

Comhairle Contae Chorcaí Cork County Council

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

Suíomh Gréasáin: www.corkcoco.ie



Kevin Sugrue, Senior Engineer, Water Services

29th November 2007

Re: Lower Harbour SS

Environmental Impact Statement

The above scheme encompasses the agglomerations of Cobh, Passage West, Monkstown, Carrigaline, Ringaskiddy and Shanbally to be served by a single wastewater treatment plant near Ringaskiddy. The effluent from the proposed plant will discharge to the 'IDA' sewer which runs adjacent to the proposed site and which discharges to deep water in Cork Harbour near the Dognose Bank.

McDonald Pettit, Consulting Engineers, are preparing the EIS which is at an advanced stage and which the Council plans to submit to An Bord Pleanála before the end of 2007. Additional hardcopies (6No.) and electronic pdf copies (2 No.) will be made available to you as soon as possible after that, say first week in January 08.

Robert O'Farrell, Senior Engineer AREA OPERATIONS
SOUTH

3 0 NOV 2007

ORK COUNTY COUNCIL OUNTY HALL - CORK



CORK COUNTY COUNCIL

COMHAIRLE CONTAE CHORCAÍ

National Grid Ref.

PLANNING

CORK COUNTY COUNCIL (NORTH)

NOTICE UNDER SECTION 179 OF THE PLANNING & DEVELOPMENT ACT 2000 & PART 8, ARTICLE 81 AND ARTICLE 83 OF THE PLANNING & DEVELOPMENT REGULATIONS 2001 (AS AMENDED BY ARTICLES 17 AND 19 OF THE PLANNING & DEVELOPMENT REGULATIONS 2006)

bmissions or observations with regard to the proposed development, dealing with the proper planning Il development of the area in which the development would be situated, may be made in writing to the nior Engineer, Water Services Department, Cork County Council (North), Annabella, Mallow, Co. Cork Later than 500 pm. 5th February 2008.

SCHEDULE	
Location	Nature and Extent of Development
Coolroe More, Lyre, Millstreet, Co.Cark.	Construction of a new 700m² over ground precast concrete water storage reservoir, pump house, site fencing and associated works

Mr. Tom Stritch, Director of Services, Annabella, Mallow, Co. Cork. 30th November 2007

CORK COUNTY COUNCIL (NORTH)

NOTICE UNDER SECTION 179 OF THE PLANNING & DEVELOPMENT ACT 2000 & PART 8. ARTICLE 81 AND ARTICLE 83 OF THE PLANNING & DEVELOPMENT REGULATIONS 2001 (AS AMENDED BY ARTICLES 17 AND 19 OF THE PLANNING & DEVELOPMENT REGULATION

Plans and particulars of the proposed development will be available for inspection or purchase at the Wat Services Department, Council Offices, Annabella, Mallow from 9:00 a.m. to 5:00 p.m. on each day during which said offices are open for the transaction of business (excluding Bank Holidays) for a period ending BNA hanuary 2008.

bmissions or observations with regard to the proposed development, dealing with the proper planning of development of the area in which the development would be situated, may be made in writing to the nior Engineer, Water Services Department, Ork County Council (North), Annabella, Mallow, Co. Co. Lieur bluss 509 p.m. Silv February 2008.

SCHEDULE	
Location	Nature and Extent of Development
Knockavaddra, Bweeng, Mallow, Co.Cork.	Construction of a new 450m3 over ground precast concrete water storage reservoir, demolition of existing concrete reservoir, site fencing and associated works

Mr. Tom Stritch, Director of Services, Annabella, Mallow, Co.Cork. 30th November 2007

CORK COUNTY COUNCIL (NORTH)

NOTICE UNDER SECTION 179 OF THE PLANNING & DEVELOPMENT ACT 2000 & PART 8, ARTICLE 81 AND ARTICLE 83 OF THE PLANNING & DEVELOPMENT REGULATIONS 2001 (AS AMENIED) BY ARTICLES 17 AND 19 OF THE PLANNING & DEDGE OWERST

Pursuant to the requirements of Part 8 of the Planning & Development Regulations 2001 (as amended by Articles 17 and 19 of the Planning and Development Regulations 2006), notice is hereby given that Cork Coamb Council (Morth twosoness to carry out a development), particulars of which are set out in the

Submissions or obser vations with regard to the proposed development, dealing with the proper planning and development of the area in which the development would be situated, may be made in writing to the and development with the proper planning and development of the property of the p

SCHEDULE	J
Location	Nature and Extent of Development
Knockduff Upper, Cullen, Mallow Co.Cork.	Construction of a new 700m over ground precast concrete waterstorage reservoir, demolition of existing concrete reservoir, site, fencing and associated works

Mr. Tom Stritch, Director of Services, Annabella, Mallow, Co. Cork. 30th November 2007

CORK NORTHERN RING ROAD SCHEME PART [
Public Exhibition - Preferred Route Corridor (Western Section - Part I)
December 2007

Cork County Council and Cork City Council, in consultation with the National Roads Authority, are holding a public exhibition for the above project to outline the preferred route corrisor for the Wester section of the scheme (Part I - N.2 Balkincollig Bysass to N20 Cork to Aldiow Road), with has been developed by the Cork National Roads Office in conjunction with the Scheme Consultants Fehly Time Giffent/Fehly Timenoy Ramboil.

To afford an opportunity for the public to be fully informed of the scale and extent of the preferred route corridor option chosen, you are invited to attend a Public Exhibition Session to be held at the following

TIME	VENUE	
	Kingsley Hotel.	
2.00pm to 8.00pm	Victoria Cross	
	2.00pm to 8.00pm	Kingeley Hotel

Cork County Council and Cork City Council are seeking the general co-operation and understanding of t



NDP Transaction ()





Road Traffic Act 2004 Road Works Speed Limits-Macroom

Notice is hereby given that in exercise of the powers vested under Section 10 of the Road Traffic Act, 200 and in the interests of road safety, Cork County Council has made a Road Works Speed Limit Order in respect of the following road:

1.3402-Reananerree to Ballingeary Road Extending the existing 50kph zone approximately 800m west.

This is to facilitate road improvement works. The Road Works Speed Limit shall be 50kph and will apply from 30th November 2007 to 31st August 2008 inclusive, or until such earlier dates as may be determined by Cork County Council.

Representations in this matter may be made in writing to Claire O'Neill, A/Staff Officer, Roads Department, Floor S, County Hall, Cork.

PUBLIC NOTICES

Plant Name Location

APPLICATION TO THE ENVIRONMENTAL PROTECTION AGENCY FOR A WASTEWATER DISCHARGE LICENCE

accordance with the Waste Water Discharge (Authorisation) Regulations 2007 St. No. 681 of 2007, No. vices Northern Division, of Cork County Council, Annabella, Mallow, Co. Cork is applying to the dromatental Protection Agency for a Waste Water Dachage Licence for Mallow Waste Water statuent Plant, Ballyellis, Mallow at the following locations:

National Grid Ref.

Mallow WWT	llow WWTP Bailyeilis, Mallow F Townland of Ballyeilis		E15	E157318 N097988	
Discharge	Function	Townland	Receptor	Locator	
Primary	Main	Ballyellis	Blackwater	E157530 N98140	
Secondary	Emergency	Bearforest Lower	Blackwater	Bearforest	
Secondary	Emergency	Bearforest Lower	Blackwater	Summerhill	
Secondary	Emergency	Spa Glen	Blackwater	Ballylough Cross	
Secondary	Emergency	Ballydahin	Blackwater	Quartertown Road Railway Bridge	
Secondary	Emergency	Lacknaloohs	Blackwater Street	Lower Beecher	
Secondary	Emergency	Castlelands	Blackwater	Davis St/Shambles	
Secondary	Emergency	Mallow	Blackwater	West End	

It is introded to make it the Mercommental Impact Statement associated with the recently completed agendancy on the William Fami to the Agency along with the Application. A A copy of the application of the Mercomment of the Agency along with the Application A copy of the application of the Agency and the Agency and the Agency and the Comment such fatther information relating to the application as may be farmined to the Agency or the Country Agency's consideration of the Agency and the Country be available for inspection or purchase at 1900.

The Eavironmental Protection Agency, IVI Box 3000, Johnstown Castle Estate, Co. Wexford, Lo Call 1890 335 599 Telephone: 053-9160600 Fax: 053-9160699 Email:info@epa.ie and at

Cork County Council Offices, Annabella, Mallow, Co. Cork, Telephone: 022 21123

Submissions in relation to the application may be made to the Environmental Protection Agency at its headquarters described above.

PUBLIC NOTICES CONT'D

ty Council Northern Division

APPLICATION TO THE ENVIRONMENTAL PROTECTION AGENCY FOR A WASTEWATER DISCHARGE LICENCE

In accordance with the Wasta Water Discharge (Authorisation) Regulations 2007 SI No. 684 of 2007, Services Northern Division, of Cork County Council, Annabella, Mallow, Co. Cork is applying to the Environmental Protection Agency for a Waste Water Discharge Licence for Fermoy Waste Water Treatment Plant, Court house Road, Fermoy at the following locations:

Townland Of Strawhall				3 N098765
Discharge	Function	Townland	Receptor	Grid Reference
Primary	Mein	Strawhall	Blackwater	E182331 N098819
Secondary	Emergency	Strawhall	Blackwater	E182193 N098780
Secondary	Emergency	Carrignagroghera	Blackwater	E181462 N098719
Secondary	SW+Trade	Carrignagroghera	Blackwater	E181232 N098624
Secondary	Emergency	Carrignagroghera	Blackwater	E181191 N098622
Secondary	Emergency	Fermoy	Blackwater	E181400 N098557
Secondary	Emergency	Fermoy	Blackwater	E181217 N098500
Secondary	Emergency	Fermov	Blackwater	E180936 N098498

t is intended to submit the Environmental Impact Statement associated with the recently completed apgrading of the Waste Water Treatment Plant to the Agency along with the Application.

A copy of the application for the Waste Water Discharge Licence, the Environmental Impact Statement an such further information relating to the application as may be furnished to the Agency in the course of the Agency's consideration of the Application shall, as soon as is practicable after receipt by the Agency, be

The Environmental Protection Agency, PO Box 3000, Johnstown Castle Estate, Co. Wexford, Lo Call 1890 335 599 Telephone: 053-9160600 Fax: 053-9160690 Email:info@ena.is and a

Cork County Council Offices, Annabella, Mallow, Co. Cork, Telephone: 022 21123 Fax. 022 21983.

ssions in relation to the application may be made to the Environmental Protection Agency at its parters described above

Cork County Council Southern Division

APPLICATION TO THE ENVIRONMENTAL PROTECTION AGENCY FOR A WASTEWATER DISCHARGE LICENCE

rdance with the Waste Water Discharge (Authorisation) Regulations 2007 SI No. 681 of 2007. Water se Southern Division of Cork County Council, County Hall, Carrigrobane Road, Cork is applying to irronmental Protection Agency for a Waste Water Discharge Licence in respect of Blarney rater Treatment Plant serving the agglomeration of Blarney.

Plant Name Blarney WWIP	Rivervi	Riverview Estate, Tower, Co. Cork E15919 Townland of Kilnamucky		Riverview Estate, Tower, Co. Cork E		Grid Ref. 6 N74918
Discharge	Function	Townland	Receptor	Grid Reference		
Primary Secondary	Main Outfall Emergency	Kilnamucky Woodside	River Shournagh River Shournagh	E159261 N74835		
Secondary Secondary	Emergency Emergency	Coolflugh Shean Lower	Owennagearagh Mill Race to River Martin	E157548 N74040 E161602 N75245		

It is intended to submit the Environmental Impact Statement associated with the recent upgrating of the Waste Water Treatment Plant to the Agency along with the Application.

A copy of the application for the Waste Water Discharge Licence, the Eurironmental Impact Statement and such further information relating to the application as may be furnished to the Agency in the course of the Agency consideration of the Application shall, as soon as is practicable after receipt by the Agency, be available for insepretion or purchase a furnished.

The Environmental Protection Agency, PO Box 3000, Johnstown Castle Estate, Co. Wexford, Lo Call 1890 335 599 Telephone: 053-9160600 Fax: 053-9160609 Semilinfo@coa.ie and at

Cork County Council Offices, Water Services South, County Hall, Carrigrohams Road, Co. Cork, Telephone: 021-4276891 Fax: 021-4276321. on may be made to the Environmental Protection A Submissions in relation to the applica headquarters described above.

APPLICATION TO THE ENVIRONMENTAL PROTECTION AGENCY FOR A WASTEWATER DISCHARGE LICENCE

ordance with the Waste Water Discharge (Authorisation), Regulations 2007 SI No. 684 of 2007, Water ws Southern Division of Curk County Council, Coonly Halp, Carrigroftane, Road, Cork is applying to wiroamental Protection Agency for a Waste Water Discharge Licence in respect of Carrigtwohill water Treatment Plant serving the augmone-2000 of Conservation.

Plant Name Carrigtwohill WWTP				lagreen E181177 N72228	
Discharge	Function To	Phland	Rece	ntor	Grid Reference
Primary	Main Outfall Tay	lagreen	Slatty	Waters Harbour	E180600 N72278
Secondary	Emergency Tul	lagreen	Barr	yscourt	E181731 N72685

It is intended to submit the Environmental Impact Statement associated with the proposed upgrading of the Waste Water Treatment Plant to the Agency along with the Application.

A copy of the application for the Waste Water Discharge Licence, the Environmental Impact Statement and such fur herbylitormation relating to the application as may be furnished to the Agency in the course the Agency code ideration of the Application shall, as soon as is practicable after receipt by the Agency, which left is the processing of purchase at:

The Cavironnental Protection Agency, PO Box 3000, Johnstown Castle Estate, O. Wexford, Lo Call 1890 335 599 Telephone: 053-9160600 Fax: 053-9160699 Email:info@epa.ie and at

Cork County Council Offices, Water Services South, County Hall, Carrigrohane Road, Co. Cork, Telephone: 021-4276891 Fax: 021-4276321 may be made to the Environmental Protection Agency at its

Cork County Council Southern Divinion

APPLICATION TO THE ENVIRONMENTAL PROTECTION AGENCY FOR A WASTEWATER DISCHARGE LICENCE.

In assortance with the Weste Water Discharge (Authoritation) Regulations 2007 SI No. 081 of 2007, Water Services Southern Division of Cork County Council, County Hall, Carrageobane Road, Cerk is applying to the Environmental Protection Agency that the County Hall Carrageobane and Cork is applying to Wastewater Treatherd Plant serving the accompanion of Ballingelluc.

Plant Name Location Ballincollig WWIP Powdermills Ballincollig, Co. Cork Townland of Ballincollig		E159	nal Grid Ref. 203 N71139	
Discharge	Function	Townland	Receptor	Grid Reference
Primary	Main Outfall	Ballincollig	River Lee	E159240 N71520
Primary Secondary	Main Outfall Emergency			
	Main Outfall	Ballincollig	River Lee	E159240 N71520

A copy of the application for the Waste Water Discharge Licence and further information relating to application as may be furnished to the Agency in the course of the Agency's consideration of the Application shall, as soon as is practicable after receipt by the Agency, be available for inspection or purchase at:

The Environmental Protection Agency, PO Box 3000, Johnstown Castle Estate, Co. Wexford, Lo Call 1880 335 599 Telephone: 053-9160600 Fax: 053-9160695 Email: int/060en.ie and all

Cork County Council Offices, Water Services South, County Hall, Carrigrohane Road, Co. Cork, Telephone: 021-4276891 Fax: 021-4276321. Submissions in relation to the application may be made to the Environmental Protection Agency at its headquarters described above.

Cork County Council Southern Division

APPLICATION TO THE ENVIRONMENTAL PROTECTION AGENCY FOR A WASTEWATER DISCHARGE LICENCE

In accordance with the Waste Water Discharge (Authorisation) Regulations 2007, 5.1. No. 684 of 2007. Water Services Southern Division of Cork County Council, County Hall, Carrigrohane Road, Cork is applying to the Environmental Protection Agency for a Waste Water Discharge Licence for the agglomeration of Cobb Rural and Cobb Urban at the following locations:

Discharge	Function	Receptor	Townland	Grid Reference
Primary	Major Outfall	Cork Harbour	Ringmeen	E 178243 N 65558
Secondary	Minor Outfall	Cork Harbour	Ringacoltig	E 177547 N 66546
Secondary	Minor Outfall	Cork Harbour	Ringmeen	E 178593 N 65910
Secondary	Minor Outfall	Cork Harbour	Ringmeen	E 178699 N 66007
Secondary	Minor Outfall	Cork Harbour	Ballyvoloon	E 179676 N 66313
Secondary	Minor Outfail	Cork Harbour	Kilgarvan	E 179807 N 66372
Secondary	Minor Outfall	Cork Harbour	Kilgaryan	E 180015 N 66415
Secondary	Minor Outfall	Cork Harbour	Currichaloy	E 180439 N 66515
Secondary	Minor Outfall	Cork Harbour	Carrignatov	E 180518 N 66526
Secondary	Minor Outfall	Cork Harbour	Carrignatov	E 180602 N 66520
Secondary	Minor Outfall	Cork Harbour	Carrignuloy	E 180795 N 66547
Secondary	Emergency	Cork Harbour	Ringmeen	E 178375 N 65605
Secondary	Emergency	Cork Harbour	Ringmeen	E 179466 N 66275
Secondary	Emergency	Cork Harbour	Kilgaryan	E 180068 N 66442
Secondary	Emergency	Cork Harbour	Kilgaryan	E 180281 N 66502

It is intended to submit the Environmental Impact Statement associated with the proposed prov Waste Water Treatment Plant in the Lower Harbour to the Agency along with the Application.

A copy of the application for the Waste Water Discharge Licence, the Environmental Impact Statement and sure their information relating to the application as may be furnished to the Agency in the course of the Agency anosideration of the Application shall, as soon as is practicable after receipt by the Agency, be available for

spection or purchase at: The Environmental Protection Agency, PO Box 3000, Johnstown Castle Estate, Co. Wexford, Lo Call 1890 335 599 Telephone: 053-9160600 Fax: 053-9160699 EmsilianGeven.ic and at Cork County Council Offices, Water Services South, County Hall, Carrigrohane Road, Co. Cork, Telephone: 021-4276891 Fax: 021-4276321.

PUBLIC NOTICES CONT'D

Cork County Council Southern Division

APPLICATION TO THE ENVIRONMENTAL PROTECTION AGENCY FOR A WASTEWATER DISCHARGE LICENCE

In accordance with the Waste Water Discharge (Authorisation) Regulations 2007, S.I. No. 684 of 2007, Water Services Southern Division of Cork County Council, County Hall, Carrigrobane Road, Cork is applying to the Environmental Protein Agency for a Maste Water Discharge Licence in respect for Rathocurvey outfall which includes the agglomeration of Midleton and trade offluent discharges from the Midleton area.

Plant Name		Location		National Grid Ref.
Midleton WWT	P	Ballyennan, Townland of		E187505 N72801
Discharge	Function	Townland	Receptor	Grid Reference
Primary Main	Outfail	Rathcoursey West	Ballynacorra River /Estuary	E186177 N69506
Secondary	Emergency	Ballynacorra West	Ballynacorra Rv	E188366 N71791
Secondary	Emergency	Ballynacorra west	Ballynacorra Rv	E188520 N71783
Secondary	Emergency	Townparks (ED Midleton)	Bailynacorra Rv	E187973 N73127.2
Secondary	Emergency	Townparks (ED Midleton)	Ballynacorra Rv	E188045 N72513.8
Secondary	Emergency	Townparks (ED Midleton)	Ballynacorra Rv	E188268 N72058

It is intended to submit the Environmental Impact Statement associated with the provision of a Waste Water Treatment Plant to the Agency along with the Application.

A copy of the application for the Waste Water Discharge Licence, the Environmental Impact Statement and such further information relating to the application as may be furnished to the Agency in the course of the Agency consideration of the Application shall, as soon as is practicable after receipt by the Agency, be available for insection or purchase as

The Environmental Protection Agency, PO Box 3000, Johnstown Castle Estate, Co. Wexford, Lo Call 1890 335 599 Telephone: 053-9160600 Fax: 053-9160699 Email: info@bea.je. and at

Cork County Council Offices, Water Services South, County Hall, Carrigrohane Road, Co. Cork, Telephone: 021-4276891 Fax: 021-4276321.

Cork County Council Southern Division

APPLICATION TO THE ENVIRONMENTAL PROTECTION AGENCY FOR A WASTEWATER DISCHARGE LICENCE

In accordance with the Waste Water Discharge (Authorisation) Regulations 2007, S.I. No. 681 of 2007, Water Services Southern Division of Cork County Council, County Hall, Carrigrohane Road, Cork is applying to the Environmental Protection, Agency for a Matter Water Discharge Licence in respect Cangasskiddy outfall which includes the agglomeration of Carrigoline and Croashaven and trade efflue discharges from the Ringasladdy are

Discharge	Function	Townland	Receptor	Grid Refer	ence '
Primary	Main Outfall	Ringaskiddy	Cork Harbour	E181358	N062521
Secondary	Emergency	Crosshaven	Owenboy River	E179639	N061145
Secondary	Emergency	Crosshaven	Owenboy River	E178816	N061285
Secondary	Emergency	Carrigaline	MiddleOwenboy River	E173070	N062352
Secondary	Emergency	Carrigaline	MiddleOwenboy River	E173131	N062418
Secondary	Emergency	Carrigaline	EastOwenboy River	E174443	N062603
Secondary	Emergency	Shanbally	Monkstown Creek	E175770	N064679

It is intended to submit the Environmental Impact Statement associated with the proposed provision of a Waste Water Treatment Plant in the Lower Harbour to the Agency along with the Application.

A copy of the application for the Waste Water Discharge Licence, the Environmental Impact Statement and such further information relating to the application as may be furnished to the Agency in the course of the Agency's consideration of the Application shall, as soon as is practicable after receipt by the Agency, be available for impaction or purchase at

The Environmental Protection Agency, PO Box 3000, Johnstown Castle Estate, Co. Wexford, Lo Call 1890 335599 Telephone: 053-9160600 Fax: 053-9160699 Email:info@ena.ie

undai Cork County Council Offices, Water Services South, County Hall, Carrigrohane Road, Cork, Telephone: 021-4276891 Fag: 021-4276321.

