


This report has been cleared for Submission  
to the Board by Dr Karen Creed  
Signed: Palmer Date: 4/3/10

		<b>OFFICE OF CLIMATE, LICENSING &amp; RESOURCE USE.</b>	
<b>INSPECTORS REPORT ON A WASTE WATER DISCHARGE LICENCE APPLICATION</b>			
<b>To:</b>	DIRECTORS		
<b>From:</b>	Gavin Clabby	<b>Environmental Programme</b>	<b>Licensing</b>
<b>Date:</b>	26 <sup>th</sup> February 2010		
<b>RE:</b>	Application for a Waste Water Discharge Licence from Cork County Council for the Schull Agglomeration, Reg. No. D0295-01		

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Application Details	
Schedule of discharge licensed:	Discharges from agglomerations with a population equivalent of 1,001 to 2,000
Licence application received:	27 <sup>th</sup> February 2009
Notices under Regulation 18(3)(b) issued:	18 <sup>th</sup> May 2009
Information under Regulation 18(3)(b) received:	30 <sup>th</sup> June 2009
Site notice check:	20 <sup>th</sup> March 2009
Site visit:	20 <sup>th</sup> March 2009 / 17 <sup>th</sup> November 2009
Submission(s) Received:	None

## 1. Background

### 1.1 Agglomeration

The Schull Agglomeration is approximately 1 (one) km<sup>2</sup> in size; of which approximately 0.6 km<sup>2</sup> constitutes the urban development of Schull town (see appendix). Schull is a coastal harbour town on the Mizen Peninsula, about 24 km west of Skibbereen. It has a permanent population of approximately 600, which increases at least threefold during the summer.

Schull Harbour is a sheltered bay of about 2km<sup>2</sup> in area and is used for both commercial and leisure activities. A lobster holding area is located at the eastern side of the harbour, while a fish plant operates by the pier on the western side. A sailing school also operates off this pier. The entire area is used for bathing during the summer months, in particular off the strands at the east of the town and at the pier.

## **1.2 Waste Water Collection System**

The town's collection system is a combined network and was originally constructed approximately 50 years ago. With the exception of the sewer on the Pier Road, which discharges directly to the harbour, the network collects and transports waste water to a septic tank located between the Ballydehob Road and the shoreline (See appendix for location). This tank is the agglomeration's existing wastewater (primary) treatment plant. The majority of the network operates by gravity with some developments and institutions connecting to it via pumps. However, Cork County Council, which is the Water Services Authority (WSA) for the Schull agglomeration, is not responsible for the operation and maintenance of these pumps.

The Department of the Environment, Heritage and Local Government (DoEHLG), under the Water Services Investment Programme 2007-2009, approved the upgrading of the Schull Sewerage Scheme. The original collection system has just now been upgraded (with commissioning at the end of 2009). As part of the upgrade, the WSA installed a new dedicated foul sewer pump station at Ballydehob Road. The new system has a reduced combined sewer component (65%). Any new sections of sewer that have been added to the network are dedicated foul sewers with separate storm water drainage. The existing combined sewers have been upgraded or remediated.

The only other flows additional to the domestic component are from a number of institutional and commercial properties. The only industrial component comes from the fish factory on the Pier Road. The process effluent from the fish factory is comprised of washings from the various fish preparation activities. Calculations based on the data submitted by the applicant, show that the Pier Road discharge, which comprises of the fish plant and a small number of houses, has a population equivalence of seven (7).

## **1.3 Waste Water Treatment**

The existing treatment plant was built in the mid 1960's and is a primary settling tank (or septic tank). When the works were constructed the population of Schull was less than 500. The design of the works allowed for some increase in the town population and an allowance for port related industry. This extra capacity, however, is subsumed by the population growth in the town during the summer. Referencing the EPA's publication 'Primary, Secondary and Tertiary Treatment' (1997) and the National Urban Waste Water Study (NUWWS) the applicant has assumed that the septic tank is working at average efficiency, estimating the solids reduction at 60%, the BOD reduction at 35% and the bacterial reduction at 50%. However, given the current over capacity at the plant, average efficiency is not likely. (With tourist season influents at three times the capacity of the septic tank, it is reasonable to assume that, during the summertime, a large proportion of the sewage is entering the harbour untreated. This assumption is supported by the supplied analytical data for summertime effluent.)

