03	<0.05	<0.02	0.276		<0.005	0.18	<0.01	<0.01	<0.01	<0.05	<0.05	<0.05	<0.01	<0.00	<0.05	<0.03	<0.05	12.8
<0.00	<0.00	<0.005	<0.05	0.11	0.25	<0.05	<0.03	<0.00	<0.04	<0.00	0.24	<0.03	<0.05	<0.02	<0.01		<0.005	0.24	<0.01	<0.01	<0.01	<0.05	<0.05	<0.00	<0.01	<0.00	<0.05	<0.03	<0.05	37.0
<0.00	<0.00	<0.005	<0.05	0.11	0.15	<0.05	<0.03	<0.00	<0.04	<0.00	<0.1	<0.03	<0.05	<0.02	<0.01		<0.005	0.16	<0.01	<0.01	<0.01	<0.05	<0.05	<0.00	<0.01	<0.00	<0.05	<0.03	<0.05	<0.13
<0.00	<0.00	<0.005	<0.05	0.15	0.13	<0.05	<0.03	<0.00	<0.04	<0.00	<0.1	<0.03	<0.05	<0.02	<0.01		<0.005	0.14	<0.01	<0.01	<0.01	<0.05	0.75	<0.00	<0.01	<0.00	<0.05	<0.03	<0.05	<0.13
<0.00	<0.00	<0.005	<0.05	0.13	0.15	<0.05	<0.03	<0.00	<0.04	<0.00	<0.1	<0.03	<0.05	<0.02	<0.01		<0.005	0.13	<0.01	<0.01	<0.01	<0.05	<0.05	<0.00	<0.01	<0.00	<0.05	<0.03	<0.05	<0.13
<0.00	<0.00	<0.005	<0.05	1.13	0.30	<0.05	<0.03	<0.00 5	<0.04	<0.00 2	<0.004	<0.03	<0.05	<0.02	<0.01		<0.005	0.53	<0.01	<0.01	<0.01	<0.05	<0.05	<0.00 2	<0.01	<0.00 2	<0.05	<0.03	<0.05	<0.5
<0.00 5	<0.00 2	<0.005	<0.05	0.14	0.17	<0.05	<0.03	<0.00 5	<0.04	<0.00 2	<0.004	<0.03	<0.05	<0.02	<0.01		<0.005	0.15	<0.01	<0.01	<0.01	<0.05	<0.05	<0.00 2	<0.01	<0.00 2	<0.05	<0.03	<0.05	<0.5
<0.00	<0.00	<0.005				<0.05	<0.03	<0.00	<0.04	<0.00		<0.03	0.15	<0.02	<0.01		<0.005		<0.01	<0.01	<0.01	<0.05	0.28		<0.01	<0.00	0.22	<0.03	0.15	
<0.00	<0.00	<0.005				<0.05	<0.03	<0.00	<0.04	<0.00		<0.03	<0.05	<0.02		<0.5	<0.005		<0.01	<0.01	<0.01	<0.05	<0.05		<0.01	<0.00	<0.05	<0.03	<0.05	
			<0.05	0.10	0.25						<0.1				<0.01			0.19						<0.00						<0.5
																0.59														
			<0.05	0.11	0.87						<0.1				<0.01			0.18						<0.00						
																<0.5														

" This is available data for 2013 but the complete dataset is not yet available. The end of year reporting to EPA has not taken place yet and therefore the final data QA that entails has not yet been carried out. Therefore please do not release these data without reference to us in advance of the data being reported to the EPA. Probe measurements are indicative as they are prone to spikes in readings. "

Cork Harbour Live Bivalve Mollusc Production Areas Designation 2012



ProductionSite	ProductionArea	AreaCode	SamplePoint	Species	XLocation	YLocation
Cork Harbour	North Channel West	CK-CH-NW		M. edulis	-8.2675	51.8819
Cork Harbour	North Channel West	CK-CH-NW		C. Gigas	-8.2675	51.8819
Cork Harbour	North Channel East	CK-CH-NE		C. Gigas	-8.2497	51.8831
Cork Harbour	Rostellan	CK-CH-RN		C. Gigas	-8.1939	51.8492