Submissions in relation to the application may be made to the Environmental Protection Agheadquarters described above.

In accordance with the Waste Water Discharge (Authorisation) Regulations 2007 SI No. 684 of 2007. Water Services Western Division, of Cork County Council, Courthouse, Shibbereen, Co. Cork is applying to the Environmental Protection Agency for a Waster Water Discharge Licence for Clonability Waste Water Treatment Plan, Youghals, Clonability at the following locations:

Discharge	Function	Townland	Receptor	Grid Reference
Primary	Main	Youghais	Clonakilty harbour	E139030 N041311
Secondary	Emergency	Scartagh	· Clonakilty harbour	E138859 N041382
Secondary	Emergency	Youghala	Clonakilty harbour	E138667 N041336
Secondary	Emergency	Gallanes	Ground	E140690 N042600
Secondary	Emergency	Inchydoney	Muckruss Strand	E139612 N038533
Secondary	Emergency	Inchydoney	Muckruss Strand	E139373 N038612

Location Youghals, Clonakilty

A copy of the application for the Waste Water Discharge, asong wall like epipeanosis.

A copy of the application for the Waste Water Discharge Lience, the Environmental Impact Statem such further information relating to the application as may be furnished to the Agency in the course, Agency's consideration of the Application shall, as soon as is practicable after receipt by the Agency available for inspection or purchase at:

The Environmental Protection Agency, PO Box 3000, Johnstown Castle Estate, Co. Wexford, Lo Call 1890 335599 Telephone: 053-9160600 Pax: 053-9160699 Email:info@epa.je

nd at Cork County Council Offices, Emmet Square, Clonakilty, Co. Cork, Telephone: 023-33347 Fax: 023-33147.

TENDERS

Cork County Council in partnership with Bandon Action Group invites unders from suitable qualified town planning consultants to manage a Bandon Action Programme.

Closing date for receipt of tenders is 4.00 pm Friday 4th January 2008.

for reveipt of tenders is 4.00 pm Friday 18th January 2008.

CCC Northern Division invites Tenders from competent Civil Engineering Contra-construction of Carriganleigh Stage 1- Upgrading Works (Laying of water mains). Closing date for receipt of Tenders is 4.00 pm Friday 11th January 2008.

aler Services Investment Programme Project Office invites tenders from suitably intractors for the Bantry Water Supply Interim Scheme - Civil Works. Josting date for receipt of tenders is 4:00 pm Friday 11th January 2008.

Cork County Water Conservation Project invites Expressions of Interest from outlably qualifi-experiencel Contractors for the supply or supply, installation and counties botting of approximately observed markets but how meters and approximately 100 cloverly outstations serves Cork Count Closing date for receipt of tenders is 4:00 pps Priviley 11th January 2004.

The County Architects Department, Floor 9, County Hall, Cork requires the services qualified architect led design team for the development of a new corporate head quarter Department at the Link Road, Ballincollig, Co. Cork.

sing date and time for the return of Pre-Qualification Quest
January 2008.

www.corkcoco.ie



CORK COUNTY COUNCIL SITE NOTICE

APPLICATION TO THE ENVIRONMENTAL PROTECTION AGENCY FOR A WASTEWATER DISCHARGE LICENCE

In accordance with the Waste Water Discharge (Authorisation) Regulations 2007, S.I. No. 684 of 2007, Water Services Southern Division, Cork County Council, County Hall, Carrigrohane Road, Cork is applying to the Environmental Protection Agency for a Waste Water Discharge Licence in respect of Ringaskiddy outfall which includes the agglomeration of Carrigaline and Crosshaven and trade effluent discharges from the Ringaskiddy area

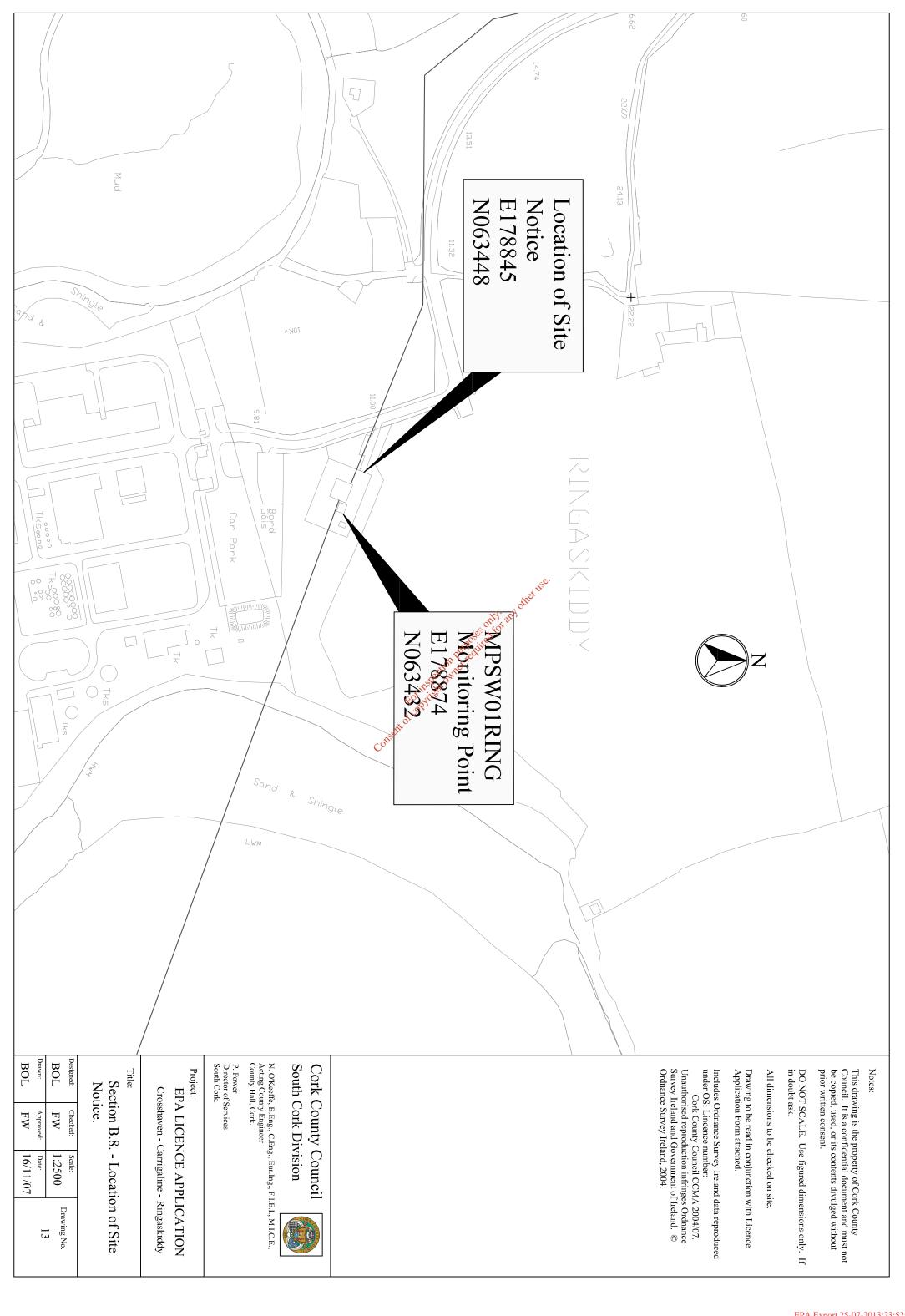
Discharge	Function	Townland	Receptor	Grid Reference
Primary .	Main Outfall	Ringaskiddy	Cork Harbour	E181358, N062521
Secondary	Emergency	Crosshaven	Owenboy River	E179639, N061145
Secondary	Emergency	Crosshaven	Owenboy River	E178816, N061285
Secondary	Emergency	Carrigaline Middle	Owenboy River	E173070, N062352
Secondary	Emergency	Carrigaline Middle	Owenboy River	E173131, N062418
Secondary	Emergency	Carrigaline East	Owenboy River	E174443, N062603
Secondary	Emergency	Shanbally	Monkstown Creek	E175796, N064930

It is intended to submit the Environmental Impact Statement associated with the proposed provision of a Waste Water Treatment Plant in the Lower Harbour to the Agency along with the Application.

A copy of the application for the Waste Water Discharge Licence, the Environmental Impact Statement and such further information relating to the application as may be furnished to the Agency in the course of the Agency's consideration of the Application shall as soon as is practicable after receipt by the Agency be available for inspection or purchase at the

- Environmental Protection Agency, PO Box 3000, Johnstown Castle Estate, Co. Wexford, Lo Call 1890 335599 Telephone: 053-9160600 Fax: 053-9160699 Email:info@epa.ie and at
- Cork County Council Offices, Water Services South, County Hall, Carrigrohane Road, Cork, Telephone: 021-4276891 Fax: 021-4276321.

Submissions in relation to the application may be made to the Environmental Protection Agency at its headquarters described above.



Kevin Sugrue, Senior Engineer, Water Services

Re: Licensing of Discharges

Ballincollig- Donald Cronin is preparing a response in respect of Ballincollig

Blarney- The Council has recently completed an upgrade of the wastewater treatment plant at Blarney to 13,000 p.e. and has no immediate proposals to increase that capacity. The plant at Blarney has two independent secondary treatment processes with the wastewater load being split approximately evenly between them. One stream has biological nutrient removal and the other has chemical nutrient removal. There is concern in relation to the nutrient levels in the river catchments north of Cork City and the Council has obtained approval to carry out a drainage study, the City Environs (CASP) Drainage Study which is being funded under the Water Services Investment Programme 2007-2009. This study will consider the drainage options available for the catchment concerned having regard to existing and planned developments in the area. The Council is currently preparing a brief for the appointment of a consultant and expects to advertise the appointment in early January 2008 and to have the study completed in approx six months thereafter.

Crosshaven- wastewater from Crosshaven is collected and discharged to the Carrigaline network and ultimately discharges to Cork Harbour via the 'IDA' sewer at the Dognose Bank. The discharge is currently untreated but will ultimately be served by the Lower Harbour SS, the treatment plant for which will be located at Carrigaline East and the effluent from this plant will discharge through the 'IDA' outfall to the harbour. The EIS for the wastewater treatment plant is being prepared and the Council hopes to lodge it with ABP by end of 2007. Nutrient removal is not being proposed as the receiving waters are not designated sensitive. The PR for the Scheme will be lodged with the DEHLG shortly after the EIS is sent to ABP but approval to the PR will not issue until after the EIS is approved, say mid 2008. The Lower Harbour SS is being funded under the Water Services Investment Programme 2007-2009 and the scheme is expected to be fully operational before the end of 2012.

 ${f Cobh}$ – this also forms part of the proposed Lower Harbour SS and a significant upgrading of the Cobh sewer network is envisaged with the wastewater being pumped across the harbour to the proposed WWTP at Carrigaline East . The current estimated design capacity required is 80,000 p.e.

Carrigaline- this wastewater is discharged (see Crosshaven) via the 'IDA' sewer and will ultimately form part of the Lower Harbour SS

Ringaskiddy – as for Carrigaline

Carrigtwohill —EIS under preparation and expected to be submitted to ABP March '08. The anticipated first phase will be to increase treatment capacity to 45000 p.e. from the current 8500 p.e. . The works are to be funded under the Serviced land Initiative . Nutrient removal will be included in the EIS and the PR as the Lee Estuary/Lough Mahon Area is currently designated a sensitive water.

The above information should be read in conjunction with earlier correspondence on the same matter and in particular you should cross-reference with response received from Duane O'Brien in relation to Carrigtwohill.

Regards,

R O'Farrell, Senior Engineer, WSIP Projects Office 4th December 2007 Consent of copyright owner required for any other use

Kevin Sugrue

I have examined B.10 Capital Investment Programme and I have broken down the request to its constituent parts as shown below and have addressed them in the table to the best of my ability. You should attach a copy of the Assessment of Needs and the published WSIP.

Regards,

ROF.

10th December 2007

B.10 Capital Investment ProgrammeProvide details of

1/any proposed infrastructural development for the waster works which has been prioritised in the water services authority 'Assessment of Needs' study.

2/ State whether this development work has been allocated funding under local or national Water Services Investment Plans.

If so, provide details

2a/ on the extent and type of work to be undertaken,

2b/ the likely timeframes for this work to be completed and

2c/ the level of funding being provided.

Table B10.

				6	5	•			1				w	<u>. </u>		2		_		7
1/ A 2/ V 200:	Atta			0,	31	٠								(
1/ Assessment of Needs 2/ Water Services Inves 2007-2009	Attachment included			Carrigtwohill	Ringaskiddy		•	Carrigaline					Cobh	,		Crosshaven	•	Blarney	AUGLOMENATION	ACCIONEDATION
f Needs is Investme	ded			Yes	Yes			Yes					Yes			Yes		No	OF NEEDS	ASSESSMENT
1/ Assessment of Needs2/ Water Services Investment programme2007-2009		•		Yes	Yes			Yes					Yes	WSIP 2005-2007.	Crosshaven	Yes- works at		No	MEN	WATER SERVICES
Yes Yes	Yes		EIS and PR as the c	First phase proposa secondary treatmen	Forms part of the pu Ringaskiddy will be East Ringaskiddy	Carrigaline East, Ri 'IDA' outfall.	proposed new 80,00	Carrigaline, which r	Enma hart of them	Nutrient removal is i	Ringaskiddy and which will discharge to the 'IDA' out	wasterwater across Cork Harbour to a proposed	Forms part of the proposed Lower Harbour SS that includes major upgrading of the Cobh collection system and transfer	the Dognose Bank.	Crosshaven collectic	Forms an element of the proposed Lower Harbour SS.	p.e. secondary treatment and <u>includes nutrient</u> additional upgrading is proposed at this time.	Blarney (Blarney/Tower) has recently been upgr	-	EXTENT AND TYPE OF WORK
	No		EIS and PR as the discharge area is currently desensitive area.	First phase proposal is to increase capacity to 4. secondary treatment. Nutrient removal is being	Forms part of the proposed Lower Harbour SS. Ringaskiddy will be pumped to the new WWTP East Ringaskiddy	'IDA' outfall.	00 p.e. secondary W	Carrigaline, which now includes Crosshave, dis	maced I ower Harh	not being proposed	Ringaskiddy and which will discharge to the 'IDA' outfall.	Cork Harbour to a p	oposed Lower Harb the Cobh collection	oll wards to the root	on systems connecte	f the proposed Low	nent and <i>includes n</i> ; is proposed at this	wer) has recently be		WORK
			rently designated a	city to 45,000 p.e. is being proposed in the	WWTP at Carrigaline		proposed new 80,000 p.e. secondary WWTP to be constructed at	Carrigaline, which now includes Crosshave, discharges untreated via the 'IDA' outfall at the Dognose Bank. It will be served by the	our SS The effluent from	Nutrient removal is not being proposed as discharge is not to a sensitive area; (5)	to the 'IDA' outfall.	roposed new 80,000 p.c.	Forms part of the proposed Lower Harbour SS that includes major upgrading of the Cobh collection system and transfer of the		Crosshaven collection systems connected to Carrigaline SS from	er Harbour SS.	time.	en upgraded to 13,000		
				ElS to ABP March '08	AS IOI COOII				As for Cobh	Construction to commence March 2010, completion March 2012	to be approved Sept.08,	Lower Harbour SS expected	submitted to An Bored	TIE for WWTP to be	commissioned.	Element is completed and		N/A		LIKELY TIMEFRAMES
		and 60% local funding	Scheme i.e. 40% DEHLG funding	funded as an SLI	Con Toba	As for Cohh			As for Cobh			20% local funding	Estimated 80%	, 20% local funding	80% DEHLG grant	€ 3m		N/A		LEVEL OF FUNDING

Cork County

Water Services Investment Programme 2007 - 2009

Ļ		Maria Service Services (1982)			, , , , , ,
jet	Schemes at Construction W/S	Est. Cost		W/S	∯ ⊭∥Ést. Cost
	Cork North		Cork South		
1	Mitchelstown Sewerage Scheme		Ballincollig Sewerage Scheme (Upgrade) (G)	s	22,248,000
1	(Nutrient Removal)	221,000	Cork Lower Harbour Sewerage Scheme (excl. Crosshav	en SSIS	73,542,000
1			Shannagarry/ Garryvoe/ Ballycotton Sewerage Scheme	: s	3,780,000
1	Cork South		Youghal Sewerage Scheme	: S	14,420,000
1.	Ballyvourney/Ballymakeery Sewerage Scheme	3,049,000	Toughai Sewerage Scheme	. 3	14,420,000
i	Coh/ Midleton/ Carrigtwohill Water Supply Scheme W Cork Lower Harbour Sewerage Scheme	10,135,000			
i	(Crosshaven SS) (G)	4 950 000	Cork West		
; -	Cork Water Strategy Study (G)	4,850,000 941,000	Ballydenob Sewerage Scheme	S	683,000
•	Kinsale Sewerage Scheme	20,000,000	Bantry Water Supply Scheme	W	14,935,000
;	Midleton Sewerage Scheme (Infiltration Reduction) (G) S	2,078,000	Clonakilty Sewerage Scheme (Plant Capacity Increase)	S	3,677,000
		41,274,000	Courtmacsherry/Timoleague Sewerage Scheme	S	2,472,000
9	Schemes to start 2007	1	Dunmanway Regional Water Supply Scheme Stage 1	W	12,669,000
					164,629,000
	Cork North		Serviced Land Initiative		
-	North Cork Grouped DBO Wastewater Treatment				. :
1	Plant (Buttevant, Doneraile & Kilbrin)	5,150,000	Cork North		*
1			Ballyclough Water Supply Scheme	W	139,000
:	Cork West		Ballyhooley Improvement Scheme	W/S	139,000
1	Skibbereen Sewerage Scheme	20,000,000	Breghill-Rathgoggin Sewerage Scheme	S	406,000
,		25,150,000	Bweeng Water Supply Scheme		
1	Schemes to start 2008	70	1	W	115,000
j,		action net	Churchtown Sewerage Scheme (Incl. Water)	W/S	543,000
	Cork North	2000	Clondulane Sewage Treatment Plant	S	417,000
į	Mallow/ Ballyviniter Regional Water Supply Scheme (H) W	8,652,000	Freemount Sewerage Scheme	S	150,000
i	Mallow Sewerage Scheme (H)	5,408,000	Pike Road Sewerage Scheme (incl. Water)	W/S	2,080,000
i.	Cork South	d .	Rathcormac Sewerage Scheme (incl. Water)	W/S	555,000
i	Ballincollig Sewerage Scheme (Nutrient Removal) (G)	948,000	Spa Glen Sewerage Scheme	S	736,000
1	Ballingeary Sewerage Scheme	1,296,000	Uplands Fermoy Sewerage Scheme (incl. Water)	W/S	1,174,000
	Bandon Sewerage Scheme Stage 2	14,729,000	Watergrasshill Water Supply Scheme (incl. Sewerage) (G) W/S	4,151,000
	City Environs (CASP) Strategic Study (G)	153,000			
)	Cloghroe Sewerage Scheme (Upgrade)	683,000	Cork South		- ,
	Coachford Water Supply Scheme	1,318,000	Ballincollig Sewerage Scheme (Barry's Rd Foul and		
	Garrettstown Sewerage Scheme	2,153,000	Storm Drainage) (G)	s	1,164,000
1	Inniscarra Water Treatment Plant Extension Phase 1 W	2,678,000	Belgooley, Water Supply Scheme (incl. Sewerage)	W/S	2,913,000
į.	Little Island Sewerage Scheme (G)	2,200,000	Blamey Water Supply Scheme (Ext. to Station Rd) (G)	w	416,000
			Camgtwohill Sewerage Scheme (Treatment and	••	110,000
	A-1-12-2		Storm Drain) (G)	s	7,632,000
	Cork West Bantry Sewerage Scheme	7 149 000	Castlematyr Wastewater Treatment Plant Extension	S	
	Bantry Sewerage Scheme Dunmanway Sewerage Scheme	7,148,000 2,153,000	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		1,200,000
	Leap/ Baltimore Water Supply Scheme	6,365,000	Crookstown Sewerage Scheme (find. Water)	W/S	1,200,000
	Schull Water Supply Scheme W	5,253,000	Dripsey Water Supply Scheme (incl. Sewerage)	W/S	1,112,000
		61,137,000	Glounthane Sewerage Scheme (G)	S	1,576,000
	Schemes to start 2009		Innishannon Sewerage Scheme	S	277,000
			Innishannon Wastewater Treatment Plant	S	694,000
	Cork North		Kerrypike Sewerage Scheme	S	832,000
	Banteer/Dromanane Regional Water Supply Scheme W	1,576,000	Kerrypike Water Supply Scheme	W	416,000
	Conna Regional Water Supply Scheme Extension W	2,627,000	Killeagh Wastewater Treatment Plant Extension	s	1,200,000
	Cork NE Water Supply Scheme	4,326,000	Killeagh Water Supply Scheme (includes Sewerage)	W/S	485,000
	Cork NW Regional Water Supply Scheme	6,046,000	Killeens Sewerage Scheme	s	420,000
	Millstreet Wastewater Treatment Plant (Upgrade) S	1,628,000	Kilnagleary Sewerage Scheme	s	694,000
		1	Midleton Wastewater Treatment Plant Extension	s	4,050,000
				_	.,500,500

Cork County contd.