A new wastewater treatment plant (WWTP) is proposed under a design, build and operate (DBO) contract. The applicant has stated that the new WWTP will provide preliminary and secondary treatment, or their equivalent, to achieve a final effluent in compliance with Urban Waste Water Treatment (UWWT) Regulations. Although the application refers to Sequence Batch Reactors as the recommended design, no finalised design details were prescribed. Tenders for the DBO contract have been assessed by the WSA and the selected proposal is currently with the DoEHLG for approval. The proposed construction completion date is set for June 2011.

## **1.4 Population Equivalent – Agglomeration**

Located in a tourist area, the Schull agglomeration has significant seasonal variations in population equivalence (PE). Data compiled in 2000 and 2005 indicate a winter PE of 597 and a summer PE of 1,680. The applicant has estimated a maximum PE of up to and including 2,000, for the lifetime of this licence.

## **1.5 Design Population Equivalent - WWTP**

The current treatment works were designed for the smaller PE associated with the agglomeration's winter population. The septic tank volume is 230 m<sup>3</sup>, equating to a design PE of approximately 1,100. According to the applicant, the works 'cannot cater with present influx of summer holidaymakers, therefore, the discharge standard for BOD and SS cannot be achieved on occasions'. Strictly speaking there is no applicable 'discharge standard' for coastal discharge agglomerations, of less than 10,000 PE, in the regulations.

It is stated in the application that the proposed new WWTP will have secondary treatment and will cater for a population equivalence of 3,000. This should provide more than sufficient treatment capacity during the lifetime of the recommended licence, to produce an effluent that will meet the standards set for BOD and SS in Part One of the Second Schedule of Urban Waste Water Treatment Regulations, 2001. A review of the licence may be required to accommodate a loading of over 2,000 PE as the application is for 1,001 to 2,000 P.E.

## **1.6 Site Visit**

A site inspection was undertaken as part of the site notice check on March 20th 2009. On the 17<sup>th</sup> November 2009, a meeting was held with Declan Groarke, Ian O'Mahony and Orla O'Brien of Cork County Council at their offices in Skibbereen, Co. Cork, to discuss and clarify issues arising from this licence application assessment.

## **2. Discharges to Waters**

### **2.1 Existing Discharges.**

The primary discharge, SW01 Schull, is at the outfall from the septic tank and discharges into the harbour below the low tide level.

There is one secondary discharge in the agglomeration, SW02, which is located south of the town pier, taking wastewater from the sewer along the Pier Road, whereupon it is discharged, untreated, into the harbour below the low tide level. This discharge is principally composed of process water (washings) from the town's fish factory, as well as some domestic wastewater. The WSA are in discussions with the operators of the Fish Factory to connect to the new network. According to the WSA this connection may involve pumping and the issue may take some time to resolve, and the RL specifies a date of 31<sup>st</sup> March 2012 for completion of the works.

There is one storm water overflow (SWO) in the network, namely SW03, which is a manhole overflow pipe at the current WWTP (septic tank). Storm water from this overflow discharges into the harbour through the same pipe as the primary discharge, SW01.

The upgraded scheme now includes a new pump station at the Ballydehob Road, which conveys foul water only and, therefore, does not require SWO provision. However, the pump station does provide emergency overflow containment before discharge to the adjacent stream flowing into the harbour.

Currently, the primary treated effluent is sampled via a manhole at the discharge pipe, by means of manual grab sampling. The final effluent flow is not measured. The monitoring type and frequency is not specified in the Urban Waste Water Treatment Regulations 2001 for agglomerations of less than 2,000 PE. However, sampling data submitted indicate that six samples were taken in the calendar year prior to the application (2008).

## **2.2 Proposed Discharges.**

Upon completion of the WWTP, the primary discharge point will be relocated, via a two kilometre rising main running south along the Colla Road, to open coastal water at Schull Point (SW01p Schull). The network's single SWO will remain at its current location (i.e. SW03).