Area	Result Number	Sample Position	Sampling Date	Sample Type	ECShell
CORK HARBOUR	29180	NORTH CHANNEL EAST	14-Jan-13	POY	**4.9**
CORK HARBOUR	29357	NORTH CHANNEL EAST	13-Feb-13	POY	1.3
CORK HARBOUR	29535	NORTH CHANNEL EAST	27-Mar-13	POY	0.2
CORK HARBOUR	29650	NORTH CHANNEL EAST	24-Apr-13	POY	0.5
CORK HARBOUR	29732	NORTH CHANNEL EAST	27-May-13	POY	2.3
CORK HARBOUR	29901	NORTH CHANNEL EAST	25-Jun-13	POY	0.5
CORK HARBOUR	30044	NORTH CHANNEL EAST	24-Jul-13	POY	1.1
CORK HARBOUR	30159	NORTH CHANNEL EAST	20-Aug-13	POY	0.2
CORK HARBOUR	30309	NORTH CHANNEL EAST	17-Sep-13	POY	1.7
CORK HARBOUR	30438	NORTH CHANNEL EAST	16-Oct-13	POY	0.2
CORK HARBOUR	30515	NORTH CHANNEL EAST	6-Nov-13	POY	1.3
CORK HARBOUR	30680	NORTH CHANNEL EAST	4-Dec-13	POY	0.2
CORK HARBOUR	29179	NORTH CHANNEL WEST	14-Jan-13	MUS	**3.3**
CORK HARBOUR	29359	NORTH CHANNEL WEST	13-Feb-13	MUS	**4.9**
CORK HARBOUR	29537	NORTH CHANNEL WEST	27-Mar-13	MUS	**3.3**
CORK HARBOUR	29648	NORTH CHANNEL WEST	24-Apr-13	MUS	0.9
CORK HARBOUR	29730	NORTH CHANNEL WEST	27-May-13	MUS	0.2
CORK HARBOUR	29900	NORTH CHANNEL WEST	25-Jun-13	MUS	0.2
CORK HARBOUR	30043	NORTH CHANNEL WEST	24-Jul-13	MUS	**22**
CORK HARBOUR	30157	NORTH CHANNEL WEST	20-Aug-13	MUS	0.7
CORK HARBOUR	30308	NORTH CHANNEL WEST	17-Sep-13	MUS	1.7
CORK HARBOUR	30437	NORTH CHANNEL WEST	16-Oct-13	MUS	**13**
CORK HARBOUR	30517	NORTH CHANNEL WEST	6-Nov-13	MUS	0.8
CORK HARBOUR	30682	NORTH CHANNEL WEST	4-Dec-13	MUS	0.8
CORK HARBOUR	29178	NORTH CHANNEL WEST	14-Jan-13	POY	**4.9**
CORK HARBOUR	29358	NORTH CHANNEL WEST	13-Feb-13	POY	0.2
CORK HARBOUR	29536	NORTH CHANNEL WEST	27-Mar-13	POY	0.7
CORK HARBOUR	29649	NORTH CHANNEL WEST	24-Apr-13	POY	0.5
CORK HARBOUR	29731	NORTH CHANNEL WEST	27-May-13	POY	0.2
CORK HARBOUR	29899	NORTH CHANNEL WEST	25-Jun-13	POY	1.7
CORK HARBOUR	30158	NORTH CHANNEL WEST	20-Aug-13	POY	1.4
CORK HARBOUR	30307	NORTH CHANNEL WEST	17-Sep-13	POY	0.5
CORK HARBOUR	30436	NORTH CHANNEL WEST	16-Oct-13	POY	2.2
CORK HARBOUR	30516	NORTH CHANNEL WEST	6-Nov-13	POY	0.2
CORK HARBOUR	30681	NORTH CHANNEL WEST	4-Dec-13	POY	1.4
CORK HARBOUR	29181	ROSTELLAN	14-Jan-13	POY	**24**
CORK HARBOUR	29651	ROSTELLAN	24-Apr-13	POY	0.2
CORK HARBOUR	30039	ROSTELLAN	24-Jul-13	POY	0.2
CORK HARBOUR	30440	ROSTELLAN	16-Oct-13	POY	0.2
CORK HARBOUR	30519	ROSTELLAN	6-Nov-13	POY	0.9