Water Services Investment Programme 2007 - 2009

Water grant to get by the top gain his to be	W/S	Est. Cost	w/s	Est. Cost
	1			
Mogeely, Castlemartyr & Ladysbridge Water Supply Scheme	W	2,566,000	Cork South	
North Cobh Sewerage Scheme (G)	S	3,193,000	Carrigtwohill Sewerage Scheme (G)	20,000,000
Riverstick Water Supply Scheme (incl. Sewerage)	W/S	525,000	Cork Sludge Management (G)	14,420,000
Rochestown Water Supply Scheme	W	2,700,000	Cork Water Supply Scheme (Storage - Mount Emla	
Saleen Sewerage Scheme	S	1,051,000	Ballincollig & Chetwind) (G)	8,500,000
Youghal Water Supply Scheme	, W	2,300,000	Inniscarra Water Treatment Plant (Sludge Treatment)(G)W	5,356,000
			Macroom Sewerage Scheme	5,150,000
Cork West			Minane Bridge Water Supply Scheme	1,421,000
Castletownshend Sewerage Scheme	S	1,576,000		
		50,797,000	Cork West	
Rural Towns & Villages Initiative			Bantry Regional Water Supply Scheme (Distribution) W	9,455,000
			Cape Clear Water Supply Scheme	1,679,000
Cork North			Castletownbere Regional Water Supply Scheme	8,405,000
Buttevant Sewerage Scheme (Collection System)	S	2,446,000	Glengarriff Sewerage Scheme	2,500,000
Doneraile Sewerage Scheme (Collection System)	S	1,738,000	Roscarberry/Owenahincha Sewerage Scheme	1,576,000
	•		Skibbereen Regional Water Supply Scheme Stage 4 W	7,880,000
Cork South				95,646,000
Innishannon (Ballinadee/ Ballinspittle/ Garrettstown)			Oli Call	
Water Supply Scheme	W	6,726,000	Water Conservation Allocation	12,206,000
	*	alip	air and the second seco	
Cork West		ion 2 re	Asset Management Study	300,000
Ballylicky Sewerage Scheme	S	2753,000		
Baltimore Sewerage Scheme	s 📝	3,762,000	South Western River Basin District (WFD) Project ¹	9,400,000
Castletownbeire Sewerage Scheme	s 🛠	5,202,000		
Schull Sewerage Scheme	S & CO	3,523,000		
	cente	24,950,000	Programme Total 485	5,489,000
Schemes to Advance through Planning	S of co			i,
				1
Cork North				
Mitchelstown North Galtees Water Supply Scheme	w	3,152,000		
Mitchelstown Sewerage Scheme	S .	3,000,000		
Newmarket Sewerage Scheme	S	3,152,000		

¹ This project is being led by Cork County Council on behalf of other authorities in the River Basin District

⁽H) Refers to a Hub as designated in the National Spatial Strategy

⁽G) Refers to a Gateway as designated in the National Spatial Strategy

SECTION C: INFRASTRUCTURE & OPERATION

Advice on completing this section is provided in the accompanying Guidance Note.

C.1 Operational Information Requirements

Provide a description of the plant, process and design capacity for the areas of the waste water works where discharges occur, to include a copy of such plans, drawings or maps, (site plans and location maps, process flow diagrams), and such other particulars, reports and supporting documentation as are necessary to describe all aspects of the area of the waste water works discharging to the aquatic environment. Maps and drawings must be no larger than A3 size.

Attachment C.1 should contain supporting documentation with regard to the plant and process capacity, systems, storm water overflows, emergency overflows, etc., including flow diagrams of each with any relevant additional information. These drawings / maps should also be provided as geo-referenced digital drawing files (e.g. ESRI Shapefile, MapInfo Tab AutoCAD or other upon agreement) in Irish National Grid Projection. This data should be provided to the Agency on a separate CD-Rom containing Sections B.1, B.2, B.3, B.4, B.5, D.2, E.3 and F.2.

Attachment included	inspectowing	Yes	No
	Fortigli		✓

C.2 Outfall Design and Construction

Provide details on the primary discharge point & secondary discharge points and storm overflows to include reference, location, design criteria and construction detail.

Attachment C.2 should contain any supporting documentation on the design and construction of <u>any and all</u> discharge outfalls, including stormwater overflows, from the waste water works.

Attachment included	Yes	No
	√	

C. 1 Operational Information.

There is no wastewater treatment plant serving the agglomeration at present. There are 6 Sewage Pumping Stations in the agglomeration with emergency overflows. No flow data is available for these discharges.

Pumping Station 1 at The Square, Crosshaven.

Pumps: 3 foul pumps, (2 duty, 1 standby). 3 storm pumps (2 duty, 1 standby) Storm holding tank provided 100 m³.

Pumping Station 2 at The Glen, Crosshaven.

Pumps: 8 foul pumps

4 pumps to each of two rising mains (160 mm and 225 mm) from PS2 to Kilnaglery Bridge in Carrigaline.

Storm holding tank: 155 m³. With a high level gravity emergency overflow. Screens are in place prior to overflow. No overflow events have been experienced since the pumping station was commissioned.

Old Waterpark Pumping Station, Carrigaline

Pumps: 2 foul pumps(I duty, 1 standby); 2 Storm Pumps (1 duty, 1 standby). Storm Holding: 70m³ storm holding tank.

Influent flows in excess of the capacity of the foul pumps, overflows into the storm holding tank. A flap valve is incorporated in the holding tank to return stored effluent to the foul sump when the level in the foul sump returns to normal operating levels.

An overflow from the storm holding tank discharges to the storm pump sump. During low tide any overflow would discharge directly to the river. At high tides the storm pumps are intended to lift the overflow to a header chamber above high tide level.

Crosshaven Road Pumping Station, Carrigaline

Description: wet Well/dry well

Pumps: two foul pumps (1 duty, 1 standby).

Coolmore Pumping Station

Description: Wet well/dry well structure with a Comminutor chamber immediately upstream of the wet well.

Pumps: four foul pumps (2 duty and 2 assist).

Pumping Capacity: 480 l/sec. Average Daily flow: 4516 m3/day

Rising Main: twin 500 mm diameter AC rising mains.

Shanbally Pumping Station.

Description: wet well, submersible pumps. Pumps: 2 pumps (1 duty, 1 standby).

C.2. Outfall Design and Construction.

Primary Discharge:

The outfall pipe consists of a 1400 mm internal diameter continuously welded steel pipe with diffuser discharge. The outfall pipe discharges approximately 2.6km from the shore near the Dognose Bank at a depth of approximately 30 below sea level. There is also a flushing system to keep the outfall pipe clear. This consists of a flushing pump which extracts sea water and pumps it at a rate of 1200 litres per second into the trunk sewer upstream of the outfall. At present the flushing pump is operated for one hour each day at high tide thus pumping approximately 4320 m3 of sea water per day.

The outfall pipe was designed for a flow of 30 million gals/day [136,350 m3/day] The current average daily flow is 10,024 m3/day.

Secondary Discharges:

There are emergency overflows from the 6 pumping stations in the agglomeration.

SW02RING Shanbally SPS

Emergency overflow discharges to existing storm sewer pipe. Outfall 450 mm diameter with Non return flap valve.

outini 100 mm namoto win 1 ton 10 tanii 11ap 18

SW03RING Coolmore SPS, Carrigaline 600mm Ø P.C.C. overflow pipe.

SW04RING, Old Waterpark Pumping Station.

Discharges to 450 mm storm sewer outfall with Non return flap Valve

SW05RING, Crosshaven Road Pumping Station, Carrigaline.

300mm Ø A.C. overflow pipe with Non return flap valve.

SW06RING Crosshaven PS2.

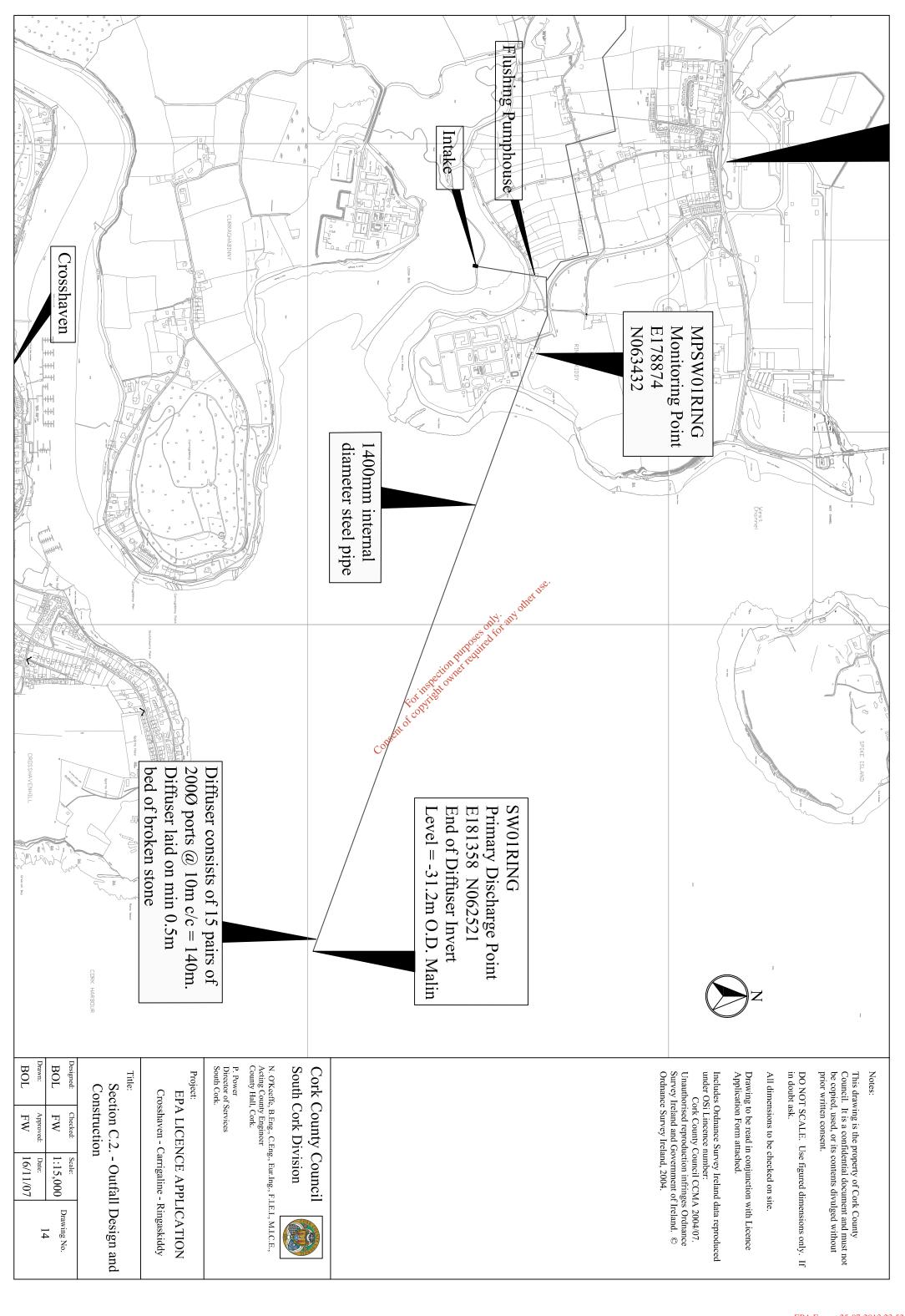
Overflow discharges to existing storm sewer system.

Outfall: 600mm Ø storm sewer with Non return flap valve

SW07RING Crosshaven PS1.

Overflow 400 mm diameter HPPE pipe discharges to existing storm sewer.

Outfall with Non return flap valve



SECTION D: DISCHARGES TO THE AQUATIC ENVIRONMENT

Advice on completing this section is provided in the accompanying Guidance Note.

Give particulars of the source, location, nature, composition, quantity, level and rate of discharges arising from the agglomeration and, where relevant, the period or periods during which such emissions are made or are to be made.

The applicant should address in particular all discharge points where the substances outlined in Tables D.1(i), (b) & (c) and **D.1(ii)**, **(b)** & **(c)** of Annex 1 are emitted.

Where it is considered that any of the substances listed in Annex X of the Water Framework Directive (2000/60/EC) or any of the Relevant Pollutants listed in Annex VIII of the Water Framework Directive (2000/60/EC) are being discharged from the waste water works or are seen to be present in the receiving water environment downstream of a discharge from the works (as a result of any monitoring programme) the applicant shall screen the discharge for the relevant substance.

D.1 Discharges to Surface Waters

D.1 Discharges to Surface Waters

Details of all discharges of waste water from the agglomeration should be supplied. Tables D.1(i)(a), (b) & (c), should be completed for the primary discharge point from the agglomeration and Tables D.1(ii)(a) (b) & (c) of Annex 1 should be completed for each secondary discharge point, where relevant. Table D.1(iii)(a) should be completed for each storm water overflow. Individual Tables must be completed for each discharge point.

Emissions from this agglomeration arise from two main sources of the Domestic Loading and Non Domestic Loading

Domestic Loading/ Emissions.

The following Population figures are used to estimate the domestic loading:

Crosshaven: 1,669 [Census 2006] Carrigaline: 12,835. [Census 2006]

Shanbally: 360 [estimated from house count]. Total Population for the Agglomeration: 14,864.

Non domestic loading/emissions.

Non Domestic Loading arises from discharges from industry.

A number of industries in the catchment are licensed to discharge effluent - either by the EPA or by Cork County Council.

The Population Equivalent [PE] of the licensed discharges is estimated to be 82,692

The Total PE of all current discharges is 97,556.

Details of locations of discharges are given in Sections B3, B4, B5.

Supporting information should form **Attachment D.1**

Attachment included	Yes	No
	√	

D.2 Tabular Data on Discharge Points

Applicants should submit the following information for each discharge point:

Table D.2:

PT_CD I	PT_TYPE	LA_NAME	RWB_TYPE	RWBONAME	DESIGNATION	EASTING	NORTHING
Code (Provide label ID's	Point Type (e.g., Primary/ Secondary/ Storm Water Overflow)	Local Authority Name (e.g., Donegal County Council)	Receiving Water Body Type (e.g., River, Lake, Groundwater, Transitional, Coastal)	Receiving Water Body Name (e.g., River Suir)	Protected Area Type (e.g., SAC, candidate SAC, NHA, SPA etc.)	6E-digit GPS Irish National Grid Reference	6N-digit GPS Irish National Grid Reference

An individual record (i.e. row) is required for each discharge point. Acceptable file formats include Excel, Access or other upon agreement with the Agency. A standard Excel template can be diswilloaded from the EPA website at www.epa.ie. This data should be submitted to the Agency on a separate CD-Rom containing sections B.1, B.2, B.3, B.4, B.5, C.1, E.3 and F.2.

TABLE D.1(i)(a): EMISSIONS TO SURFACE/GROUND WATERS (Primary Discharge Point)

Discharge Point Code: <u>SW01RING</u>

							
Source of Emission:		Crosshaven – Carrigaline – Ringaskiddy Agglomeration					
Location:		Cork Lower Harbour To	ownland Ringaskiddy				
Grid Ref. (12 digit, 6l	E, 6N):	E181358 N062521					
Name of receiving wa	aters:	Cork Harbour					
River Basin District:		South Western River B	South Western River Basin District				
Designation of receiv	ing waters:	None	वासि, यसि				
Flow rate in receiving	y waters:		school purpose required to	Tidal	m³.sec ⁻¹ Dry Weather Flow m³.sec ⁻¹ 95%ile flow		
Emission Details:		GOT IN	ght of				
(i) Volume emitted		, d cold,					
Normal/day	10,000m ³	Maximum/day of sett			14,000m³		
Maximum rate/hour	800m ³	Period of emission (avg)		60	min/hr <u>24</u> hr/day <u>365</u> day/yr		
Dry Weather Flow	9,000m³/day						

TABLE D.1(i)(b): EMISSIONS TO SURFACE/GROUND WATERS - Characteristics of the emission (Primary Discharge Point)

Discharge Point Code: SW01Ring

Number	Substance	As discharged				
		Max. daily average				
1	pH	8.04				
2	Temperature	Not available				
3	Electrical Conductivity(@20°C)	2100				
		Max. daily average (mg/l)	kg/day			
4	Suspended Solids	73.7	740.6			
5	Ammonia (as N)	4.1	°41.1			
6	Biochemical Oxygen Demand	106 net	1065.6			
7	Chemical Oxygen Demand	151.8	1525.5			
8	Total Nitrogen (as N)	15.0 Only 1 are	151.2			
9	Nitrite (as N)	Not available	Not available			
10	Nitrate (as N)	3.9 null quite	39.4			
11	Total Phosphorus (as P)	3.9 ion 7 10	39.5			
12	Orthophosphate (as P) ^{Note 1}	5.9 Sectionic	60.3			
13	Sulphate (SO₄)	275.9 (it) th	2773.8			
14	Phenols (sum) Note 2 (ug/l)	<0.10 to year	< 0.001			

Note 1: For waste water samples this monitoring should be undertaken on a sample filtered on 0.45μm filter paper.

Note 2: USEPA Method 604, AWWA Standard Method 6240, or equivalent

TABLE D.1(i)(c): DANGEROUS SUBSTANCE EMISSIONS TO SURFACE/GROUND WATERS

Primary Discharge Point - Characteristics of the emission

Discharge Point Code: <u>SW01Ring</u>

Number	Substance		As discharged	
		Max. daily average (μg/l)	kg/day	kg/year
1	Atrazine	<0.01	< 0.0001	< 0.0365
2	Dichloromethane	<1	<0.0100	<3.65
3	Simazine	<0.01	< 0.0001	<0.0365
4	Toluene	<0.01	<0.0001 <0.0002	<0.0365
5	Tributyltin	<0.02	<0.0002	<0.0730
6	Xylenes	< 0.01	<0.000 10 10 10 10 10 10 10 10 10 10 10 10	< 0.0365
7	Arsenic	7	0.0704	25.7
8	Chromium	<20	<0.2010	<73.4
9	Copper	60	0.6031	220.1
10	Cyanide	<5	6 0.0503	<18.4
11	Fluoride	660 ¢o	<0.0503 6.6349 <0.2011	2421.7
12	Lead	<20	<0.2011	<73.4
13	Nickel	<20 Consent	<0.2011	<73.4
14	Zinc	<20	<0.2011	<73.4
15	Boron	5110	51.3706	18750.3
16	Cadmium	<20	<0.2011	<73.4
17	Mercury	0.9	0.0090	3.3
18	Selenium	4	0.0402	14.7
19	Barium	<20	<0.2011	<73.4

TABLE D.1(ii)(a): EMISSIONS TO SURFACE/GROUND WATERS (Secondary Discharge Point) (1 table per discharge point)

Discharge Point Code: <u>SW02RING</u>

Source of Emission:	Shanbally Pumping Station		
Location:	Shanbally Townland Shanbally		
Grid Ref. (12 digit, 6E, 6N):	E175796, N064930		
Name of receiving waters:	Monkstown Creek		
River Basin District:	South Western River Basin District		
Designation of receiving waters:	NHA IN STARTER OF THE		
Flow rate in receiving waters:	Tidal Watersm³.sec ⁻¹ Dry Weather Flowm³.sec ⁻¹ 95%ile flow		
Emission Details: :hefter of the control of the con			

(i) Volume emitte	ed	to diffi	
Normal/day	Not Available	Maximum/day	Not Available
Maximum rate/hour	Not Available	Period of emission (avg)	Not Available
Dry Weather Flow	Not available		

TABLE D.1(ii)(b): EMISSIONS TO SURFACE/GROUND WATERS - Characteristics of the emission (1 table per discharge point) (Secondary Discharge Point)

Discharge Point Code: <u>SW02Ring</u>

Number	Substance	As discharged		
		Max. daily average		
1	pH	Not available		
2	Temperature	Not available		
3	Electrical Conductivity (@25°C)	Not available		
		Max. daily average (mg/l)	kg/day	
4	Suspended Solids	Not available	Not available	
5	Ammonia (as N)	Not available	·Not available	
6	Biochemical Oxygen Demand	Not available	Not available	
7	Chemical Oxygen Demand	Not available	Not available	
8	Total Nitrogen (as N)	Not available	Not available	
9	Nitrite (as N)	Not available	Not available	
10	Nitrate (as N)	Not available	Not available	
11	Total Phosphorus (as P) Note 1	Not available Not available Not available	Not available	
12	Orthophosphate (as P)	Not available golf wife	Not available	
13	Sulphate (SO ₄)	Not available 100	Not available	
14	Phenols (sum) Note 2 (ug/l)	Not available	Not available	

Note 1: For waste water samples this monitoring should be undertaken on a Sample filtered on 0.45μm filter paper. Note 2: USEPA Method 604, AWWA Standard Method 6240, or equivalents

TABLE D.1(ii)(c): DANGEROUS SUBSTANCE EMISSIONS TO SURFACE/GROUND WATERS

Secondary Discharge Point - Characteristics of the emission (1 table per discharge point)

Discharge Point Code: <u>SW02Ring</u>

Number	Substance	As discharged		
		Max. daily average (μg/l)	kg/day	kg/year
1	Atrazine	Not available	Not available	Not available
2	Dichloromethane	Not available	Not available	Not available
3	Simazine	Not available	Not available	Not available
4	Toluene	Not available	Not available	Not available
5	Tributyltin	Not available	Not available	Not available
6	Xylenes	Not available	Not available.	Not available
7	Arsenic	Not available	Not available	Not available
8	Chromium	Not available	Not available	Not available
9	Copper	Not available	Not available	Not available
10	Cyanide	Not available	Not available	Not available
11	Fluoride	Not available	Not available	Not available
12	Lead	Not available	Not available	Not available
13	Nickel	Not available	Not available	Not available
14	Zinc	Not available	Not available	Not available
15	Boron	Not available	Not available	Not available
16	Cadmium	Not available	Not available	Not available
17	Mercury	Not available	Not available	Not available
18	Selenium	Not available	Not available	Not available
19	Barium	Not available	Not available	Not available

TABLE D.1(ii)(a) cont. :

Discharge Point Code: <u>SW03RING</u>

Source of Emission:	Coolmore Pumping Station		
Location:	Carrigaline Townland Carrigaline East		
Grid Ref. (12 digit, 6E, 6N):	E174443, N062603		
Name of receiving waters:	Owenboy River		
River Basin District:	South Western River Basin District		
Designation of receiving waters:	NHA		
Flow rate in receiving waters:	Tidal Watersm³.sec ⁻¹ Dry Weather Flowm3.sec ⁻¹ 95%ile flow		

Emission Details:

(i) Volume emitte	ed	వ	schafter V. ret.
Normal/day	Not Available	Maximum/day For Min	Not Available
Maximum rate/hour	Not Available	Period of emission (avg)	Not Available
Dry Weather Flow	Not Available	<u> </u>	

TABLE D.1(ii)(b): EMISSIONS TO SURFACE/GROUND WATERS - Characteristics of the emission (1 table per discharge point) (Secondary Discharge Point)