This single SWO on the network is located prior to the primary discharge, as described in Section 2.1 above. However, storm water/emergency overflow measures will be improved upon completion of the proposed WWTP. The proposed plant's inlet pumping station will have dual pumping, screening and overflow to the existing septic tank, which will have over two hours storm water containment at three times the dry weather flow (3DWF), before discharging through the upgraded network's storm water overflow discharge point, SWO3. This containment is greater than that required in table 3 of the DoEHLG's 'Procedures and Criteria in Relation to Storm Water Overflows'.

It should be noted that this application is for a coastal agglomeration of less than 10,000 PE. Therefore, the discharge standards for BOD and SS (and COD) listed in Part One of the Second Schedule of the UWWT Regulations do not apply, and that furthermore, only Appropriate Treatment (and not Secondary Treatment) is required, which is defined in the regulations as 'any process and/or disposal system which, after discharge, allows the receiving waters to meet the relevant quality objectives and the relevant provisions of the Urban Waste Water Directive and of other Community Directives'. Therefore, any conditions in the licence regarding treatment requirements and Emission Limit Values (ELVs) will be set with reference to the receiving water regulations, namely the European Communities Environmental Objectives (Surface Waters) Regulations (S.I. 272 of 2009) and the Shellfish Regulations (S.I. 268 of 2006), as well as accepted best practice.

### 3. Receiving Waters and Impact

The following table summarises the main considerations in relation to Schull Harbour, Roaringwater Bay of the primary discharge.

**Table 3.1 Receiving Waters Summary**

Characteristic	Classification	Comment
Receiving water name and type	(Existing) Schull Harbour, Roaringwater Bay, West Cork – Coastal Discharge	Sheltered harbour opening to exposed coastal bay.
	(Proposed) Long Island Channel, Roaringwater Bay, West Cork – Coastal Discharge	Sheltered sound with strong ebb tidal movements opening to exposed coastal bay.
Resource use	Fisheries Port	-
Amenity value	Sailing	-
Applicable Regulations	Urban Waste Water Treatment Regulations 2001 (as amended) S.I. 254 of 2001 and S.I. 440 of 2004, SI 48 of 2010	-
	EC Environmental Objectives (Surface Water) Regulations 2009 S.I. 272 of 2009	-
	EC (Quality of Shellfish Waters) Regulations 2006 (as amended) S.I. 268 of 2006 and S.I. 55 of 2009	Shellfish Waters approx 2km from existing and proposed primary discharge.
	EC Regulation 854/2004 and SI 335 of 2006	Shellfish Flesh Classification - Classified 'A' for Mussels (all beds) in 2009
Designations	Shellfish Waters	2.5 km from Existing Discharge 2 km from Proposed Discharge
	Roaringwater Bay and Islands, SAC/NHA 000101	-
WFD monitoring station	SW_140_0000	Grid Reference: 92124 E 25752 N
WFD Overall Status	Unassigned	Status year: 2008
WFD Objective	To be determined	Status year: 2008
WFD Risk Category	1a	At significant risk of failing objectives (WWTP). Status year: 2008
WFD protected areas	Roaringwater Bay and Islands, SAC/NHA 000101	-
Any other important issues	Bathing Water Quality Regulations (No designations in the wider area, but harbour used as swimming and boating amenity.)	-

### 3.1 Quality of Receiving Waters

Roaringwater Bay, in its entirety, is an SAC and NHA. The inward portion of the bay, just east of Schull Harbour, has Shellfish Water designation (See appendix). The Draft River Basin Management Plan (DRBMP) published by the South Western River Basin District (SWRBD) classifies the bay as a coastal water body. According to DRBMP, the overall status of the bay (as defined by the Water Framework Directive) is yet to be assigned. The DRBMP, consequently, does not determine objectives for the restoration or protection of the water body. The risk status is, however, set at '1(a)', which suggests that the area is at risk of failing to achieve or maintain good status by 2015 (with WWTP's indicated as the sole pressure). The report also has WFD status for both Dissolved Inorganic Nitrogen and Molybdate Reactive Phosphorous (Orthophosphate) classified as 'high' (The most favourable quality class, i.e. Unpolluted Status).

The Characterisation Report and the Pollution Reduction Programme (PRP) for Roaringwater Bay (drafted in accordance with Shellfish Water Regulations in 2009) both state that the licensed aquaculture sites were classified 'A' for mussels in accordance with EC Regulation 854/2004. Sites classified as 'A' are those areas from which live bivalve molluscs may be collected and directly placed on the market for human consumption without purification treatment for the purposes of meeting required health standards. This classification indicates that there is no bacteriological contamination in the general bay area.