Area	Samplepos	Sampledat	Resultno	Sampletyp	Lab	ECShell
CORK HARBOUR						
	NORTH CHANNEL WEST	4-Apr-12	27971	MUS	EURO	0.8
	NORTH CHANNEL WEST	8-May-12	28101	MUS	EURO	**7.9**
	NORTH CHANNEL WEST	6-Jun-12	28309	MUS	EURO	**92**
	NORTH CHANNEL WEST	19-Jun-12	28322	MUS	EURO	**35**
	NORTH CHANNEL WEST	3-Jul-12	28404	MUS	EURO	**9.4**
	NORTH CHANNEL WEST	17-Jul-12	28422	MUS	EURO	2.3
	NORTH CHANNEL WEST	9-Aug-12	28509	MUS	EURO	**4.9**
	NORTH CHANNEL WEST	28-Aug-12	28596	MUS	EURO	2.3
	NORTH CHANNEL WEST	11-Sep-12	28658	MUS	EURO	**3.3**
	NORTH CHANNEL WEST	3-Oct-12	28765	MUS	EURO	0.5
	NORTH CHANNEL WEST	17-Oct-12	28769	MUS	EURO	0.2
	NORTH CHANNEL WEST	14-Nov-12	28925	MUS	EURO	1.3
	NORTH CHANNEL WEST	28-Nov-12	29026	MUS	EURO	**54**
	NORTH CHANNEL WEST	12-Dec-12	29089	MUS	EURO	**3.3**
	NORTH CHANNEL WEST	10-Jan-12	27551	POY	EURO	**3.3**
	NORTH CHANNEL WEST	22-Feb-12	27791	POY	EURO	0.7
	NORTH CHANNEL WEST	21-Mar-12	27865	POY	EURO	0.2
	NORTH CHANNEL WEST	4-Apr-12	27970	POY	EURO	0.2
	NORTH CHANNEL WEST	8-May-12	28100	POY	EURO	**7.9**
	NORTH CHANNEL WEST	19-Jun-12	28325	POY	EURO	**4.9**
	NORTH CHANNEL WEST	17-Jul-12	28423	POY	EURO	**4.9**
	NORTH CHANNEL WEST	21-Aug-12	28515	POY	EURO	**4.9**
	NORTH CHANNEL WEST	18-Sep-12	28664	POY	EURO	**7**
	NORTH CHANNEL WEST	17-Oct-12	28770	POY	EURO	2.3
	NORTH CHANNEL WEST	14-Nov-12	28926	POY	EURO	0.2
	NORTH CHANNEL WEST	12-Dec-12	29088	POY	EURO	0.2
	NORTH CHANNEL EAST	10-Jan-12	27552	POY	EURO	0.5
	NORTH CHANNEL EAST	22-Feb-12	27790	POY	EURO	0.2
	NORTH CHANNEL EAST	4-Apr-12	27972	POY	EURO	0.2
	NORTH CHANNEL EAST	8-May-12	28099	POY	EURO	**3.3**
	NORTH CHANNEL EAST	18-Jun-12	28316	POY	EURO	**22**
	NORTH CHANNEL EAST	17-Jul-12	28421	POY	EURO	1.7
	NORTH CHANNEL EAST	22-Aug-12	28514	POY	EURO	**3.3**
	NORTH CHANNEL	18-Sep-12	28663	POY	EURO	1.7