Discharge Point Code: <u>SW03Ring</u>

Number	Substance	As discharged		
		Max. daily average		
1	pH	Not available		
2	Temperature	Not available		
3	Electrical Conductivity (@25°C)	Not available		
		Max. daily average (mg/l)	kg/day	
4	Suspended Solids	Not available	Not available	
5	Ammonia (as N)	Not available	Not available	
6	Biochemical Oxygen Demand	Not available	Not available	
7	Chemical Oxygen Demand	Not available	Not available	
8	Total Nitrogen (as N)	Not available	Not available	
9	Nitrite (as N)	Not available	Not available	
10	Nitrate (as N)	Not available	Not available	
11	Total Phosphorus (as P) Note 1	Not available Not available	Not available	
12	Orthophosphate (as P)	Not available golf and	Not available	
13	Sulphate (SO ₄)	Not available	Not available	
14	Phenols (sum) Note 2 (ug/l)	Not available	Not available	

Note 1: For waste water samples this monitoring should be undertaken on a sample filtered on 0.45µm filter paper. Note 2: USEPA Method 604, AWWA Standard Method 6240, or equivalents

TABLE D.1(ii)(c): DANGEROUS SUBSTANCE EMISSIONS TO SURFACE/GROUND WATERS

Secondary Discharge Point - Characteristics of the emission (1 table per discharge point)

Discharge Point Code: <u>SW03Ring</u>

Number	Substance			
		Max. daily average (μg/l)	kg/day	kg/year
1	Atrazine	Not available	Not available	Not available
2	Dichloromethane	Not available	Not available	Not available
3	Simazine	Not available	Not available	Not available
4	Toluene	Not available	Not available	Not available
5	Tributyltin	Not available	Not available	Not available
6	Xylenes	Not available	Not available.	Not available
7	Arsenic	Not available	Not available	Not available
8	Chromium	Not available	Not available	Not available
9	Copper	Not available	Not available	Not available
10	Cyanide	Not available	Not available	Not available
11	Fluoride	Not available	Mot available	Not available
12	Lead	Not available	Not available	Not available
13	Nickel	Not available	Not available	Not available
14	Zinc	Not available	Not available	Not available
15	Boron	Not available	Not available	Not available
16	Cadmium	Not available	Not available	Not available
17	Mercury	Not available	Not available	Not available
18	Selenium	Not available	Not available	Not available
19	Barium	Not available	Not available	Not available

TABLE D.1(ii)(a) cont. :

Discharge Point Code: SW04RING

I					
Source of Emission: Old Waterpark Pumping Station					
Location:		Carrigaline Townland (Carrigaline Townland Carrigaline		
Grid Ref. (12 digit, 6E	, 6N):	E173131, N062418			
Name of receiving wa	ters:	Owenboy River			
River Basin District: South Western River Basin District					
Designation of receiving waters:		None	. Itse		
Flow rate in receiving waters:			ses of the any other the	<u>Tidal Waters</u>	m³.sec ⁻¹ Dry Weather Flow m³.sec ⁻¹ 95%ile flow
Emission Details:	auth direction of the second o				,
(i) Volume emitte	d	insy	ecitume and		
Normal/day	Not Available	Maximum/day Forty			Not Available
Maximum rate/hour	Not Available	Period of emission (avg)			Not Available

Not Available

Dry Weather Flow

TABLE D.1(ii)(b): EMISSIONS TO SURFACE/GROUND WATERS - Characteristics of the emission (1 table per discharge point) (Secondary Discharge Point)

Discharge Point Code: <u>SW04Ring</u>

Number	Substance	As discharged		
		Max. daily average		
1	pH	Not available		
2	Temperature	Not available		
3	Electrical Conductivity (@25°C)	Not available		
		Max. daily average (mg/l)	kg/day	
4	Suspended Solids	Not available	·Not available	
5	Ammonia (as N)	Not available	Not available	
6	Biochemical Oxygen Demand	Not available	Not available	
7	Chemical Oxygen Demand	Not available	Not available	
8	Total Nitrogen (as N)	Not available	Not available	
9	Nitrite (as N)	Not available	Not available	
10	Nitrate (as N)	Not available	Not available	
11	Total Phosphorus (as P) Note 1	Not available of white	Not available	
12	Orthophosphate (as P)	Not available Not available Not available Not available	Not available	
13	Sulphate (SO ₄)	Not available	Not available	
14	Phenols (sum) Note 2 (ug/l)	Not available	Not available	

Note 1: For waste water samples this monitoring should be undertaken on a sample filtered on 0.45μm filter paper. Note 2: USEPA Method 604, AWWA Standard Method 6240, or equivalent.

TABLE D.1(ii)(c): DANGEROUS SUBSTANCE EMISSIONS TO SURFACE/GROUND WATERS

Secondary Discharge Point - Characteristics of the emission (1 table per discharge point)

Discharge Point Code: <u>SW04Ring</u>

Number	Substance			
		Max. daily average (μg/l)	kg/day	kg/year
1	Atrazine	Not available	Not available	Not available
2	Dichloromethane	Not available	Not available	Not available
3	Simazine	Not available	Not available	Not available
4	Toluene	Not available	Not available	Not available
5	Tributyltin	Not available	Not available	Not available
6	Xylenes	Not available	Not available.	Not available
7	Arsenic	Not available	Not available	Not available
8	Chromium	Not available	Not available	Not available
9	Copper	Not available	Not available	Not available
10	Cyanide	Not available	Not available	Not available
11	Fluoride	Not available	Mot available	Not available
12	Lead	Not available	Not available	Not available
13	Nickel	Not available	Not available	Not available
14	Zinc	Not available	Not available	Not available
15	Boron	Not available	Not available	Not available
16	Cadmium	Not available	Not available	Not available
17	Mercury	Not available	Not available	Not available
18	Selenium	Not available	Not available	Not available
19	Barium	Not available	Not available	Not available

TABLE D.1(ii)(a) cont.. : Discharge Point Code: <u>SW05RING</u>

Source of Emission:	Crosshaven Road Pumping Station
Location:	Carrigaline Townland Carrigaline
Grid Ref. (12 digit, 6E, 6N):	E173070, N062352
Name of receiving waters:	Owenboy River
River Basin District:	South Western River Basin District
Designation of receiving waters:	None None
Flow rate in receiving waters:	Tidal Waterm³.sec ⁻¹ Dry Weather Flowm³.sec ⁻¹ 95%ile flow
Emission Details:	at pitro
(i) Volume emitted	in Spectrum C

(i) Volume emitted : Italy to the control of the co			
Normal/day	Not Available	Maximum/day	Not Available
Maximum rate/hour	Not Available	Period of emission (avg)	Not Available
Dry Weather Flow	Not Available		

TABLE D.1(ii)(b): EMISSIONS TO SURFACE/GROUND WATERS - Characteristics of the emission (1 table per discharge point) (Secondary Discharge Point)

Discharge Point Code: <u>SW05Ring</u>

Number	Substance	As discharged		
		Max. daily average		
1	pH	Not available		
2	Temperature	Not available		
3	Electrical Conductivity (@25°C)	Not available		
		Max. daily average (mg/l)	kg/day	
4	Suspended Solids	Not available	Not available	
5	Ammonia (as N)	Not available	·Not available	
6	Biochemical Oxygen Demand	Not available	Not available	
7	Chemical Oxygen Demand	Not available	Not available	
8	Total Nitrogen (as N)	Not available	Not available	
9	Nitrite (as N)	Not available	Not available	
10	Nitrate (as N)	Not available	Not available	
11	Total Phosphorus (as P) Note 1	Not available Not available	Not available	
12	Orthophosphate (as P)	Not available 🔊 🔊	Not available	
13	Sulphate (SO ₄)	Not available	Not available	
14	Phenols (sum) Note 2 (ug/l)	Not available	Not available	

Note 1: For waste water samples this monitoring should be undertaken on a Sample filtered on 0.45μm filter paper. Note 2: USEPA Method 604, AWWA Standard Method 6240, or equivalents

TABLE D.1(ii)(c): DANGEROUS SUBSTANCE EMISSIONS TO SURFACE/GROUND WATERS

Secondary Discharge Point - Characteristics of the emission (1 table per discharge point)

Discharge Point Code: <u>SW05Ring</u>

Number	Substance	As discharged			
		Max. daily average (μg/l)	kg/day	kg/year	
1	Atrazine	Not available	Not available	Not available	
2	Dichloromethane	Not available	Not available	Not available	
3	Simazine	Not available	Not available	Not available	
4	Toluene	Not available	Not available	Not available	
5	Tributyltin	Not available	Not available	Not available	
6	Xylenes	Not available	Not available.	Not available	
7	Arsenic	Not available	Not available	Not available	
8	Chromium	Not available	Not available	Not available	
9	Copper	Not available	Not available	Not available	
10	Cyanide	Not available	Not available	Not available	
11	Fluoride	Not available	Mot available	Not available	
12	Lead	Not available	Not available	Not available	
13	Nickel	Not available	Not available	Not available	
14	Zinc	Not available	Not available	Not available	
15	Boron	Not available	Not available	Not available	
16	Cadmium	Not available	Not available	Not available	
17	Mercury	Not available	Not available	Not available	
18	Selenium	Not available	Not available	Not available	
19	Barium	Not available	Not available	Not available	

TABLE D.1(ii)(a) cont. : Discharge Point Code: <u>SW06RING</u>

Source of Emission:	Crosshaven Road Pumping Station No.2			
Location:	Crosshaven Townland Crosshaven			
Grid Ref. (12 digit, 6E, 6N):	E178816, N061285			
Name of receiving waters:	Owenboy River			
River Basin District:	South Western River Basin District			
Designation of receiving waters:	None None			
Flow rate in receiving waters:	<u>Tidal</u> m³.sec ⁻¹ Dry Weather Flow m³.sec ⁻¹ 95%ile flow			
Emission Details: (i) Volume emitted get the properties of the pr				

(i) Volume emitte	ed	:Tiest	th Owner
Normal/day	Not Available	Maximum/day	Not Available
Maximum rate/hour	Not Available	Period of emission (avg)	Not Available
Dry Weather Flow	Not Available		

TABLE D.1(ii)(b): EMISSIONS TO SURFACE/GROUND WATERS - Characteristics of the emission (1 table per discharge point) (Secondary Discharge Point)

Discharge Point Code: <u>SW06Ring</u>

Number	Substance	As discharged		
		Max. daily average		
1	pH	Not available		
2	Temperature	Not available		
3	Electrical Conductivity (@25°C)	Not available		
		Max. daily average (mg/l)	kg/day	
4	Suspended Solids	Not available	·Not available	
5	Ammonia (as N)	Not available	Not available	
6	Biochemical Oxygen Demand	Not available	Not available	
7	Chemical Oxygen Demand	Not available	Not available	
8	Total Nitrogen (as N)	Not available	Not available	
9	Nitrite (as N)	Not available	Not available	
10	Nitrate (as N)	Not available	Not available	
11	Total Phosphorus (as P) Note 1	Not available exit with	Not available	
12	Orthophosphate (as P)	Not available	Not available	
13	Sulphate (SO ₄)	Not available	Not available	
14	Phenols (sum) Note 2 (ug/l)	Not available	Not available	

Note 1: For waste water samples this monitoring should be undertaken on a sample filtered on 0.45μm filter paper. Note 2: USEPA Method 604, AWWA Standard Method 6240, or equivalent.

TABLE D.1(ii)(c): DANGEROUS SUBSTANCE EMISSIONS TO SURFACE/GROUND WATERS

Secondary Discharge Point - Characteristics of the emission (1 table per discharge point)

Discharge Point Code: <u>SW06Ring</u>

Number	Substance	As discharged			
		Max. daily average (μg/l)	kg/day	kg/year	
1	Atrazine	Not available	Not available	Not available	
2	Dichloromethane	Not available	Not available	Not available	
3	Simazine	Not available	Not available	Not available	
4	Toluene	Not available	Not available	Not available	
5	Tributyltin	Not available	Not available	Not available	
6	Xylenes	Not available	Not available.	Not available	
7	Arsenic	Not available	Not available	Not available	
8	Chromium	Not available	Not available	Not available	
9	Copper	Not available	Not available	Not available	
10	Cyanide	Not available	Not available	Not available	
11	Fluoride	Not available	Mot available	Not available	
12	Lead	Not available	Not available	Not available	
13	Nickel	Not available	Not available	Not available	
14	Zinc	Not available	Not available	Not available	
15	Boron	Not available	Not available	Not available	
16	Cadmium	Not available	Not available	Not available	
17	Mercury	Not available	Not available	Not available	
18	Selenium	Not available	Not available	Not available	
19	Barium	Not available	Not available	Not available	

TABLE D.1(ii)(a) cont. :

Dry Weather Flow

Discharge Point Code: **SW07RING**

I c.					
Source of Emission: Crosshaven Pumping S			Station No 1		
Location:		Crosshaven Townland	Crosshaven		
Grid Ref. (12 digit, 6E	E, 6N):	E179639, N061145			
Name of receiving wa	ters:	Owenboy River			
River Basin District:		South Western River B	Basin District		
Designation of receivi	Designation of receiving waters:		. itse.		
Flow rate in receiving	waters:		es of the any other	Tidal Water	m³.sec ⁻¹ Dry Weather Flow m³.sec ⁻¹ 95%ile flow
Emission Details:			on Purde direct		
(i) Volume emitte	acting.				
Normal/day	Not Available	Maximum/day Constitution			Not Available
Maximum rate/hour	Not Available	Period of emission (avg)			Not Available

section D WW Discharge licence Application Ringaskiddy.doc

Not Available

TABLE D.1(ii)(b): EMISSIONS TO SURFACE/GROUND WATERS - Characteristics of the emission (1 table per discharge point) (Secondary Discharge Point)

Discharge Point Code: <u>SW07Ring</u>

Number	Substance	As discharged		
		Max. daily average		
1	pH	Not available		
2	Temperature	Not available		
3	Electrical Conductivity (@25°C)	Not available		
		Max. daily average (mg/l)	kg/day	
4	Suspended Solids	Not available	Not available	
5	Ammonia (as N)	Not available	Not available	
6	Biochemical Oxygen Demand	Not available	Not available	
7	Chemical Oxygen Demand	Not available	Not available	
8	Total Nitrogen (as N)	Not available	Not available	
9	Nitrite (as N)	Not available	Not available	
10	Nitrate (as N)	Not available	Not available	
11	Total Phosphorus (as P) Note 1	Not available Not available	Not available	
12	Orthophosphate (as P)	Not available 🔊 🔊	Not available	
13	Sulphate (SO ₄)	Not available	Not available	
14	Phenols (sum) Note 2 (ug/l)	Not available	Not available	

Note 1: For waste water samples this monitoring should be undertaken on a Sample filtered on 0.45μm filter paper. Note 2: USEPA Method 604, AWWA Standard Method 6240, or equivalents

TABLE D.1(ii)(c): DANGEROUS SUBSTANCE EMISSIONS TO SURFACE/GROUND WATERS

Secondary Discharge Point - Characteristics of the emission (1 table per discharge point)

Discharge Point Code: <u>SW07Ring</u>

Number	Substance	As discharged				
		Max. daily average (μg/l)	kg/day	kg/year		
1	Atrazine	Not available	Not available	Not available		
2	Dichloromethane	Not available	Not available	Not available		
3	Simazine	Not available	Not available	Not available		
4	Toluene	Not available	Not available	Not available		
5	Tributyltin	Not available	Not available	Not available		
6	Xylenes	Not available	Not available.	Not available		
7	Arsenic	Not available	Not available	Not available		
8	Chromium	Not available	Not available	Not available		
9	Copper	Not available	Not available	Not available		
10	Cyanide	Not available	Not available	Not available		
11	Fluoride	Not available	Mot available	Not available		
12	Lead	Not available	Not available	Not available		
13	Nickel	Not available	Not available	Not available		
14	Zinc	Not available	Not available	Not available		
15	Boron	Not available	Not available	Not available		
16	Cadmium	Not available	Not available	Not available		
17	Mercury	Not available	Not available	Not available		
18	Selenium	Not available	Not available	Not available		
19	Barium	Not available	Not available	Not available		

TABLE D.1(iii)(a): EMISSIONS TO SURFACE/GROUND WATERS (Storm Water Overflow) (1 table per discharge point)

Discharge Point Code: <u>SW02RING</u>

Source of Emission:	Shanbally Pumping Station
Location:	Shanbally Townland Shanbally
Grid Ref. (12 digit, 6E, 6N):	E175796, N064930
Name of receiving waters:	Monkstown Creek
River Basin District:	South Western River Basin District
Designation of receiving waters:	NHA OSES LA COLOR
Flow rate in receiving waters:	Tidal Watersm³.sec ⁻¹ Dry Weather Flowm³.sec ⁻¹ 95%ile flow

Emission Details:

(i) Volume emitte	ed .	alsent of	
Normal/day	Not Available	Maximum/day	Not Available
Maximum rate/hour	Not Available	Period of emission (avg)	Not Available

TABLE D.1(iii)(a) cont. : Discharge Point Code: <u>SW03RING</u>

Source of Emission:		Coolmore Pumping Sta	ation		
Location:		Carrigaline Townland (Carrigaline East		
Grid Ref. (12 digit, 6E	:, 6N):	E174443, N062603			
Name of receiving wa	ters:	Owenboy River			
River Basin District:		South Western River B	Basin District		
Designation of receivi	ng waters:	NHA GREAT BEAUTY.			
Flow rate in receiving	waters:		sction purposet edired for	<u>Tidal Water</u>	m³.sec ⁻¹ Dry Weather Flow m³.sec ⁻¹ 95%ile flow
Emission Details:		inst tot arts	and the second s		,
(i) Volume emitted					
Normal/day	Not Available	Maximum/day			Not Available
Maximum rate/hour	Not Available	Period of emission (avg)			Not Available

TABLE D.1(iii)(a) cont. : Discharge Point Code: <u>SW04RING</u>

Source of Emission:		Old Waterpark Pumpin	Old Waterpark Pumping Station							
Location:		Carrigaline Townland Carrigaline								
Grid Ref. (12 digit, 6E	E, 6N):	E173131, N062418								
Name of receiving wa	ters:	Owenboy River								
River Basin District:		South Western River Basin District								
Designation of receivi	ng waters:	None ose different								
Flow rate in receiving	waters:	Tidal Watersm³.sec ⁻¹ Dry Weather Flowm³.sec ⁻¹ 95%ile flow								
Emission Details:		For his	§							
(i) Volume emitte	d	alsentot								
Normal/day	Not Available	Maximum/day			Not Available					
Maximum rate/hour	Not Available	Period of emission (avg)	Not Available							

TABLE D.1(iii)(a) cont. : Discharge Point Code: <u>SW05RING</u>

Source of Emission:		Crosshaven Road Pumping Station 1							
Location:		Carrigaline Townland Carrigaline							
Grid Ref. (12 digit, 6E	., 6N):	E173070, N062352							
Name of receiving wa	ters:	Owenboy River	Owenboy River						
River Basin District:		South Western River Basin District							
Designation of receivi	ng waters:	None							
Flow rate in receiving	waters:	Tidal Waters m³.sec ⁻¹ Dry Weather m³.sec ⁻¹ 95%ile							
Emission Details:		atot coli,							
(i) Volume emitte	d	Course							
Normal/day	Not Available	Maximum/day			Not Available				
Maximum rate/hour Not Available		Period of emission (avg)	Not A						

TABLE D.1(iii)(a) cont. :

Discharge Point Code: <u>SW06RING</u>

Source of Emission:		Crosshaven Pumping Station No. 2							
Location:		Crosshaven Townland Crosshaven							
Grid Ref. (12 digit, 6E	E, 6N):	E178816, N061285							
Name of receiving wa	ters:	Owenboy River	met use.						
River Basin District:		South Western River Basin District							
Designation of receivi	ng waters:	None	authorited th						
Flow rate in receiving	waters:				m ³ .sec ⁻¹ Dry Weather Flow m ³ .sec ⁻¹ 95%ile flow				
Emission Details:		at of cop.							
(i) Volume emitte	ed	Course							
Normal/day	Not Available	Maximum/day			Not Available				
Maximum rate/hour Not Available		Period of emission (avg)	Not A						

TABLE D.1(iii)(a) cont. : Discharge Point Code: <u>SW07RING</u>

Source of Emission:		Crosshaven Pumping Station No. 1							
Location:		Crosshaven Townland Crosshaven							
Grid Ref. (12 digit, 6E	E, 6N):	E179639, N061145							
Name of receiving wa	ters:	Owenboy River	ist of other						
River Basin District:		South Western River Basin District							
Designation of receivi	ng waters:	None	N V						
Flow rate in receiving	waters:	for the g	ee out	<u>Tidal Waters</u>	m ³ .sec ⁻¹ Dry Weather Flow m ³ .sec ⁻¹ 95%ile flow				
Emission Details:		nsentot							
(i) Volume emitte	ed	8							
Normal/day	Not Available	Maximum/day			Not Available				
Maximum rate/hour Not Available		Period of emission (avg)	Not A						

Table D2 table of Discharge Points

			RWB_TYP		DESIGNATIO	EASTIN	NORTHIN	VERIFIE
PT_CD	PT_TYPE	LA_NAME	E	RWB_NAME	N	G	G	D
SW01RIN		Cork County						
G	Primary	Council	Coastal	Cork Harbour	none	181358	62521	N
SW02RIN		Cork County						
G	Secondary	Council	Transitional	Monkstown Creek	NHA	175796	64930	Υ
SW03RIN		Cork County						
G	Secondary	Council	Transitional	East Owenaboy River	NHA	174443	62603	Υ
SW04RIN		Cork County		Middle Owenaboy				
G	Secondary	Council	Transitional	River	none	173131	62418	Υ
SW05RIN		Cork County		Middle Owenaboy				
G	Secondary	Council	Transitional	River	none	173070	62352	Υ
SW06RIN		Cork County						
G	Secondary	Council	Transitional	Owenaboy River	None	178816	61285	N
SW07RIN		Cork County		inet				
G	Secondary	Council	Transitional	Owenaboy River	none	179639	61145	Υ
SW02RIN	Storm Water	Cork County		Ottl's air.				
G	Overflow	Council	Transitional	Monkstown Creek	NHA	175796	64930	Υ
SW03RIN	Storm Water	Cork County		althuite				
G	Overflow	Council	Transitional	East Owenaboy River	NHA	174443	62603	Υ
SW04RIN	Storm Water	Cork County	و د	Middle Owenaboy				
G	Overflow	Council	Transitional	River	none	173131	62418	Υ
SW05RIN	Storm Water	Cork County	Transitional	Middle Owenaboy				
G	Overflow	Council	Transitional	River	none	173070	62352	Υ
SW06RIN	Storm Water	Cork County	x of					
G	Overflow	Council	Transitional	Owenaboy River	none	178816	61285	N
SW07RIN	Storm Water	Cork County	Con					
G	Overflow	Council	Transitional	Owenaboy River	none	179639	61145	Υ

SECTION E MONITORING

Advice on completing this section is provided in the accompanying Guidance Note.

E.1 Waste Water Discharge Frequency and Quantities – Existing & Proposed

Provide an estimation of the quantity of waste water likely to be emitted in relation to all primary and secondary discharge points applied for. This information should be included in Table E.1(i) of the Annex. The primary discharge shall be annotated with a **(P)**.

Provide an estimation of the quantity of waste water likely to be emitted in relation to all storm water overflows within the agglomeration applied for. This information should be included in Table E.1(ii) of the Annex.

E.2. Monitoring and Sampling Points

Programmes for environmental monitoring should be submitted as part of the application. These programmes should be provided as Attachment E.2.

Reference should be made to, provision of sampling points and safe means of access, sampling methods, analytical and quality control procedures, including equipment calibration, equipment maintenance and data recording/reporting procedures to be carried out in order to ensure accurate and reliable monitoring.

In determining the sampling programme to be carried out, the variability of the emission and its effect on the receiving environment should be considered.

Details of any accreditation or certification of analysis should be included.

Attachment E.2 should contain any supporting informations is

Attachment included	Yes	No
	All Mil	

E.3. Tabular data on Monitoring and Sampling Points

Applicants should submit the following information for each monitoring and sampling point:

PT_CD	PT_TYPE	MON_TYPE	EASTING	NORTHING	VERIFIED
Point Code Provide label ID's assigned in section E of application	Point Type (e.g., Primary, Secondary, Storm Water Overflow)	Monitoring Type M = Monitoring S = Sampling	6E-digit GPS Irish National Grid Reference	6N-digit GPS Irish National Grid Reference	Y = GPS used N = GPS not used

An individual record (i.e., row) is required for each discharge point. Acceptable file formats include Excel, Access or other upon agreement with the Agency. A standard Excel template can be downloaded from the EPA website at www.epa.ie. This data should be submitted to the Agency on a separate CD-Rom containing sections B.1, B.2, B.3, B.4, B.5, C.1, D.2 and F.2.

E.4 Sampling Data - Not applicable

Regulation 16(1)(h) of the Waste Water Discharge (Authorisation) Regulations 2007 requires all applicants in the case of an existing waste water treatment plant to specify the sampling data pertaining to the discharge based on the samples taken in the 12 months preceding the making of the application.

Regulation 16(1)(I) of the regulations requires applicants to give details of compliance with any applicable monitoring requirements and treatment standards.

Attachment E.4 should contain any supporting information.

E4 attachment contains sampling information relating to the primary discharges which are the subject of the application

Attachment included		Yes	No any other
		√	See of to
	<u>.</u>		on purequite
		For it	specifo wher
		FOLI	hight
		A of col	
		Conser	

TABLE E.1(i): WASTE WATER FREQUENY AND QUANTITY OF DISCHARGE – Primary and Secondary Discharge Points

Identification Code for Discharge point	Frequency of discharge (days/annum)	Quantity of Waste Water Discharged (m³/annum)
SW01RING (P)	365	3,658,760
SW02RING	Not available	Not Available
SW03RING	Not available	Not Available
SW04RING	Not available	Not Available
SW05RING	Not available	Not Available
SW06RING	Not available	Net Available
SW07RING	Not available of the state of t	Not Available
	rdo iredit	
	ion differ	
	in the first of th	
	FOT STITE	
	a di con	
	C Olizete.	

TABLE E.1(ii): WASTE WATER FREQUENY AND QUANTITY OF DISCHARGE – Storm Water Overflows

Identification Code for Discharge point	Frequency of discharge (days/annum)	Quantity of Waste Water Discharged (m³/annum)	Complies with Definition of Storm Water Overflow
SW02RING	Not Available	Not Available	N
SW03RING	Not Available	Not Available	N
SW04RING	Not Available	Not Available	Υ
SW05RING	Not Available	Not Available	N
SW06RING	Not Available	Not Available	Υ
SW07RING	Not Available	Not Available	Υ
		ng.	
		, offer	
		county and	
		iflosited	
		itali pe rede	
		interest out	
		korjingti	
	*	\$ 6	
	Consort		

Attachment E2

Cork County Council operate a refrigerated composite sampler on the primary discharge outlet from the Ringaskiddy outfall to sea . This sampler operates on a 28 day rolling cycle and collects samples presently on a 24 hour basis per sample . There is no safe access to the discharge pipe at sea as the pipe discharges into deep water off the coast therefore the only location that is accessible and is safe for personnel is at the channel prior to discharge to sea . Samples have generally been collected on a fortnightly basis at this location from the composite sampler .It is proposed to continue with this arrangement as part of the licencing process .Samples are generally analysed for COD, Ammonia, pH ,Suspended Solids, Total Nitrogen Total Phosphorus ,Ortho phosphate(in recent times) and Sulphates. The samples are periodically checked for BOD but as the main component of the discharge is treated industrial wastewaters from the industries located in Ringaskiddy the principal focus has been on parameters that may be present in industrial effluents. There is a flow meter and pH meter installed in the outfall location however the reported pH results relate solely to the composite samples collected by the Environment directorate of Cork County Council.

The wastewater Laboratory of Cork County Council are accredited for a number of analytical tests under the Irish National Accreditation Board (INAB) under the ISO 17025 international standard. We currently are accredited for the following parameters under the ISO 17025 system

- **>** pH
- > Biochemical Oxygen Demand
- > Chemical Oxygen Demand
- Suspended Solids
- > Ammonia
- > Ortho Phosphate
- > Total Phosphate
- > Chloride
- > Sulphate

The laboratory perform a number of analytical tests e.g. Fats Oil, Grease &Metals using an ICP-OES system and while we are not currently accredited for extra tests the analytical procedures and protocol are adhered to by the laboratory as if the tests are accredited,. The laboratory also participate in proficiency testing schemes which measure the accuracy of results and performance of the laboratory in both the EPA scheme and the WRC Aquacheck scheme from the UK. The performance of the laboratory in these schemes is excellent and the non accredited tests are within the performance criteria for the schemes as evaluated by the scheme coordinators.

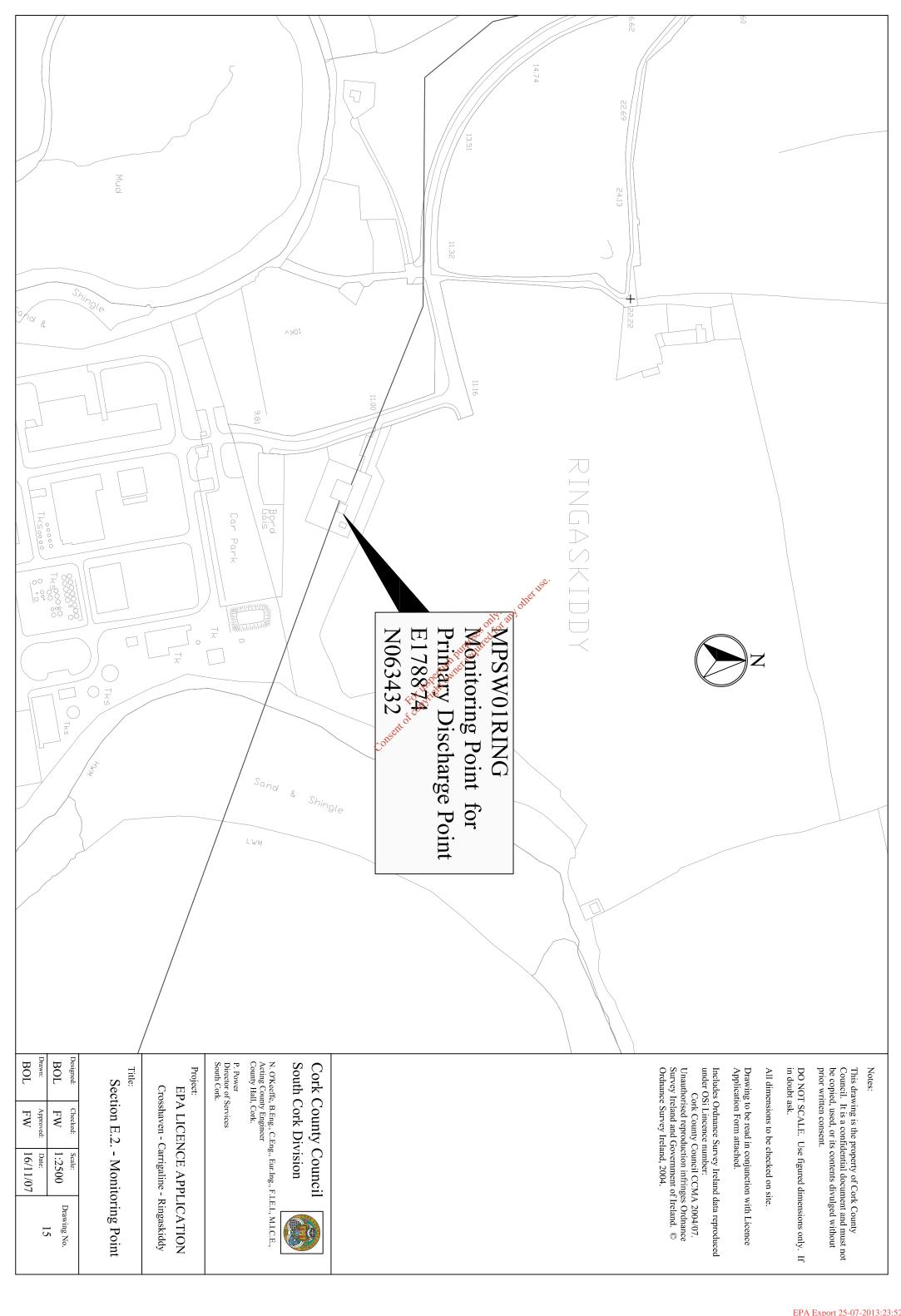
section E Discharge licence Application Ringaskiddy.doc

Table E3Monitoring and sampling locations

PT_CD	PT_TYPE	MON_TYPE	EASTING	NORTHING	VERIFIED
SW01RING	Primary	Sampling	178871	63434	N
SW02RING	Secondary	Monitoring	175796	64930	Υ
SW03RING	Secondary	Monitoring	174443	62603	Υ
SW04RING	Secondary	Monitoring	173131	62418	Υ
SW05RING	Secondary	Monitoring	173070	62352	Υ
SW06RING	Secondary	Monitoring	178816	61285	$\mathcal{M} \cdot \mathcal{A}_{o}$
SW07RING	Secondary	Monitoring	179639	61145	20X01.81
SW02RING	Storm Water Overflow	Not available	175796	64930	00°.30 Y
SW03RING	Storm Water Overflow	Not available	174443	62603 ³	Edit Y
SW04RING	Storm Water Overflow	Not available	173131	624180	Y
SW05RING	Storm Water Overflow	Not available	173070	62352	Υ
SW06RING	Storm Water Overflow	Not available	178816	285	N
SW07RING	Storm Water Overflow	Not available	179639	61145	Υ

E4 : Monitoring Data

Consent of copyright outlet required for any other use.



Г	T	Т	1				·T-	_1	T-	1	·		· T	-	·	7		- 1			т-	
Ayrene	i noutylitin"	T-16-10-C30	TDU CAO COO	Total Organic Carbon	Tolliene	Simprino (OES)	Folyarumanic mydrocarbons	Prienois (Total)	Mercury (OES)	Month (Olio)	Dichlorometriane	Cyanice	Chazile	Atrono (OLO)	Arcenic (OEC)	Darameter				24/10/2007	oampie/Date	O Data
GC-MS 1	GC-MS 1	GC-FID	analyser (NPOC)	GC-MS 1	HPLC	ICP-OES	HPLC	GC-MS 2	ICP-OES	GC-FID	GC-MS 1	Colorimetry	HPLC	ICP-OES	Method		Ngroay	Kalbay	Average	Pumping Station	Sample	
4	NS.	7.3	61.6	<0.01	60.01	6	<0.01	<0.10	0.9	7.3	4	8	6.01	6	Result				8 20	8.2	꾶	
J/gu	ug/L as Sn	ng/L	mg/L	ug/L	ug/L	ng/L	ug/L	ug/L	ug/L	l/gu	ug/L	ug/L	ng/L	ug/L	Units		400	3 8	106.	138	BOD mg/	
																	1249.5	1000	367	357	BOD mg/L COD mg/L	
GR1031 24/10/07 Carrigaline Pumping Station	GR1031 24/10/07 Carrigaline_Pumping_Station	GR1031 24/10/07 Carrigaline Pumping Station	GR1031 24/10/07 C	GR1031 24/10/07 Carrigaline Pumping Station			294	ç	S.		SS mg/L											
)/07 Carrigalir)/07 Carrigaliı)/07 Carrigalii)/07 Carrigali	0/07 Carrigali)/07 Carrigali	0/07 Carrigali	0/07 Carrigali	0/07 Carrigali	0/07 Carrigali	0/07 Carrigali	0/07 Carrigali	0/07 Carrigali	0/07 Carrigali	0/07 Carrigal	Source		22.33	0,30	6.00	6.38	TP mg/L	Car
ne Pumping	ne Pumping	ne Pumping	ne Pumpino	ne_Pumping	ne Pumpin	ne Pumpin	ne Pumpin	ne Pumpin	arrigaline Pumping Station	ne Pumpin			189	ğ	;	-	TN ma/L	rıgalı				
Station	Station	Station	Station	Station	g Station	g Station	g Station	g Station	g Station	g Station	g Station	g Station	g Station	g Station			127.4	35.4	3	36 /	NH. ma/L	Carrigaline Pumping Station
<u> </u>			3	0	Á	ş İ	Á	×		<u></u>		in the latest	<u>.</u>	*****	tan da	l d	378	108 1	ē	-1-	2	mpine
<0.00035		0.02555	215.6	0.000035	<0.000035	0.021	<0.000035	<0.00035	0.00315	0.02555	<0.0035	0.028	<0.000035	0.021	Kg/Day		39 165	11.19			2 200	g Stat
	· · · · · · · · · · · · · · · · · · ·			CCC							· · · · · · · · · · · · · · · · · · ·			3.		0.01	<0.07 <0.07	3500	3000 - 16//9 - <0:02 - <0:02 - <0:02 - <0:02 - <0:02 - <0:02 - <0:02 - <0:08	-Coura Eve - Chromium		ation
								•								٦		38	38	on I		

	_			_											(
		Xvlene	Tributylitin*	TPH C10-C36	rotal Organic Carbon	loluene	Simazine	Selenium (OES)	Polyaromatic Hydrocarbons	Phenois (Total)	Mercury (OES)	EPH	Dichloromethane	Cyanide	Atrazine	Ciselle (OES)	A reanic (OEC)	Parameter				24/10/2007	05/09/2007	01/08/2007	24/07/2007	04/07/2007	30/05/2007	24/05/2007	20/06/2007	04/04/2007	07/06/2007	01/02/2007	7/01/2007	odilpie Dale	Camala Data			
	O WO	CC-MS 1	GC-MS 1	GC-FID	TOC analyser (NPOC)	GC-MS 1	HPLC	ICP-OES	HPLC	GC-MS 2	ICP-OES	GC-FID	GC-MS 1	Colorimetry	HPLC	ICP-OES	metriod	Market		Kg/Day	Average	E Cuttall Course	- Outfalling	. Outfall 11	The state of the s	ு நிரித்த	(Outfall)	(ουπη)	(JLU)	Outall .	Outrall .	Outri	Outfall	Sample				
	6.6		8	<u>.</u>	49.00	<0.01	<0.01	4	^0.01	<0.10	0.9	4.1	<u>^</u>	ŝ	<0.01	7	Kesult	,		1					8					124954	8.4	7.7	00	먇				
	, ug/L	1 00 CI	us se l'ou	ug/-	mg/L	ug/∟	ug/L	⊔9/L	ug/L	ug/L	ug/L	/gu	ug/L	ng/r	ug/L	J/gu	T	1	1000.012	1085 8107	186	<u>3</u>			1		+	1	1					BOD mg/L				
	GK103	T	1	GR103	GR103	GR103	GR103	GR103	GR103	GR103	GR103	GR103	GR103	GR103	GR10	GR10			1020.0002	+	151.75	311	165	203	100	111	330	153	00 9	g	52	127	_	I/L COD mg/L				,
	GR1030 24/10/07 Ringaskiddy Pumping Station Outfall	GR 1030 24/10/07 Ringaskiddy Pumping Station Outfall	CB1030 24/40/2 E. Surgasway Fumbrily Station Outrain	0 24/10/07 R	GR1030 24/10/07 Ringaskiddy Pumping Station Outfall	GR1030 24/10/07 Ringaskiddy Pumping Station Outfall	GR1030 24/10/07 Ringaskiddy Pumping Station Outfall	GR1030 24/10/07 Ringaskiddy Pumping Station Outfall	GR1030 24/10/07 Ringaskiddy Pumping Station Outfall	GR1030 24/10/07 Ringaskiddy Pumping Station Outfall	GR1030 24/10/07 Ringaskiddy Pumping Station Outfall	GR1030 24/10/07 Ringaskiddy Pumping Station Outfall	GR1030 24/10/07 Ringaskiddy Pumping	GR1030 24/10/07 Ringskiddy Bumping	GR1030 24/10/07 Ringaskiddy Pumping	GR1030 24/10/07 Ringaskiddy Pumping			/40.30/3	┿-	7	113	111	130	51 8	8 8	150	8 8	3 2	3	17	2 ;		/L SS mg/L				
	ingaskiddy P	Ingaskiddy P	gaskiday	ingsekiddy D	inoaskiddy P	ingaskiddy P	ingaskiddy F	ingaskiddy F	lingaskiddy F	Ringaskiddy F	Ringaskiddy F	Ringaskiddy F	Ringaskiddy F	dingaskiddy (Ringaskiddy F	Ringaskiddy I	Source		39.49895	J.92908	4	3 3 1	9.0	2.20	200	3 25 6	2.4	2.30	2/4		2 5	3 50	_	L TP mg/L				
	umping Stati	umping Stati	amping oran	umping Ctati	umping Stati	umping Stati	umping Stati	umping Stati	umping Stat	umping Stat	umping Stat	umping Stat	uniping Stat			oumping Stat			151.2466	1	12 0 1	2 6	30.	2 -		14.4		7.0	6./5	Ç.	6.3	3 2	An o	TN mg/L				
	on Outfall	on Outfall	on Cuttail	on Outlan	on Outfall	on Outfall	on Outfall	on Outfall	ion Outfall	ion Outfall	on Outfall	Station Outfall	Station Outfall	Station Cutter!	ion Outfall	Station Outfall			41.09143313	4.08/5	14.7	<u> </u>	1.8	1.2		10.6	ê	1.2	-	<0.1	2.4	2 0	2 2	NH, ma/L	Ring	!	,	
	<0.000101	< 0.000201	0.047217	492,2940	100 5016			0.0402130	<0 000 000 000 000 000 000 000 000 000	<0.001.005	SYCODOC	0.01003	<0.050265	\0.000.01	0.000001	0 070371	Kg/Day_		2773.776	275.9167	160	360.8			259		381.4		259.1	235.2		1		SOA	Ringaskiddy Outfall		·	
	7 T.	v.	t :	:	رون مورن	SON'S OWIS	ei ie	Quit		. 7	<u>-</u>	. *			. 11			•	60.267435	5.995	6.36	5,63		E.A. 1.4			100	(-4-1		-		· · · fer · ·	010	0 0	dy Ou	-{	in. J ^{ug} alan <u>i</u> u Za ran a	
;	Cong	ent.	\$00 St. 00	38 ³ 1	33			- 12		- 1 n	***				1			and the same		10052.95	8248	6525	8555	8891	8365	7715	6189.9	17671	17574	13943	5559	11399.5	MOLE		Itfall			
	Cor																	Andrew And American Company	_	2100	2100					· •					a mande		Cong Zuc				The state of the s	
						Property of the state of the st												L	9	<0.02	<0.02		The Vernance i.			A ARRIVE THE PROPERTY AND ADDRESS.			1 a man and the second		\$1.4.5		Cadmium					
							4 6										1		<0.201059	< 0.02	<0.02			1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		Children Poter - Training		The state of the s	<0.02		The contract of the contract o		Cadmium Chromium Copper					The second second second
)							7	006	^ 0.02		· · · · · · · · · · · · · · · · · · ·			i de la composition della comp			0.1				Copper					
			a.			·		4	i Las	1 3.									<u>.</u>	+	<0.02							12 11 11 1	<0.03				-Lead -N					
	i							1 4 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1			. "		it Hill F						2010140 2010	+	60 02 €0 0	1							A0.02			-1	=Nickel Zi					
•							,			. :	,	į			i i			0.00100	Ž	3 6	उ		1	+	1			6.6)))				inc Barium					
•																		00/0.10	-	1				1			-	7.	3	+	1		Jm Boron					
							1			:								6.63494/			0.55							1		<u> </u>	1		Elijorida					
							1											39.407564	3.92	3.92												ti ca asau						
									4	:							1	-			<u></u>	1	1	<u></u>	#	1	1	1	1;	L	1		=[

SECTION F: EXISTING ENVIRONMENT & IMPACT OF THE DISCHARGE(S)

Advice on completing this section is provided in the accompanying Guidance Note.

Detailed information is required to enable the Agency to assess the existing receiving environment. This section requires the provision of information on the ambient environmental conditions within the receiving water(s) upstream and downstream of any discharge(s).

Where development is proposed to be carried out, being development which is of a class for the time being specified under Article 24 (First Schedule) of the Environmental Impact Assessment Regulations, the information on the state of the existing environment should be addressed in the EIS. In such cases, it will suffice for the purposes of this section to provide adequate cross-references to the relevant sections in the EIS.