EAST					
NORTH CHANNEL EAST	17-Oct-12	28771	POY	EURO	**7**
NORTH CHANNEL EAST	14-Nov-12	28927	POY	EURO	1.4
NORTH CHANNEL EAST	12-Dec-12	29087	POY	EURO	0.5
ROSTELLAN	10-Jan-12	27556	POY	EURO	0.5
ROSTELLAN	22-Feb-12	27789	POY	EURO	0.2
ROSTELLAN	21-Mar-12	27868	POY	EURO	0.7
ROSTELLAN	4-Apr-12	27973	POY	EURO	1.3
ROSTELLAN	8-May-12	28103	POY	EURO	0.7
ROSTELLAN	19-Jun-12	28324	POY	EURO	**54**
ROSTELLAN	17-Jul-12	28425	POY	EURO	0.7
ROSTELLAN	21-Aug-12	28511	POY	EURO	0.8
ROSTELLAN	18-Sep-12	28662	POY	EURO	0.2
ROSTELLAN	17-Oct-12	28773	POY	EURO	0.2
ROSTELLAN	14-Nov-12	28928	POY	EURO	0.4
ROSTELLAN	12-Dec-12	29086	POY	EURO	0.2

Cork Harbour Gigas Viral Results Jan 2009 – Dec 2012

Date	Test Description	Result
13/01/2009	Real-time PCR detection of Norovirus	High level of norovirus GI and GII detected
11/02/2009	Real-time PCR detection of Norovirus	High level of norovirus GI and GII detected
10/03/2009	Real-time PCR detection of Norovirus	High level of norovirus GI and GII detected
15/04/2009	Real-time PCR detection of Norovirus	High level of norovirus GI and GII detected
13/05/2009	MBU-4 Norovirus determination in shellfish	Low level norovirus GI detected, medium level norovirus GII detected
09/06/2009	MBU-4 Norovirus determination in shellfish	Norovirus GI and GII not detected
14/07/2009	MBU-4 Norovirus determination in shellfish	Norovirus GI not detected, low level of norovirus GII detected
11/08/2009	MBU-4 Norovirus determination in shellfish	**NoV GI:** Not detected **NoV GII:** Positive; 117 detectable virus genome copies/g
08/09/2009	MBU-4 Norovirus determination in shellfish	**NoV GI:** Not detected **NoV GII:**Positive; 578 detectable virus genome copies/g
14/10/2009	MBU-4 Norovirus determination in shellfish	**NoV GI:** Positive; 3830 detectable virus genome copies/g **NoV GII:** Positive; 2210 detectable virus genome copies/g
18/11/2009	MBU-4 Norovirus determination in shellfish	**NoV GI:** Not detected **NoV GII:** Positive; 6010 detectable virus genome copies/g
16/12/2009	MBU-4 Norovirus determination in shellfish	**NoV GI:** Positive; <LOQ **NoV GII:** Positive; 2000 detectable virus genome copies/g
13/01/2010	MBU-4 Norovirus determination in shellfish	**NoV GI:** Positive; 5790 detectable virus genome copies/g **NoV GII:** Positive; 4210 detectable virus genome copies/g
18/05/2010	MBU-4 Norovirus determination in shellfish	**NoV GI:** Positive; 190 detectable virus genome copies/g **NoV GII:** Positive; 1160