F.1. Assessment of Impact on Receiving Surface or Ground Water

- o Give summary details and an assessment of the impacts of any existing of proposed emissions on the environment, including environmental media other than those into which the emissions are to be made.
- Tables F.1(i)(a) & (b) should be completed for the primary discharge point. Surface water monitoring locations upstream and downstream of the discharge point shall be screened for those substances listed in Tables F.1(i)(a) & (b). Monitoring of surface water shall be carried out at not less than two points, one upstream from the discharge location and one downstream.
- o For discharges from secondary discharge points Tables F.1(1)(a) & (b) should be completed. Furthermore, provide summary details and an assessment of the impacts of any existing proposed emissions on the surface water or ground (aquifers, soils, sub-soils and rock environment), including any impact on environmental media other than those into which the emissions are to be made.
- Provide details of the extent and type of ground emissions at the works. For larger discharges to groundwaters, e.g., from Integrated Constructed Wetlands, large scale percolation areas, etc., a comprehensive report must be completed which should include, inter alia, topography, meteorological data, water quality, geology, hydrology, and hydrogeology. The latter must in particular present the aquifer classification and vulnerability. The Geological Survey of Ireland Groundwater Protection Scheme Dept of the Environment and Local Government, Geological Survey of Ireland, EPA (1999) methodology should be used for any such classification. This report should also identify all surface water bodies and water wells that may be at risk as a result of the ground discharge.
- Describe the existing environment in terms of water quality with particular reference to environmental quality standards or other legislative standards. Submit a copy of the most recent water quality management plan or catchment management plan in place for the receiving water body. Give details of any designation under any Council Directive or Regulations that apply in relation to the receiving water.
- o Provide a statement as to whether or not emissions of main polluting substances (as defined in the *Dangerous Substances Regulations S.I. No. 12 of 2001*) to water are likely to impair the environment.

- o In circumstances where water abstraction points exist downstream of any discharge describe measures to be undertaken to ensure that discharges from the waste water works will not have a significant effect on faecal coliform, salmonella and protozoan pathogen numbers, e.g., Cryptosporidium and Giardia, in the receiving water environment.
- o Indicate whether or not emissions from the agglomeration or any plant, methods, processes, operating procedures or other factors which affect such emissions are likely to have a significant effect on
 - a site (until the adoption, in respect of the site, of a decision by the European Commission under Article 21 of Council Directive 92/43/EEC for the purposes of the third paragraph of Article 4(2) of that Directive)
 - (i) notified for the purposes of Regulation 4 of the Natural Habitats Regulations, subject to any amendments made to it by virtue of Regulation 5 of those Regulations,
 - (ii) details of which have been transmitted to the Commission in accordance with Regulation 5(4) of the Natural Habitats Regulations, or
 - (iii) added by virtue of Regulation 6 of the Natural Habitats Regulations to the list transmitted to the Commission in accordance with Regulation 5(4) of those Regulations,
 - (b) a site adopted by the European Commission as a site of Community importance for the purposes of Article 4(2) of Council Directive 92/43/EEC¹ in accordance with the procedures laid with in Article 21 of that Directive,
 - (c) a special area of conservation within the meaning of the Natural Habitats Regulations, or
 - (d) an area classified pursuant to Article 4(1) or 4(2) of Council Directive 79/409/EEC²;

 ¹Council Directive 92/43/EEC of 21 May 1992 on the conservation of natural habitats and of wild fauna and flora (OJ No. L 206, 22.07.1992)

²Council Directive 79/409/EEC of 2 April 1979 on the conservation of wild birds (OJ No. L 103, 25.4.1979)

- o Describe, where appropriate, measures for minimising pollution over long distances or in the territory of other states.
- This section should also contain full details of any modelling of discharges from the agglomeration. Full details of the assessment and any other relevant information on the receiving environment should be submitted as **Attachment F.1.**

Attachment included	Yes	No
	x	

F.2 Tabular Data on Drinking Water Abstraction Point(s)

Not applicable

Applicants should submit the following information for each downstream or downgradient drinking water abstraction point. The zone of contribution for the abstraction point should be delineated and any potential risks from the waste water discharge to the water quality at that abstraction point identified.

ABS_CD	AGG_SERVED	ABS_VOL	PT_CD	DIS_DS	EASTING	NORTHING	VERIFIED
Abstraction Code	Agglomeration served	Abstraction Volume in m³/day	Point Code Provide label ID's	Distance Downstream in meters from Emission Point to Abstraction Point	6E-digit GPS Irish National Grid Reference	6N-digit GPS Irish National Grid Reference	Y = GPS used N = GPS not used

Note: Attach any risk assessment that may have been carried out in relation to the abstraction point(s) listed.

An individual record (i.e. row) is required for each abstraction point. Acceptable file formats include Excel, Access or other upon agreement with the Agency. A standard Excel template can be downloaded from the EPA website at www.epa.ie. This data should be submitted to the Agency on a separate CD-Rom containing sections B, 1, 8, 2, B, 3, B, 4, B, 5, C, 1, D, 2 and E, 3.

Attachment F.2 should contain any supporting information. Not applicable

TABLE F.1(i)(a): SURFACE/GROUND WATER MONITORING

(Primary Discharge Point – one table per upstream and downstream location)

Discharge Point Code: <u>SW01Ring</u>

MONITORING POINT CODE: <u>SW01Ring</u>

Parameter		Re (mg	esults /I ^{Note 1})		Sampling method (grab, drift etc.)	Limit of Quantitation	Analysis method / technique
2007	July 24	Aug 01	Sept 05	Oct 24	, ,		
pН	8.0	7.9	8.4	7.6	Composite	2	Electrochemical
Temperature	NA	NA	NA	NA	Composite	N/A	N/A
Electrical Conductivity (@20°C)	NA	NA	NA	2100	Composite	0.5 μmhos/cm	Electrochemical
Suspended Solids	51	130	111	112	Composite	0.5 mg/L	Gravimetric
Ammonia (as N)	1.2	1.8	<0.1	14.2	Composite	0.02 mg/L	Colorimetric
Biochemical Oxygen Demand	NA	NA	NA	106,120 jiro	Composite	0.06 mg/L	Electrochemical
	108	203	165	31 P red	Composite	8 mg/L	Digestion +
Chemical Oxygen Demand				ctionner			Colorimetric
Dissolved Oxygen	NA	NA	NA	WA	Composite	N/A	N/A
Hardness (as CaCo ₃)	NA	NA	NA cot si	ŶNA	Composite	N/A	N/A
Total Nitrogen (as N)	11	15.1	16.1	21	Composite	0.5 mg/L	Digestion + Colorimetric
Nitrite (as N)	NA	NA	NA	NA	Composite	N/A	N/A
Nitrate (as N)	NA	NA	NA	3.92	Composite	0.5 mg/L	Colorimetric
Total Phosphorus (as P)	5.28	8.5	NA	2.21	Composite	0.2 mg/L	Digestion + Colorimetric
Orthophosphate (as P) - unfiltered	NA	NA	5.63	6.36	Composite	0.02 mg/L	Colorimetric
Sulphate (SO ₄)	NA	NA	360.8	160	Composite	30 mg/L	Turbidimetric
Phenols (sum) Note 2 (ug/l)	NA	NA	NA	< 0.10	Composite	0.1 μg/L	GC-MS 2

Note 1: Or other unit as appropriate – please specify. Note 2: USEPA Method 604, AWWA Standard Method 6240, or equivalent.

TABLE F.1(i)(b): SURFACE/GROUND WATER MONITORING (Dangerous Substances)
(Primary Discharge Point - one table per upstream and downstream location)

Discharge Point Code: <u>SWO1 Ring</u>

MONITORING POINT CODE: <u>SW01Ring</u>

Parameter			esults ig/l)		Sampling method (grab, drift etc.)	Limit of Quantitation	Analysis method / technique
2007	July 24	Aug 01	Sept 05	Oct 24	, ,		
Atrazine	NA	NA	NA	< 0.01	Composite	0.96 μg/L	HPLC
Dichloromethane	NA	NA	NA	<1	Composite	1 μg/L	GC-MS 1
Simazine	NA	NA	NA	< 0.01	Composite	0.01 μg/L	HPLC
Toluene	NA	NA	NA	< 0.01	Composite	0.02 μg/L	GC-MS 1
Tributyltin	NA	NA	NA	<0.02	Composite	0.02 μg/L as Sn	GC-MS 1
Xylenes	NA	NA	NA	<0.01	Ó Composite	1 μg/L	GC-MS 1
Arsenic	NA	NA	NA	7 ,005 ited	Composite	0.96 μg/L	ICP-MS
Chromium	NA	NA	NA	<201,000	Composite	20 μg/L	ICP-OES
Copper	NA	NA	NA	×20°	Composite	20 μg/L	ICP-OES
Cyanide	NA	NA	NA 💉	<5	Composite	5 μg/L	Colorimetric
Fluoride	NA	NA	NA GOTT	660	Composite	100 μg/L	ISE
Lead	NA	NA	NA CORT	<20	Composite	20 μg/L	ICP-OES
Nickel	NA	NA	NA S	<20	Composite	20 μg/L	ICP-OES
Zinc	NA	NA	NACTI	<20	Composite	20 μg/L	ICP-OES
Boron	NA	NA	₩ Ã	5.11	Composite	20 μg/L	ICP-OES
Cadmium	NA	NA	NA	<20	Composite	20 μg/L	ICP-OES
Mercury	NA	NA	NA	0.9	Composite	0.2 μg/L	ICP-MS
Selenium	NA	NA	NA	4	Composite	0.74 μg/L	ICP-MS
Barium	NA	NA	NA	<20	Composite	20 μg/L	ICP-OES

TABLE F.1(ii)(a): SURFACE/GROUND WATER MONITORING - (1 table per discharge point upstream and downstream locations) (Secondary Discharge Point)

Discharge Point Code:	SW02Ring	1

MONITORING POINT CODE: <u>SW02Ring</u>

Parameter			esults /I ^{Note 1})		Sampling method (grab, drift etc.)	Limit of Quantitation	Analysis method / technique
2007	July 24	Aug 01	Sept 05	Oct 24			
pН	NA	NA	NA	NA	NA	2	Electrochemical
Temperature	NA	NA	NA	NA	NA	N/A	N/A
Electrical Conductivity (@25°C)	NA	NA	NA	NA	NA	0.5 μmhos/cm	Electrochemical
Suspended Solids	NA	NA	NA	NA	NA dire	0.5 mg/L	Gravimetric
Ammonia (as N)	NA	NA	NA	NA å	A.N.A.	0.02 mg/L	Colorimetric
Biochemical Oxygen Demand	NA	NA	NA	NA &	NA	0.06 mg/L	Electrochemical
· ·	NA	NA	NA	NA TO HE	NA	8 mg/L	Digestion +
Chemical Oxygen Demand				NA priposities			Colorimetric
Dissolved Oxygen	NA	NA	NA	MAger	NA	N/A	N/A
Hardness (as CaCo ₃)	NA	NA	NA	NÃ	NA	N/A	N/A
Total Nitrogen (as N)	NA	NA	NA FORT	NA	NA	0.5 mg/L	Digestion + Colorimetric
Nitrite (as N)	NA	NA	NA S	NA	NA	N/A	N/A
Nitrate (as N)	NA	NA	NASTE	NA	NA	0.5 mg/L	Colorimetric
Total Phosphorus (as P)	NA	NA	₩Å	NA	NA	0.2 mg/L	Digestion + Colorimetric
Orthophosphate (as P) - unfiltered	NA	NA	NA	NA	NA	0.02 mg/L	Colorimetric
Sulphate (SO ₄)	NA	NA	NA	NA	NA	30 mg/L	Turbidimetric
Phenols (sum) Note 2 (ug/l)	NA	NA	NA	NA	NA	0.1 μg/L	GC-MS 2

Note 1: Or other unit as appropriate – please specify.

Note 2: USEPA Method 604, AWWA Standard Method 6240, or equivalent.

TABLE F.1(ii)(b): SURFACE/GROUND WATER MONITORING - (1 table per discharge point upstream and downstream locations) (Secondary Discharge Point)

Discharge Point Code: <u>SW02Ring</u>

MONITORING POINT CODE: <u>SW02Ring</u>

Parameter			sults g/l)		Sampling method (grab, drift etc.)	Limit of Quantitation	Analysis method / technique
2007	July 24	Aug 01	Sept 05	Oct 24	,		
Atrazine	NA	NA	NA	NA	NA	0.96 μg/L	HPLC
Dichloromethane	NA	NA	NA	NA	NA	1 μg/L	GC-MS 1
Simazine	NA	NA	NA	NA	NA	0.01 μg/L	HPLC
Toluene	NA	NA	NA	NA	NA 455	0.02 μg/L	GC-MS 1
Tributyltin	NA	NA	NA	NA	NA die	0.02 μg/L as Sn	GC-MS 1
Xylenes	NA	NA	NA		A.M.A	1 μg/L	GC-MS 1
Arsenic	NA	NA	NA	NA S	ÓNA	0.96 μg/L	ICP-MS
Chromium	NA	NA	NA	NA gostie	NA	20 μg/L	ICP-OES
Copper	NA	NA	NA	NAQUEOR	NA	20 μg/L	ICP-OES
Cyanide	NA	NA	NA	NA CT	NA	5 μg/L	Colorimetric
Fluoride	NA	NA	NA 🥳	NÃ	NA	100 μg/L	ISE
Lead	NA	NA	NA cot it	₽NA	NA	20 μg/L	ICP-OES
Nickel	NA	NA	NA OR	NA	NA	20 μg/L	ICP-OES
Zinc	NA	NA	NA S	NA	NA	20 μg/L	ICP-OES
Boron	NA	NA	NACT	NA	NA	20 μg/L	ICP-OES
Cadmium	NA	NA	₩Ă	NA	NA	20 μg/L	ICP-OES
Mercury	NA	NA	NA	NA	NA	0.2 μg/L	ICP-MS
Selenium	NA	NA	NA	NA	NA	0.74 μg/L	ICP-MS
Barium	NA	NA	NA	NA	NA	20 μg/L	ICP-OES

TABLE F.1(ii)(a): SURFACE/GROUND WATER MONITORING - (1 table per discharge point upstream and downstream locations) (Secondary Discharge Point)

Discharge Point Code:	SW03Ring	1

MONITORING POINT CODE: <u>SW03Ring</u>

Parameter		Re (mg	esults /I ^{Note 1})		Sampling method (grab, drift etc.)	Limit of Quantitation	Analysis method / technique
2007	July 24	Aug 01	Sept 05	Oct 24			
pН	NA	NA	NA	NA	NA	2	Electrochemical
Temperature	NA	NA	NA	NA	NA	N/A	N/A
Electrical Conductivity (@25°C)	NA	NA	NA	NA	NA TISE.	0.5 μmhos/cm	Electrochemical
Suspended Solids	NA	NA	NA	NA	NA die	0.5 mg/L	Gravimetric
Ammonia (as N)	NA	NA	NA	NA 🚴	A.M.A.	0.02 mg/L	Colorimetric
Biochemical Oxygen Demand	NA	NA	NA	NA &	NA	0.06 mg/L	Electrochemical
	NA	NA	NA	NA ROSTIE	NA	8 mg/L	Digestion +
Chemical Oxygen Demand				NA purposition			Colorimetric
Dissolved Oxygen	NA	NA	NA	MAger	NA	N/A	N/A
Hardness (as CaCo ₃)	NA	NA	کی. NA	MA	NA	N/A	N/A
Total Nitrogen (as N)	NA	NA	NA FOLK	NA	NA	0.5 mg/L	Digestion + Colorimetric
Nitrite (as N)	NA	NA	NA 💍	NA	NA	N/A	N/A
Nitrate (as N)	NA	NA	NASI	NA	NA	0.5 mg/L	Colorimetric
Total Phosphorus (as P)	NA	NA	MÃ	NA	NA	0.2 mg/L	Digestion + Colorimetric
Orthophosphate (as P) - unfiltered	NA	NA	NA	NA	NA	0.02 mg/L	Colorimetric
Sulphate (SO ₄)	NA	NA	NA	NA	NA	30 mg/L	Turbidimetric
Phenols (sum) Note 2 (ug/l)	NA	NA	NA	NA	NA	0.1 μg/L	GC-MS 2

Note 1: Or other unit as appropriate – please specify.

Note 2: USEPA Method 604, AWWA Standard Method 6240, or equivalent.

TABLE F.1(ii)(b): SURFACE/GROUND WATER MONITORING - (1 table per discharge point upstream and downstream locations) (Secondary Discharge Point)

Discharge Point Code: <u>SW03Ring</u>

MONITORING POINT CODE: <u>SW03Ring</u>

Parameter			sults g/l)		Sampling method (grab, drift etc.)	Limit of Quantitation	Analysis method / technique
2007	July 24	Aug 01	Sept 05	Oct 24	, ,		
Atrazine	NA	NA	NA	NA	NA	0.96 μg/L	HPLC
Dichloromethane	NA	NA	NA	NA	NA	1 μg/L	GC-MS 1
Simazine	NA	NA	NA	NA	NA _{Cut}	0.01 μg/L	HPLC
Toluene	NA	NA	NA	NA	NA 1150	0.02 μg/L	GC-MS 1
Tributyltin	NA	NA	NA	NA	NA dite	0.02 μg/L as Sn	GC-MS 1
Xylenes	NA	NA	NA	NA 🔉	S.N.A	1 μg/L	GC-MS 1
Arsenic	NA	NA	NA	NA S	όΝΑ	0.96 μg/L	ICP-MS
Chromium	NA	NA	NA	NA NO TEL	NA	20 μg/L	ICP-OES
Copper	NA	NA	NA	NAOTTOOL	NA	20 μg/L	ICP-OES
Cyanide	NA	NA	NA	a PAget	NA	5 μg/L	Colorimetric
Fluoride	NA	NA	NA 🥳	NA	NA	100 μg/L	ISE
Lead	NA	NA	NA GOTTE	NA	NA	20 μg/L	ICP-OES
Nickel	NA	NA	NA COR	NA	NA	20 μg/L	ICP-OES
Zinc	NA	NA	NA 👌	NA	NA	20 μg/L	ICP-OES
Boron	NA	NA	NAST	NA	NA	20 μg/L	ICP-OES
Cadmium	NA	NA	₩Ă	NA	NA	20 μg/L	ICP-OES
Mercury	NA	NA	NA	NA	NA	0.2 μg/L	ICP-MS
Selenium	NA	NA	NA	NA	NA	0.74 μg/L	ICP-MS
Barium	NA	NA	NA	NA	NA	20 μg/L	ICP-OES

TABLE F.1(ii)(a): SURFACE/GROUND WATER MONITORING - (1 table per discharge point upstream and downstream locations) (Secondary Discharge Point)

Discharge Point Code:	SW04Ring	9

MONITORING POINT CODE: <u>SW04Ring</u>

Parameter	Results (mg/l ^{Note 1})				Sampling method (grab, drift etc.)	Limit of Quantitation	Analysis method / technique
2007	July 24	Aug 01	Sept 05	Oct 24			
pН	NA	NA	NA	NA	NA	2	Electrochemical
Temperature	NA	NA	NA	NA	NA	N/A	N/A
Electrical Conductivity (@25°C)	NA	NA	NA	NA	NA TISE.	0.5 μmhos/cm	Electrochemical
Suspended Solids	NA	NA	NA	NA	NA die	0.5 mg/L	Gravimetric
Ammonia (as N)	NA	NA	NA	NA 🚴	A.M.A.	0.02 mg/L	Colorimetric
Biochemical Oxygen Demand	NA	NA	NA	NA &	NA	0.06 mg/L	Electrochemical
	NA	NA	NA	NA ROSTIE	NA	8 mg/L	Digestion +
Chemical Oxygen Demand				NA purposition			Colorimetric
Dissolved Oxygen	NA	NA	NA	MARET	NA	N/A	N/A
Hardness (as CaCo ₃)	NA	NA	کی. NA	MA	NA	N/A	N/A
Total Nitrogen (as N)	NA	NA	NA FOLK	NA	NA	0.5 mg/L	Digestion + Colorimetric
Nitrite (as N)	NA	NA	NA 💍	NA	NA	N/A	N/A
Nitrate (as N)	NA	NA	NASI	NA	NA	0.5 mg/L	Colorimetric
Total Phosphorus (as P)	NA	NA	MÃ	NA	NA	0.2 mg/L	Digestion + Colorimetric
Orthophosphate (as P) - unfiltered	NA	NA	NA	NA	NA	0.02 mg/L	Colorimetric
Sulphate (SO ₄)	NA	NA	NA	NA	NA	30 mg/L	Turbidimetric
Phenols (sum) Note 2 (ug/l)	NA	NA	NA	NA	NA	0.1 μg/L	GC-MS 2

Note 1: Or other unit as appropriate – please specify.

Note 2: USEPA Method 604, AWWA Standard Method 6240, or equivalent.

TABLE F.1(ii)(b): SURFACE/GROUND WATER MONITORING - (1 table per discharge point upstream and downstream locations) (Secondary Discharge Point)

Discharge Point Code: <u>SW04Ring</u>

MONITORING POINT CODE: <u>SW04Ring</u>

Parameter			sults g/l)		Sampling method (grab, drift etc.)	Limit of Quantitation	Analysis method / technique
2007	July 24	Aug 01	Sept 05	Oct 24	, ,		
Atrazine	NA	NA	NA	NA	NA	0.96 μg/L	HPLC
Dichloromethane	NA	NA	NA	NA	NA	1 μg/L	GC-MS 1
Simazine	NA	NA	NA	NA	NA	0.01 μg/L	HPLC
Toluene	NA	NA	NA	NA	NA TISE.	0.02 μg/L	GC-MS 1
Tributyltin	NA	NA	NA	NA	NA die	0.02 μg/L as Sn	GC-MS 1
Xylenes	NA	NA	NA	NA 🔉	S. Nyas	1 μg/L	GC-MS 1
Arsenic	NA	NA	NA	NA S	όΝΑ	0.96 μg/L	ICP-MS
Chromium	NA	NA	NA	NA ROSTIELL	NA	20 μg/L	ICP-OES
Copper	NA	NA	NA	NAQUEOU	NA	20 μg/L	ICP-OES
Cyanide	NA	NA	NA	a PAget	NA	5 μg/L	Colorimetric
Fluoride	NA	NA	NA 🥳	KN,	NA	100 μg/L	ISE
Lead	NA	NA	NA GOTA	₽NA	NA	20 μg/L	ICP-OES
Nickel	NA	NA	NA OR	NA	NA	20 μg/L	ICP-OES
Zinc	NA	NA	NA S	NA	NA	20 μg/L	ICP-OES
Boron	NA	NA	NAST	NA	NA	20 μg/L	ICP-OES
Cadmium	NA	NA	άγΑ	NA	NA	20 μg/L	ICP-OES
Mercury	NA	NA	NA	NA	NA	0.2 μg/L	ICP-MS
Selenium	NA	NA	NA	NA	NA	0.74 μg/L	ICP-MS
Barium	NA	NA	NA	NA	NA	20 μg/L	ICP-OES

TABLE F.1(ii)(a): SURFACE/GROUND WATER MONITORING - (1 table per discharge point upstream and downstream locations) (Secondary Discharge Point)

|--|

MONITORING POINT CODE: <u>SW05Ring</u>

Parameter		Re (mg	esults /I ^{Note 1})		Sampling method (grab, drift etc.)	Limit of Quantitation	Analysis method / technique
2007	July 24	Aug 01	Sept 05	Oct 24			
рН	NA	NA	NA	NA	NA	2	Electrochemical
Temperature	NA	NA	NA	NA	NA	N/A	N/A
Electrical Conductivity (@25°C)	NA	NA	NA	NA	NA TISE.	0.5 μmhos/cm	Electrochemical
Suspended Solids	NA	NA	NA	NA	NA die	0.5 mg/L	Gravimetric
Ammonia (as N)	NA	NA	NA	NA 🚴	A.M.A.	0.02 mg/L	Colorimetric
Biochemical Oxygen Demand	NA	NA	NA	NA &	NA	0.06 mg/L	Electrochemical
	NA	NA	NA	NA ROSTIE	NA	8 mg/L	Digestion +
Chemical Oxygen Demand				NA purposition			Colorimetric
Dissolved Oxygen	NA	NA	NA	MAger	NA	N/A	N/A
Hardness (as CaCo ₃)	NA	NA	کی. NA	MA	NA	N/A	N/A
Total Nitrogen (as N)	NA	NA	NA FOLK	NA	NA	0.5 mg/L	Digestion + Colorimetric
Nitrite (as N)	NA	NA	NA 💍	NA	NA	N/A	N/A
Nitrate (as N)	NA	NA	NASI	NA	NA	0.5 mg/L	Colorimetric
Total Phosphorus (as P)	NA	NA	MÃ	NA	NA	0.2 mg/L	Digestion + Colorimetric
Orthophosphate (as P) - unfiltered	NA	NA	NA	NA	NA	0.02 mg/L	Colorimetric
Sulphate (SO ₄)	NA	NA	NA	NA	NA	30 mg/L	Turbidimetric
Phenols (sum) Note 2 (ug/l)	NA	NA	NA	NA	NA	0.1 μg/L	GC-MS 2

Note 1: Or other unit as appropriate – please specify.

Note 2: USEPA Method 604, AWWA Standard Method 6240, or equivalent.

TABLE F.1(ii)(b): SURFACE/GROUND WATER MONITORING - (1 table per discharge point upstream and downstream locations) (Secondary Discharge Point)

Discharge Point Code: <u>SW05Ring</u>

MONITORING POINT CODE: <u>SW05Ring</u>

Parameter			sults g/l)		Sampling method (grab, drift etc.)	Limit of Quantitation	Analysis method / technique
2007	July 24	Aug 01	Sept 05	Oct 24	, ,		
Atrazine	NA	NA	NA	NA	NA	0.96 μg/L	HPLC
Dichloromethane	NA	NA	NA	NA	NA	1 μg/L	GC-MS 1
Simazine	NA	NA	NA	NA	NA _{Cut}	0.01 μg/L	HPLC
Toluene	NA	NA	NA	NA	NA 1150	0.02 μg/L	GC-MS 1
Tributyltin	NA	NA	NA	NA	NA dite	0.02 μg/L as Sn	GC-MS 1
Xylenes	NA	NA	NA	NA 🔉	S.N.A	1 μg/L	GC-MS 1
Arsenic	NA	NA	NA	NA S	όΝΑ	0.96 μg/L	ICP-MS
Chromium	NA	NA	NA	NA NO TELL	NA	20 μg/L	ICP-OES
Copper	NA	NA	NA	NAOTTOOL	NA	20 μg/L	ICP-OES
Cyanide	NA	NA	NA	a PAget	NA	5 μg/L	Colorimetric
Fluoride	NA	NA	NA 🥳	NA	NA	100 μg/L	ISE
Lead	NA	NA	NA GOTTE	NA	NA	20 μg/L	ICP-OES
Nickel	NA	NA	NA COR	NA	NA	20 μg/L	ICP-OES
Zinc	NA	NA	NA 👌	NA	NA	20 μg/L	ICP-OES
Boron	NA	NA	NAST	NA	NA	20 μg/L	ICP-OES
Cadmium	NA	NA	₩Ă	NA	NA	20 μg/L	ICP-OES
Mercury	NA	NA	NA	NA	NA	0.2 μg/L	ICP-MS
Selenium	NA	NA	NA	NA	NA	0.74 μg/L	ICP-MS
Barium	NA	NA	NA	NA	NA	20 μg/L	ICP-OES

TABLE F.1(ii)(a): SURFACE/GROUND WATER MONITORING - (1 table per discharge point upstream and downstream locations) (Secondary Discharge Point)

Discharge Point Code:	SW06Ring	7

MONITORING POINT CODE: <u>SW06Ring</u>

Parameter		Re (mg	esults /I ^{Note 1})		Sampling method (grab, drift etc.)	Limit of Quantitation	Analysis method / technique
2007	July 24	Aug 01	Sept 05	Oct 24			
рН	NA	NA	NA	NA	NA	2	Electrochemical
Temperature	NA	NA	NA	NA	NA	N/A	N/A
Electrical Conductivity (@25°C)	NA	NA	NA	NA	NA TISE.	0.5 μmhos/cm	Electrochemical
Suspended Solids	NA	NA	NA	NA	NA die	0.5 mg/L	Gravimetric
Ammonia (as N)	NA	NA	NA	NA 🚴	A.M.A.	0.02 mg/L	Colorimetric
Biochemical Oxygen Demand	NA	NA	NA	NA &	NA	0.06 mg/L	Electrochemical
	NA	NA	NA	NA ROSTIE	NA	8 mg/L	Digestion +
Chemical Oxygen Demand				NA purposition			Colorimetric
Dissolved Oxygen	NA	NA	NA	MAger	NA	N/A	N/A
Hardness (as CaCo ₃)	NA	NA	کی. NA	MA	NA	N/A	N/A
Total Nitrogen (as N)	NA	NA	NA FOLK	NA	NA	0.5 mg/L	Digestion + Colorimetric
Nitrite (as N)	NA	NA	NA 💍	NA	NA	N/A	N/A
Nitrate (as N)	NA	NA	NASI	NA	NA	0.5 mg/L	Colorimetric
Total Phosphorus (as P)	NA	NA	MÃ	NA	NA	0.2 mg/L	Digestion + Colorimetric
Orthophosphate (as P) - unfiltered	NA	NA	NA	NA	NA	0.02 mg/L	Colorimetric
Sulphate (SO ₄)	NA	NA	NA	NA	NA	30 mg/L	Turbidimetric
Phenols (sum) Note 2 (ug/l)	NA	NA	NA	NA	NA	0.1 μg/L	GC-MS 2

Note 1: Or other unit as appropriate – please specify.

Note 2: USEPA Method 604, AWWA Standard Method 6240, or equivalent.

TABLE F.1(ii)(b): SURFACE/GROUND WATER MONITORING - (1 table per discharge point upstream and downstream locations) (Secondary Discharge Point)

Discharge Point Code: <u>SW06Ring</u>

MONITORING POINT CODE: <u>SW06Ring</u>

Parameter			sults g/l)		Sampling method (grab, drift etc.)	Limit of Quantitation	Analysis method / technique
2007	July 24	Aug 01	Sept 05	Oct 24	, ,		
Atrazine	NA	NA	NA	NA	NA	0.96 μg/L	HPLC
Dichloromethane	NA	NA	NA	NA	NA	1 μg/L	GC-MS 1
Simazine	NA	NA	NA	NA	NA	0.01 μg/L	HPLC
Toluene	NA	NA	NA	NA	NA TISE.	0.02 μg/L	GC-MS 1
Tributyltin	NA	NA	NA	NA	NA die	0.02 μg/L as Sn	GC-MS 1
Xylenes	NA	NA	NA	NA 🔉	S. Nyas	1 μg/L	GC-MS 1
Arsenic	NA	NA	NA	NA S	όΝΑ	0.96 μg/L	ICP-MS
Chromium	NA	NA	NA	NA ROSTIELL	NA	20 μg/L	ICP-OES
Copper	NA	NA	NA	NAQUEOU	NA	20 μg/L	ICP-OES
Cyanide	NA	NA	NA	a PAget	NA	5 μg/L	Colorimetric
Fluoride	NA	NA	NA 🥳	KN,	NA	100 μg/L	ISE
Lead	NA	NA	NA GOTA	₽NA	NA	20 μg/L	ICP-OES
Nickel	NA	NA	NA OR	NA	NA	20 μg/L	ICP-OES
Zinc	NA	NA	NA S	NA	NA	20 μg/L	ICP-OES
Boron	NA	NA	NAST	NA	NA	20 μg/L	ICP-OES
Cadmium	NA	NA	άγΑ	NA	NA	20 μg/L	ICP-OES
Mercury	NA	NA	NA	NA	NA	0.2 μg/L	ICP-MS
Selenium	NA	NA	NA	NA	NA	0.74 μg/L	ICP-MS
Barium	NA	NA	NA	NA	NA	20 μg/L	ICP-OES

TABLE F.1(ii)(a): SURFACE/GROUND WATER MONITORING - (1 table per discharge point upstream and downstream locations) (Secondary Discharge Point)

Discharge Point Code: <u>SW07Ring</u>

MONITORING POINT CODE: <u>SW07Ring</u>

Parameter			esults /I ^{Note 1})		Sampling method (grab, drift etc.)	Limit of Quantitation	Analysis method / technique
2007	July 24	Aug 01	Sept 05	Oct 24			
pН	NA	NA	NA	NA	NA	2	Electrochemical
Temperature	NA	NA	NA	NA	NA 💸	N/A	N/A
Electrical Conductivity (@25°C)	NA	NA	NA	NA	NA N	0.5 μmhos/cm	Electrochemical
Suspended Solids	NA	NA	NA	NA 💰) N/A	0.5 mg/L	Gravimetric
Ammonia (as N)	NA	NA	NA	NA &	NA	0.02 mg/L	Colorimetric
Biochemical Oxygen Demand	NA	NA	NA	NA 170 ite	NA	0.06 mg/L	Electrochemical
· -	NA	NA	NA	NAPORECT	NA	8 mg/L	Digestion +
Chemical Oxygen Demand				NAPT red		_	Colorimetric
Dissolved Oxygen	NA	NA	NA 🥳	NA NA	NA	N/A	N/A
Hardness (as CaCo₃)	NA	NA	NA cot si	ŶNA	NA	N/A	N/A
Total Nitrogen (as N)	NA	NA	NA COOP	NA	NA	0.5 mg/L	Digestion + Colorimetric
Nitrite (as N)	NA	NA	NAER	NA	NA	N/A	N/A
Nitrate (as N)	NA	NA	MA	NA	NA	0.5 mg/L	Colorimetric
Total Phosphorus (as P)	NA	NA	NA	NA	NA	0.2 mg/L	Digestion + Colorimetric
Orthophosphate (as P) - unfiltered	NA	NA	NA	NA	NA	0.02 mg/L	Colorimetric
Sulphate (SO ₄)	NA	NA	NA	NA	NA	30 mg/L	Turbidimetric
Phenols (sum) Note 2 (ug/l)	NA	NA	NA	NA	NA	0.1 μg/L	GC-MS 2

Note 1: Or other unit as appropriate – please specify. Note 2: USEPA Method 604, AWWA Standard Method 6240, or equivalent.

TABLE F.1(ii)(b): SURFACE/GROUND WATER MONITORING - (1 table per discharge point upstream and downstream locations) (Secondary Discharge Point)

Discharge Point Code: <u>SW07Ring</u>

MONITORING POINT CODE: <u>SW07Ring</u>

Parameter			sults g/l)		Sampling method (grab, drift etc.)	Limit of Quantitation	Analysis method / technique
2007	July 24	Aug 01	Sept 05	Oct 24	, ,		
Atrazine	NA	NA	NA	NA	NA	0.96 μg/L	HPLC
Dichloromethane	NA	NA	NA	NA	NA	1 μg/L	GC-MS 1
Simazine	NA	NA	NA	NA	NA	0.01 μg/L	HPLC
Toluene	NA	NA	NA	NA	NA TISE.	0.02 μg/L	GC-MS 1
Tributyltin	NA	NA	NA	NA	NA die	0.02 μg/L as Sn	GC-MS 1
Xylenes	NA	NA	NA	NA 🔉	S. Nyas	1 μg/L	GC-MS 1
Arsenic	NA	NA	NA	NA S	όΝΑ	0.96 μg/L	ICP-MS
Chromium	NA	NA	NA	NA ROSTIELL	NA	20 μg/L	ICP-OES
Copper	NA	NA	NA	NAQUEOU	NA	20 μg/L	ICP-OES
Cyanide	NA	NA	NA	a PAget	NA	5 μg/L	Colorimetric
Fluoride	NA	NA	NA 🥳	KN,	NA	100 μg/L	ISE
Lead	NA	NA	NA GOTA	₽NA	NA	20 μg/L	ICP-OES
Nickel	NA	NA	NA OR	NA	NA	20 μg/L	ICP-OES
Zinc	NA	NA	NA S	NA	NA	20 μg/L	ICP-OES
Boron	NA	NA	NAST	NA	NA	20 μg/L	ICP-OES
Cadmium	NA	NA	άγΑ	NA	NA	20 μg/L	ICP-OES
Mercury	NA	NA	NA	NA	NA	0.2 μg/L	ICP-MS
Selenium	NA	NA	NA	NA	NA	0.74 μg/L	ICP-MS
Barium	NA	NA	NA	NA	NA	20 μg/L	ICP-OES

Section G:

Table G

No programme of improvements at this time Will be addressed in the Preliminary Report G4- STORM OVERFLOWS. EIS to ABP March '08 As for Crossshaven As for Crossshaven As for Crossshaven necessary at this time. No interim proposals mitigation measures As for Crossshaven As for Crossshaven As for Crosshaven No further works MITIGATION identified as are proposed G3-IMPACT . No interim Nutrient removal is being proposed in the been upgraded to 13,000 p.e. secondary Blarney (Blarney/Tower) has recently removal. No additional upgrading is currently designated a sensitive area. REGULATIONS (SI NO. 258 OF 1998) Nutrient removal is not envisaged as EIS and PR as the discharge area is discharge is not to sensitive waters G2- COMPLIANCE WITH QUALITY STANDARDS FOR PHOSPHOROUS treatment and includes nutrient proposed at this time. As for Crossshaven As for Crossshaven As for Crosshaven **e**s Yes Yes will be lodged with An Bord Pleanála at end 2007. The Preliminary Report be lodged with DEHLG in February is also at an advanced stage and will relevant environmental and drainage 2/ Water Services Investment programme capacity to 45,000 p.e. secondary treatment. EIS and PR will address Lower Harbour SS. Will be served by the Lower Harbour Wastewater Freatment Plant the EIS for which G1- COMPLIANCE WITH COUNCIL DIRECTIVES Forms an element of the proposed 2008. The reports will address all First phase proposal is to increase No information to hand on this. . As for Crosshaven As for Crossshaven As for Crosshaven these issues 1/ Assessment of Needs issues. **Attachment included** AGGLOMERATION Carrigtwohill Ringaskiddy Carrigaline Crosshaven Blarney Cobh

2007-2009

Kevin Sugrue, Senior Engineer, Water Services

Re: Licensing of Discharges

Ballincollig- Donald Cronin is preparing a response in respect of Ballincollig

Blarney- The Council has recently completed an upgrade of the wastewater treatment plant at Blarney to 13,000 p.e. and has no immediate proposals to increase that capacity. The plant at Blarney has two independent secondary treatment processes with the wastewater load being split approximately evenly between them. One stream has biological nutrient removal and the other has chemical nutrient removal. There is concern in relation to the nutrient levels in the river catchments north of Cork City and the Council has obtained approval to carry out a drainage study, the City Environs (CASP) Drainage Study which is being funded under the Water Services Investment Programme 2007-2009. This study will consider the drainage options available for the catchment concerned having regard to existing and planned developments in the area. The Council is currently preparing a brief for the appointment of a consultant and expects to advertise the appointment in early January 2008 and to have the study completed in approx six months thereafter.

Crosshaven- wastewater from Crosshaven is collected and discharged to the Carrigaline network and ultimately discharges to Cork Harbour via the 'IDA' sewer at the Dognose Bank. The discharge is currently untreated but will ultimately be served by the Lower Harbour SS, the treatment plant for which will be located at Carrigaline East and the effluent from this plant will discharge through the 'IDA' outfall to the harbour. The EIS for the wastewater treatment plant is being prepared and the Council hopes to lodge it with ABP by end of 2007. Nutrient removal is not being proposed as the receiving waters are not designated sensitive. The PR for the Scheme will be lodged with the DEHLG shortly after the EIS is sent to ABP but approval to the PR will not issue until after the EIS is approved, say mid 2008. The Lower Harbour SS is being funded under the Water Services Investment Programme 2007-2009 and the scheme is expected to be fully operational before the end of 2012.

 ${f Cobh}$ – this also forms part of the proposed Lower Harbour SS and a significant upgrading of the Cobh sewer network is envisaged with the wastewater being pumped across the harbour to the proposed WWTP at Carrigaline East . The current estimated design capacity required is 80,000 p.e.

Carrigaline- this wastewater is discharged (see Crosshaven) via the 'IDA' sewer and will ultimately form part of the Lower Harbour SS

Ringaskiddy – as for Carrigaline

Carrigtwohill –EIS under preparation and expected to be submitted to ABP March '08. The anticipated first phase will be to increase treatment capacity to 45000 p.e. from the current 8500 p.e. . The works are to be funded under the Serviced land Initiative . Nutrient removal will be included in the EIS and the PR as the Lee Estuary/Lough Mahon Area is currently designated a sensitive water.

The above information should be read in conjunction with earlier correspondence on the same matter and in particular you should cross-reference with response received from Duane O'Brien in relation to Carrigtwohill.

Regards,

R O'Farrell, Senior Engineer, WSIP Projects Office 4th December 2007

Cork County

Water Services Investment Programme 2007 - 2009

	1. (1970年) April 18 世 日本・2287年 1. (1970年 1. 1970年 1. 19	THERE IS NO THE REPORTED	CA SECTION OF THE COMPANY OF THE COM		,4. S
h. i	Schemes at Construction W/S	Est. Cost		w/s	Est. Cost
Ŷ					
	Cork North		Cork South		
1	Mitchelstown Sewerage Scheme		10 14 10 10 mm 19 10 10 10 10 10 10 10 10 10 10 10 10 10		22,248,000
	(Nutrient Removal)	221,000	Ballincollig Sewerage Scheme (Upgrade) (G) Cork Lower Harbour Sewerage Scheme (excl. Crosshave)		1 1 11
			Cork Lower Harbour Sewerage Scheme (excl. Crosshaver	n SS)S	73,542,000
ji,	Cork South		Shannagany/ Garryvoe/ Ballycotton Sewerage Scheme	∥ S	3,780,000
1	- 1	3,049,000	Youghal Sewerage Scheme	S	14,420,000
1	Ballyvourney/ Ballymakeery Sewerage Scheme			!	111
1	Cobh/ Midleton/ Carrigtwohill Water Supply Scheme	10,135,000			
ŀ	Cork Lower Harbour Sewerage Scheme	4	Cork West		
1	(Crosshaven SS) (G)	4,850,000	Ballydehob Sewerage Scheme	S	683,000
1	Cork Water Strategy Study (G)	941,000	Bantry Water Supply Scheme	W	14,935,000
1	Kinsale Sewerage Scheme	20,000,000	Clonakilty Sewerage Scheme (Plant Capacity Increase)	s	3,677,000
1	Midleton Sewerage Scheme (Infiltration Reduction) (G) S	2,078,000	STORE THE HILL BY A REPORT OF BUILDING A REAL PROPERTY AND A STORE		
j.		41,274,000	Courtmacsherry, Timoleague Sewerage Scheme	S	2,472,000
Ì	Schemes to start 2007		Dunmanway Regional Water Supply Scheme Stage 1	W	12,669,000
71					164,629,000
ŧ	Cork North		Serviced Land Initiative		9
1	North Cork Grouped DBO Wastewater Treatment				
:	in	E 150 000			
	Plant (Buttevant: Doneraile & Kilbrin)	5,150,000	Cork North		
			Ballyclough Water Supply Scheme	W	139,000
	Cork West		Ballyhooley improvement Scheme	W/S	139,000
	Skibbereen Sewerage Scheme	20,000,000	Broghil-Rathgoggin Sewerage Scheme	S	406,000
		25,150,000			
	Schemes to start 2008	500	Bweeng Water Suppty Scheme	W	115,000
		ion of	Churchtown Sewerage Scheme (incl. Water)	W/S	543,000
	Cork North	accla which	Clondulane Sewage Treatment Plant	S	417,000
	Mallow/ Ballyviniter Regional Water Supply Scheme (H) W	8,652,000	Freemount Sewerage Scheme	· s	150,000
	Mallow Sewerage Scheme (H)	<0 5,408,000 €	Pike Road Sewerage Scheme (incl. Water)	w/s	2,080,000
		6063			
	Cork South	ુ હર્	Rathcomac Sewerage Scheme (incl. Water)	W/S	555,000
		948,000	Spa Glen Sewerage Scheme	S	736,000
	Ballincollig Sewerage Scheme (Nutrient Removal) (G)		Uplands Fermoy Sewerage Scheme (incl. Water)	w/s	1,174,000
	Ballingeary Sewerage Scheme	1,296,000	Watergrasshill Water Supply Scheme (incl. Sewerage) (G)	W/S	4,151,000
	Bandon Sewerage Scheme Stage 2	14,729,000	valeiglassiiii valei supplyscrie iie (ii.e. sewerage) (c)	11/0	4,151,000
	City Environs (CASP) Strategic Study (G)	153,000			ı
	Cloghroe Sewerage Scheme (Upgrade)	683,000	Cork South	•	
	Coachford Water Supply Scheme	1,318,000	Ballincollig Sewerage Scheme (Barry's Rd Foul and	,	
	Garrettstown Sewerage Scheme S	2,153,000	Storm Drainage) (G)	S	1,164,000
•	Inniscarra Water Treatment Plant Extension Phase 1 W	2,678,000	医二甲甲腺醇甲腺腺醇醇 医皮肤 医二甲二甲二甲二甲二甲二甲二甲二甲二甲二甲二甲二甲二甲二甲二甲二甲二甲二甲二甲	W/S	100
	Little Island Sewerage Scheme (G)	2,200,000	Belgooley, Water Supply Scheme (incl. Sewerage)	VV/3	2,913,000
		1	Blamey Water Supply Scheme (Ext. to Station Rd) (G)	W	416,000
			Carrigtwohill Sewerage Scheme (Treatment and	,	1
	Cork West	•	Storm Drain) (G)	S	7,632,000
		7,148,000	Castlematyr Wastewater Treatment Plant Extension	S	1,200,000
	Dunmanway Sewerage Scheme S	2,153,000	Crookstown Sewerage Scheme (incl. Water)	W/S	1,200,000
	Leap/ Baltimore Water Supply Scheme	6,365,000	Dripsey Water Supply Scheme (incl. Sewerage)	W/S	1,112,000
	Schull Water Supply Scheme W	5,253,000	Giounthane Sewerage Scheme (G)	S	1,576,000
		61,137,000	Innishannon Sewerage Scheme	S	277,000
	Schemes to start 2009		Innishannon Wastewater Treatment Plant	S	
					694,000
	Cork North		Kenypike Sewerage Scheme	S	832,000
	Banteer/Dromahane Regional Water Supply Scheme : W	1,576,000	Kerrypike Water Supply Scheme	W :	416,000
	Conna Regional Water Supply Scheme Extension W	2,627,000	Killeagh Wastewater Treatment Plant Extension	s	1,200,000
	Cork NE Water Supply Scheme	4,326,000		w/s	485,000
	Cork NW Regional Water Supply Scheme	6,046,000	Killeagh Water Supply Scheme (includes Sewerage)		
			Killeens Sewerage Scheme	S	420,000
	Millstreet Wastewater Treatment Plant (Upgrade)	1,628,000	Kilnagleary Sewerage Scheme	S	694,000
			Midleton Wastewater Treatment Plant Extension	S	4,050,000
					, ,,

Cork County contd.