		detectable virus genome copies/g
28/07/2010	MBU-4 Norovirus determination in shellfish	**NoV GI:** Not detected **NoV GII:** Not detected
01/09/2010	MBU-4 Norovirus determination in shellfish	**NoV GI:** Not detected **NoV GII:** Not detected
29/09/2010	MBU-4 Norovirus determination in shellfish	**NoV GI:** Not detected **NoV GII:** Not detected
27/10/2010	MBU-4 Norovirus determination in shellfish	**NoV GI:** Not detected **NoV GII:** Positive; 219 detectable virus genome copies/g
16/02/2011	MBU-4 Norovirus determination in shellfish	**NoV GI:** Positive; 311 detectable virus genome copies/g **NoV GII:** Positive; 8619 detectable virus genome copies/g
21/03/2011	MBU-4 Norovirus determination in shellfish	**NoV GI:** Positive; <LOQ **NoV GII:** Positive; 1645 detectable virus genome copies/g
18/04/2011	MBU-4 Norovirus determination in shellfish	**NoV GI:** Negative **NoV GII:** Positive; 1171 detectable virus genome copies/g
18/05/2011	MBU-4 Norovirus determination in shellfish	**NoV GI:** Positive; <LOQ **NoV GII:** Positive; 285 detectable virus genome copies/g
15/06/2011	MBU-4 Norovirus determination in shellfish	**NoV GI:** Not detected **NoV GII:** Positive; 423 detectable virus genome copies/g
28/07/2011	MBU-4 Norovirus determination in shellfish	**NoV GI:** Not detected **NoV GII:** Not detected
16/08/2011	MBU-4 Norovirus determination in shellfish	**NoV GI:** Not detected **NoV GII:** Not detected
13/09/2011	MBU-4 Norovirus determination in shellfish	**NoV GI:** Not detected **NoV GII:** Not detected
25/10/2011	MBU-4 Norovirus determination in shellfish	**NoV GI:** Not detected **NoV GII:** Positive; 4047 detectable virus genome copies/g
23/11/2011	MBU-4 Norovirus determination in shellfish	**NoV GI:** Not detected **NoV GII:** Positive; 8477 detectable virus genome copies/g
12/12/2011	MBU-4 Norovirus determination in shellfish	**NoV GI:** Not detected **NoV GII:** Positive; 11856 detectable virus genome

		copies/g
10/01/2012	MBU-4 Norovirus determination in shellfish	**NoV GI:** Not detected **NoV GII:** Positive; 17643 detectable virus genome copies/g
22/02/2012	MBU-4 Norovirus determination in shellfish	**NoV GI:** Not detected **NoV GII:** Positive; 876 detectable virus genome copies/g
21/03/2012	MBU-4 Norovirus determination in shellfish	**NoV GI:** Not detected **NoV GII:** Positive; 256 detectable virus genome copies/g
04/04/2012	MBU-4 Norovirus determination in shellfish	**NoV GI:** Positive <LOQ **NoV GII:** Positive; 2331 detectable virus genome copies/g
08/05/2012	MBU-4 Norovirus determination in shellfish	**NoV GI:** Positive <LOQ **NoV GII:** Positive; 207 detectable virus genome copies/g
06/06/2012	MBU-4 Norovirus determination in shellfish	**NoV GI:** Positive <LOQ **NoV GII:** Positive; 875 detectable virus genome copies/g
03/07/2012	MBU-4 Norovirus determination in shellfish	**NoV GI:** Not Detected **NoV GII:** Positive; 1791 detectable virus genome copies/g
28/08/2012	MBU-4 Norovirus determination in shellfish	**NoV GI:** Not detected **NoV GII:** Not detected
18/09/2012	MBU-4 Norovirus determination in shellfish	**NoV GI:** Positive <LOQ **NoV GII:** Not detected
18/10/2012	MBU-4 Norovirus determination in shellfish	**NoV GI:** Positive <LOQ **NoV GII:** Positive; 241 detectable virus genome copies/g
15/11/2012	MBU-4 Norovirus determination in shellfish	**NoV GI:** Positive <LOQ **NoV GII:** Positive; 740 detectable virus genome copies/g
12/12/2012	MBU-4 Norovirus determination in shellfish	**NoV GI:** Positive; 106 detectable virus genome copies/g **NoV GII:** Positive; 1546 detectable virus genome