Water Services Investment Programme 2007 - 2009

1	Make a salah s	W/S	Est! Cost	Tright San Andrews	W/S	Est. Cost
1						
	Mogeely, Castlemartyr & Ladysbridge Water Supply Schel	ne W	2,566,000	Cork South		
	North Cobh Sewerage Scheme (G)	s	3,193,000	Carrigtwohill Sewerage Scheme (G)	s:	20,000,000
	Riverstick Water Supply Scheme (incl. Sewerage)	w/s	525,000	Cork Sludge Management (G)	, i s	14,420,000
	Rochestown Water Supply Scheme	W,	2,700,000	Cork Water Supply Scheme (Storage Mount Emla		
	Saleen Sewerage Scheme	s	1,051,000	Ballincollig & Chetwind) (G)		8,500,000
	Youghal Water Supply Scheme	W	2,300,000	Inniscarra Water Treatment Plant (Sludge Treatmen	t)(G)W	5,356,000
				Macroom Sewerage Scheme	1. S	5,150,000
	Cork West			Minane Bridge Water Supply Scheme	W.	1,421,000
	Castletownshend Sewerage Scheme	S	1,576,000			
			50,797,000	Cork West		
	Rural Towns & Villages Initiative			Bantry Regional Water Supply Scheme (Distribution) Will	9,455,000
,			-	Cape Clear Water Supply Scheme	II W	1,679,000
	Cork North	•		Castletownbere Regional Water Supply Scheme	W.	8,405,000 2,500,000
	Buttevant Sewerage Scheme (Collection System)	\$	2,446,000	Glengarriff Sewerage Scheme	S	
	Doneraile Sewerage Scheme (Collection System)	S	1,738,000	Roscarberry/Owenahincha Sewerage Scheme	I I S	1,576,000
				Skibbereen Regional Water Supply Scheme Stage	4), I W	7,880,000
	Cork South			440		95,646,000
	Innishannon (Ballinadee/ Ballinspittle/ Garrettstown)					
	Water Supply Scheme	W	6,726,000	Water Conservation Allocation		12,206,000
			DUI	Asset Management Study		300,000
	Cork West		original fr	Asset Management Study		300,000
	Ballylicky Sewerage Scheme	S	2,153,000 3,462,000	South Western River Basin District (WFD) Proje		9.400.000
	Baltimore Sewerage Scheme	. 5	\$5,202,000	South Western River Basin District (WPD) Project		3,700,000
	Castletownbere Sewerage Scheme		3,523,000			
	Schull Sewerage Scheme	. S	24,950,000	Programme Total	48	5.489.000
	Schemes to Advance through Planning	ansen	24,550,000			
	Scriemes to Advance through Flamming	Co				
	Cork North					
	Mitchelstown North Galtees Water Supply Scheme	w	3,152,000			
	Mitchelstown Sewerage Scheme	S	3,000,000			
	Newmarket Sewerage Scheme	S	3,152,000			
	The state of the s	_	, -			
	A Company of the Comp			- 1. The control of t	t de la graffit	990 () HELL 14 (45 E 1 5) A E

¹ This project is being led by Cork County Council on behalf of other authorities in the River Basin District

⁽H) Refers to a Hub as designated in the National Spatial Strategy

⁽G) Refers to a Gateway as designated in the National Spatial Strategy

ringaskiddy annex 2.doc

Ringaskiddy : ANNEX 2: Check List For Regulation 16 Compliance

Regulation 16 of the Waste Water Discharge (Authorisation) Regulations, 2007 (S.I. No. 684 of 2007) sets out the information which must, in all cases, accompany a discharge licence application. In order to ensure that the application fully complies with the legal requirements of Regulation 16 of the 2007 Regulations, all applicants should complete the following. In each case, refer to the attachment number(s) of your application which contain(s) the information requested in the appropriate sub-article.

Checked by Applicant	>	>	>	>	>	>
Attachment Number	81	B 7	B2	89	C,D	D2
Regulation 16(1) In the case of an application for a waste water discharge licence, the application shall -	give the name, address, telefax number (if any) and telephone number of the applicant (and, if different, of the operator of any treatment plant concerned) and the address to which correspondence relating to the application should be sent and, if the operator is a body corporate, the address of its registered office of principal office,	give the name of the water services authority in whose functional area the relevant waste water discharge takes place or is to take place, if different flow that of the applicant,	give the location or postal address (including where appropriate, the name of the townland or townlands) and the National Grid reference of the location of the waste water treatment plant and/or the waste water discharge point or points to which the application relates,	state the population equivalent of the agglomeration to which the application relates,	specify the content and extent of the waste water discharge, the level of treatment provided, if any, and the flow and type of discharge,	give details of the receiving water body, including its protected area status, if any, and details of any sensitive areas or protected areas or both in the vicinity of the discharge point or points likely to be affected by the discharge concerned, and for discharges to ground provide details of groundwater protection schemes in place for the receiving water body and all associated hydrogeological and geological assessments related to the receiving water environment in the vicinity of the discharge.
Regu	(a)	(p)	(၁)	(g	(e)	E

Regu		Attachment Number
(9)	identify monitoring and sampling points and indicate proposed arrangements for the monitoring of discharges and, if Regulation 17 does not apply, provide details of the likely environmental consequences of any such discharges,	E3
(h)	in the case of an existing waste water treatment plant, specify the sampling data pertaining to the discharge based on the samples taken in the 12 months preceding the making of the application,	E4
Ξ	describe the existing or proposed measures, including emergency procedures, to prevent unintended waste water discharges and to minimise the impact on the environment of any such discharges,	G
(j)	give particulars of the nearest downstream drinking water abstraction point or points to the discharge point or points,	Not applicable
E	give details, and an assessment of the effects, of any existing or proposed emissions on the environment, including any environmental medium others, than those into which the emissions are, or are to be made, and of proposed measures to prevent or eliminate or, where that is not practicable, to limit any pollution caused in such discharges, or the proposed emissions or the environment, including any environmental medium others, than those into which the emissions of the environment, including any environmental medium others, than those into which the emissions of the environment, including any environmental medium others, than those into which the emissions of the environment, including any environmental medium others, than those into which the emissions of the environment, including any environmental medium others, than those into which the emissions of the environment, including any environmental medium others, than those into which the emissions of the environment, including any environmental medium others, and the environmental medium others are also and the environmental medium others.	_
3	give detail of compliance with relevant monitoring requirements and treatment standards contained in any applicable Council Directives of Regulations,	G
(m)	give details of any work necessary to meet relevant effluent discharge standards and a timeframe and schedule for such work.	G3
3	Any other information as may be stipulated by the Agency.	×

_		
•	4	

(a) a copy of the notice of intention to make an application given pursuant to Regulation 9, where appropriate, a copy of the notice given to a relevant water services authority under applicable	Reg	Regulation 16(3) Without prejudice to Regulation 16 (1) and (2), an application for a licence shall be accompanied by -	Attachment Number	Checked by the
application given pursuant to Regulation 9, given to a relevant water services authority under given to a relevant water services authority under ports and supporting documentation as are necessary and sampling are undertaken or are to be undertaken, the provisions of Regulations 38 and 39. Copies of it and of all accompanying documents and in hardcopy or in an electronic or other format as the 2 copies of the sale application and associated in of the Agency. Versions of application (PDF files) provided. 1. Vant waste water works is or has been subject to the seessment) Regulations 1989 to 2001, in addition to 65, an application in respect of the relevant discharge is impact statement and approval in accordance with tent and may be submitted in an electronic or other in the approval of the relevant discharge is an and may be submitted in an electronic or other in the sees and the contains of the contains of the contains of the sees and and may be submitted in an electronic or other sees are the contains of the contains				applicant <
given to a relevant water services authority under ports and supporting documentation as are necessary and sampling are undertaken or are to be undertaken, the provisions of Regulations 38 and 39. Copies of It and of all accompanying documents and in hardcopy or in an electronic or other format as the 2 copies of the said application and associated nt of the Agency. O versions of application (PDF files) provided. It want waste water works is or has been subject to the seessment) Regulations 1989 to 2001, in addition to 6, an application in respect of the relevant discharge tral impact statement and approval in accordance with light and may be submitted in an electronic or other	(a)		88	>
the provisions of the said application and associated in hardcopy or in the Agency. To the Agency. O versions of application (PDF files) provided. It waste water works is or has been subject to the seessment) Regulations 1989 to 2001, in addition to 6, an application in respect of the relevant discharge ital impact statement and approval in accordance with lent and may be submitted in an electronic or other	(p)	appropriate, a copy of the notice given to a relevant water services tion 13,	Not applicable	>
and sampling are undertaken or are to be undertaken, the provisions of Regulations 38 and 39. copies of it and of all accompanying documents and in hardcopy or in an electronic or other format as the 2 copies of the said application and associated int of the Agency. Versions of application (PDF files) provided. vant waste water works is or has been subject to the ssessment) Regulations 1989 to 2001, in addition to 6, an application in respect of the relevant discharge that impact statement and approval in accordance with lent and may be submitted in an electronic or other	(2)	reports and		
the provisions of Regulations 38 and 39. Copies of it and of all accompanying documents and in hardcopy or in an electronic or other format as in hardcopy or in an electronic or other format as the 2 copies of the said application and associated of the Agency. Versions of application (PDF files) provided. Seessment) Regulations 1989 to 2001, in addition to 6, an application in respect of the relevant discharge ital impact statement and approval in accordance with lent and may be submitted in an electronic or other		(i) the point or points, including storm water overflows, from which a discharge or discharges take place or are to take place, and $\frac{c}{c}$	B5	>
the provisions of Regulations 38 and 39. copies of it and of all accompanying documents and in hardcopy or in a electronic or other format as the 2 copies of the sale application and associated nt of the Agency. Versions of application (PDF files) provided. Vant waste water works is or has been subject to the ssessment) Regulations 1989 to 2001, in addition to 6, an application in respect of the relevant discharge ital impact statement and approval in accordance with lent and may be submitted in an electronic or other		and sampling are undertaken or	E3	>
Regulation 16(4) An original application shall be accompanied by 2_copies of it and of all accompanying documents and particulars as required under Regulation 16(3) in hardcopy or in an electronic or other format as specified by the Agency. Regulation 16(5) For the purpose of paragraph (4), all or part of the 2 copies of the said application and associated documents and particulars may, with the agreement of the Agency. Signed original 5 is a papilication provided or 2 CD versions of application (PDF files) provided. I CD of geo-referenced digital files provided. Regulation 17 Where a treatment plant associated with the relevant waste water works is or has been subject to the European Communities (Environmental Impact Assessment) Regulations 1989 to 2001, in addition to compliance with the requirements of Regulation 16, an application in respect of the said development and may be submitted in an electronic or other format specified by the Agency EIA provided if applicable. 2 CD versions of EIS, as PDF files, provided.	(p)	the provisions of Regulations 38	B9(ii)	>
particulars: as required under Regulation 16(3) in hardcopy or the angle electronic or other format as specified by the Agency. Regulation 16(5) For the purpose of paragraph (4), all or part of the 2 copies of the said application and associated documents and particulars may, with the agreement of the Agency. Signed original. 1 CD of geo-referenced digital files provided. 2 hardcopies of application provided or 2 CD versions of application (PDF files) provided. 2 hardcopies of application provided or 2 CD versions of application (PDF files) provided. Regulation 17 Where a treatment associated with the relevant waste water works is or has been subject to the Unique a treatment plant associated with the relevant waste water works is or has been subject to the European Communities (Environmental Impact Assessment) Regulations 1989 to 2001, in addition to compliance with the requirements of Regulation 16, an application in respect of the relevant discharge shall be accompanied by a copy of an environmental impact statement and approval in accordance with the Act of 2000 in respect of the said development and may be submitted in an electronic or other format specified by the Agency Ela provided if applicable 2 hardcopies of EIS provided if applicable. 2 cD versions of EIS, as PDF files, provided.	Reg An o			
Fegulation 16(5) For the purpose of paragraph (4), all or part of the 2 copies of the said application and associated documents and particulars may, with the agreement of the Agency. Signed original. Signed original. LOD of geo-referenced digital files provided. Regulation 17 Where a treatment plant associated with the relevant waste water works is or has been subject to the European Communities (Environmental Impact Assessment) Regulation in respect of the relevant discharge shall be accompanied by a copy of an environmental impact statement and approval in accordance with the Act of 2000 in respect of the said development and may be submitted in an electronic or other format specified by the Agency EIA provided if applicable 2 CD versions of EIS, as PDF files, provided.	parti	iculars_as_required_under_Regulation_16(3)_in_hardcopy_or_fin_an_electronic_or_other_format_as ified by the Agency.		Fig. 1. Annual control of the contro
ror the purpose of paragraph (4), all or part of the 2 copies of the sale, application and associated documents and particulars may, with the agreement of the Agency. Signed original. Signed original. I CD of geo-referenced digital files provided. Regulation 17 Where a treatment plant associated with the relevant waste water works is or has been subject to the European Communities (Environmental Impact Assessment) Regulations 1989 to 2001, in addition to compliance with the requirements of Regulation 16, an application in respect of the relevant discharge shall be accompanied by a copy of an environmental impact statement and approval in accordance with the Act of 2000 in respect of the said development and may be submitted in an electronic or other format specified by the Agency EIA provided if applicable 2 CD versions of EIS provided.	Reg	of the second se	le le	
Signed original. 2 hardcopies of application provided or 2 CD versions of application (PDF files) provided. 2 hardcopies of application provided or 2 CD versions of application (PDF files) provided. (Compliance a treatment plant associated with the relevant waste water works is or has been subject to the European Communities (Environmental Impact Assessment) Regulations 1989 to 2001, in addition to compliance with the requirements of Regulation 16, an application in respect of the relevant discharge shall be accompanied by a copy of an environmental impact statement and approval in accordance with the Act of 2000 in respect of the said development and may be submitted in an electronic or other format specified by the Agency EIA provided if applicable 2 hardcopies of EIS provided if applicable. 2 CD versions of EIS, as PDF files, provided.	docu	the 2 copies of the saighapplication and nt of the Agency.		
2 hardcopies of application provided or 2 CD versions of application (PDF files) provided. 1 CD of geo-referenced digital files provided. 1 CD of geo-referenced digital files provided. 2 CD of geo-referenced digital files provided 2 CD of geo-referenced digital files provided 2 CD of geo-referenced digital files provided 2 CD versions of ElS, as PDF files, provided 2 CD versions of EIS, as PDF files, provided 2 CD versions of EIS, as PDF files, provided 3 CD versions of EIS, as PDF files, provided 3 CD versions of EIS, as PDF files, provided 3 CD versions of EIS, as PDF files, provided 3 CD versions of EIS, as PDF files, provided 3 CD versions of EIS, as PDF files, provided 3 CD versions of EIS, as PDF files, provided 3 CD versions of EIS, as PDF files, provided 3 CD versions of EIS, as PDF files, provided 3 CD versions of EIS, as PDF files, provided 3 CD versions of EIS, as PDF files, provided 3 CD versions of EIS, as PDF files, provided 3 CD versions of EIS, as PDF files, provided 3 CD versions of EIS, as PDF files, provided 3 CD versions of EIS, as PDF files, provided 4 CD versions of EIS, as PDF files, provided 4 CD versions of EIS, as PDF files, provided 4 CD versions of EIS, as PDF files, provided 4 CD versions of EIS, as PDF files, provided 4 CD versions of EIS, as PDF files, provided 4 CD versions of EIS, as PDF files, as PDF files, provided 4 CD versions of EIS, as PDF files, provided 4 CD versions of EIS, as PDF files, provided 4 CD versions of EIS, as PDF files, provided 4 CD versions of EIS, as PDF files, provided 4 CD versions of EIS, as PDF files, provided 4 CD versions of EIS, as PDF files, provided 4 CD versions of EIS, as PDF files, provided 4 CD versions of EIS versions		Signed original.		>
Regulation 17 Regulation 17 Where a treatment plant associated with the relevant waste water works is or has been subject to the European Communities (Environmental Impact Assessment) Regulations 1989 to 2001, in addition to compliance with the requirements of Regulation 16, an application in respect of the relevant discharge shall be accompanied by a copy of an environmental impact statement and approval in accordance with the Act of 2000 in respect of the said development and may be submitted in an electronic or other format specified by the Agency EIA provided if applicable 2 CD versions of EIS provided if fles, provided.		Versions of application (PDF files)		>
Where a treatment plant associated with the relevant waste water works is or has been subject to the European Communities (Environmental Impact Assessment) Regulations 1989 to 2001, in addition to compliance with the requirements of Regulation 16, an application in respect of the relevant discharge shall be accompanied by a copy of an environmental impact statement and approval in accordance with the Act of 2000 in respect of the said development and may be submitted in an electronic or other format specified by the Agency EIA provided if applicable 2 Chardcopies of EIS provided if applicable.		1 CD of geo-referenced digital files provided.		>
European Communities (Environmental Impact Assessment) Regulations 1989 to 2001, in addition to compliance with the requirements of Regulation 16, an application in respect of the relevant discharge shall be accompanied by a copy of an environmental impact statement and approval in accordance with the Act of 2000 in respect of the said development and may be submitted in an electronic or other format specified by the Agency EIA provided if applicable 2 hardcopies of EIS provided if applicable.	Whe	unation 1.7 Fre a treatment plant associated with the relevant waste water works is or has been subject to the		>
shall be accompanied by a copy of an environmental impact statement and approval in accordance with the Act of 2000 in respect of the said development and may be submitted in an electronic or other format specified by the Agency EIA provided if applicable 2 hardcopies of EIS provided if applicable.	Euro	ssessment)		
the Act of 2000 in respect of the said development and may be submitted in an electronic or other format specified by the Agency EIA provided if applicable 2 hardcopies of EIS provided if applicable 2 CD versions of EIS, as PDF files, provided.	shall	phanee with the requirements of regardent 10, an application in respect of the relevant discharge. I be accompanied by a copy of an environmental impact statement and approval in accordance with		: #
format specified by the Agency EIA provided if applicable 2 hardcopies of EIS provided if applicable. 2 CD versions of EIS, as PDF files, provided.	the	Act of 2000 in respect of the said development and may be submitted in an electronic or other		1,1
EIA provided if applicable 2 hardcopies of EIS provided if applicable. 2 CD versions of EIS, as PDF files, provided.	torm	hat specified by the Agency		
2 CD versions of EIS, as PDF files, provided.		EIA provided if applicable		>
2 CD versions of EIS, as PDF files, provided.		2 hardcopies of EIS provided if applicable.		>
		2 CD versions of EIS, as PDF files, provided.		>

Consent of copyright owner required for any other use

SECTION H: DECLARATION

Declaration

I hereby make application for a waste water discharge licence/revised licence, pursuant to the provisions of the Waste Water Discharge (Authorisation) Regulations, 2007 (S.I. No. 684 of 2007).

I certify that the information given in this application is truthful, accurate and complete.

I give consent to the EPA to copy this application for its own use and to make it available for inspection and copying by the public, both in the form of paper files available for inspection at EPA and local authority offices, and via the EPA's website.

This consent relates to this application itself and to any further information or submission, whether provided by me as Applicant, any person acting on the Applicant's behalf, or any other person.

Signed by : Mallela Houled (on behalf of the organisation)

Date : 14th Decot

Print signature name:

Position in organisation:

Page 24 of 25

Consent of copyright owner required for any other use