Appendix 7.2 Revised Project Programme

Cork Lower Harbour Sewerage Scheme
Milestone Dates

Deliverable	Duration from Contract Award	Completion Date
Contract Signing	-	15/02/2013
Project Inception Report	4 weeks	15/03/2013
Third Party Survey Report	8 weeks	12/04/2013
Design Review Report	10 weeks	26/04/2013
Third Party Contracts	45 weeks	27/12/2013
Wastewater Treatment Plant DBO Tender Documents submission	43 weeks	12/12/2013
Carrigaline/Ringaskiddy Collection Network Tender Documents submission	51 weeks	07/02/2014
Cobh Collection Network Tender Documents submission	52 weeks	14/02/2014
Monkstown/Passage West Collection Network Tender Documents submission	52 weeks	14/02/2014
Carrigaline/Ringaskiddy Collection Network Report on Tenders	89 weeks	31/10/2014
Cobh Collection Network Report on Tenders	93 weeks	25/11/2014
Monkstown/Passage West Collection Network Report on Tenders	91 weeks	14/11/2014
Wastewater Treatment Plant DBO Report on Tenders	95 weeks	12/12/2014
Carrigaline/Ringaskiddy Collection Network Contract Award	103 weeks	06/02/2015
Cobh Collection Network Contract Award	104 weeks	13/02/2015
Monkstown/Passage West Collection Network Contract Award	104 weeks	13/02/2015
Wastewater Treatment Plant DBO Contract Award	113 weeks	13/02/2015
Carrigaline/Ringaskiddy Collection Network Contract Completion	165 weeks	15/04/2016
Cobh Collection Network Contract Completion	183 weeks	19/08/2016
Monkstown/Passage West Collection Network Contract Completion	155 weeks	05/02/2016
Wastewater Treatment Plant DBO Contract Completion	192 weeks	21/10/2016

Appendix 7.3 Letter to the EPA dated 7th December 2010

Comhairle Contae Chorcaí
Cork County Council

Halla an Chontae,
Corcaigh, Éire.
Fón: (021) 4276891 • Faics: (021) 4276321
Suíomh Gréasáin: www.corkcoco.ie
County Hall,
Cork, Ireland.
Tel: (021) 4276891 • Fax: (021) 4276321
Web: www.corkcoco.ie

Environmental Protection Agency,
P.O.Box 3000,
Johnstown Castle Estate,
County Wexford.

7th December 2010

Re: Waste Water Discharge Licence Reg. No. D0129-01
Agglomeration of Passage West / Monkstown, County Cork.

Dear Sir/Madam,

I refer to the above Licence. Cork County Council's Response to Condition 5.1 of this licence is detailed in the table below and the associated attachments.

Ref	Condition:	Response:
5.1	The licensee shall, within three months, prepare and submit to the Agency for its agreement a Project Plan for the Cork Lower Harbour Sewerage Scheme that will achieve the following objectives:	
5.1(a)	Achieve improvements in the quality of all discharges from the works;	Refer to Chapters 3, 4 & 5 of Volume 1 of the Cork Harbour Main Drainage Scheme Preliminary Report at **Attachment 1**, of which Section 5.6 "Proposed Wastewater Treatment Plant" is particularly relevant.
5.1(b)	Cease discharges listed under Schedule A.3: Discharges to be Discontinued, of this licence;	Refer to the Cork Lower Harbour Scheme Project Program at **Attachment 2**. Also refer to letter dated 2nd November 2010 which states the current position at **Attachment 3**.
5.1(c)	Give effect to Regulation 2 of the Waste Water Discharge (Authorisation) Regulations 2007 (S.I. No. 684 of 2007).	Refer to the Cork Lower Harbour Sewage Scheme EIS previously submitted as part of the licence application. Refer to Regulation 18-3b response dated 20th February 2009 at **Attachment 4** and An Bord Pleanála Inspector's Report at **Attachment 5**, of which Section 5.0 "Assessment" is particularly relevant.

I trust that the above meets with your satisfaction.

Yours faithfully,

PATRICIA POWER
DIRECTOR OF SERVICES

Passage West Monkstown

Appendix 7.4 Integrity Assessment of Sewers

Appendix 7.5 Pollutant Release and Transfer Register (PRTR)