An ecological assessment of the more proximate waters of the harbour itself, as part of a WWTP impact study commissioned by the WSA, indicates that, despite the minimal treatment of the effluent discharge and the poor tidal flushing characteristics, the harbour remains free of gross pollution.

Table 3.1 (page 7) compares the relevant coastal water limits of the Surface Water Regulations with data for the WSA Monitoring Point on eastern side of the harbour, aSW1d (1km from the discharge point, see appendix) and the EPA monitoring point, to the east of Long Island and outside the mouth of the harbour (approximately 2.5 km from the current discharge point and 1.25 km from the proposed discharge point, see appendix).

The WSA data is based on a single sample taken in late October 2008. This sample was tested for a number of parameters but the only result relevant to the Surface Water Regulations is Dissolved Oxygen. Although this result is in compliance with the Surface Water Regulations, its usefulness is limited considering the sample was not taken during the high BOD loads of the tourist season, which is also, for that matter, the algal growth season. The WSA shall assess the requirement for additional monitoring, as provided for in *Schedule B: Monitoring and Condition 4.17* of the Recommended Licence.

The EPA RW040 data yields more useful information. It is based on two samples taken on a single date in September 2009 and shows that, during the peak pressure months of August and September that the receiving waters are within the limits for all three compliance parameters.

The table also shows the overall results for Roaringwater Bay (Based on the averaged data of 44 samples taken between August and September from nine separate locations around the bay.) Shane O'Boyle of the EPA's Office of Assessment has, based on this data and for the purposes of this report, assigned these waters with a quality status of 'Unpolluted'. Also included in the table, for indicative purposes, is the parameter of Orthophosphate (as P), which is used in conjunction with DIN, DO and Chlorophyll in the EPA's Trophic Status Assessment Scheme (TSAS).

**Table 3.1 Surface Water Regulations Compliance**

Parameter	SW Regulations 2009	EPA Monitoring		WSA Monitoring Point aSW1d (2008)
		Monitoring Point RW040 (2009)	Overall Results for Bay (2009)	
Dissolved Oxygen saturation (95%ile)	> 80% lower limit < 120% upper limit	98.8 %	106 %	113.2%
DIN (95%ile)	≤ 0.17 mg P/ l <sup>Note 1</sup>	0.126 mg N/ l	0.154 mg N/ l	n/a
Chlorophyll (90%ile)	<10 µg/l	1.2 µg/l	5.9 µg/l	n/a
Orthophosphate (median)	(<40 µg/l) <sup>Note 2</sup>	7 µg/l P	7 µg/l P	n/a

Note 1: High status limit for DIN at full salinity (34.5 p.s.u.)

Note 2: No limit set for orthophosphate in Surface Water Regulations 2009 for Coastal Waters, but limit of 40 µg/l P used for TSAS.

According to the Roaringwater Bay Pollution Reduction Programme (PRP), 'the results of monitoring undertaken for the purposes of the Shellfish Waters Directive (2006/113/EC) and Schedules 2 and 4 of the Quality of Shellfish Waters Regulations (S.I. No. 268 of 2006) as amended do not indicate any water quality issues within / in the vicinity of this shellfish area'.

In summary, the wider receiving waters of Roaringwater Bay are compliant with the relevant regulations namely the European Communities Environmental Objectives (Surface Waters) Regulations (S.I. 272 of 2009) and the Shellfish Regulations (S.I. 268 of 2006) as amended. The current status of Roaringwater Bay is 'Unpolluted'. However, WWTP's are regarded by the SWRBD as the sole pressure putting the WFD objectives for the bay at risk.

For the more proximate waters of Schull Harbour, there is insufficient monitoring data to determine the water quality. However, bacteriological quality of the harbour may be inferred via modelling submitted by the applicant (See section 3.2 below).

### 3.2 Impact of Discharge on Receiving Waters

As part of this application, the WSA submitted modelling for the bacteriological impact of secondary treated discharges, both at the current discharge location (SW01 Schull) and the proposed discharge location at Schull Point (SW01p Schull).

#### Faecal Coliforms

##### Current Scenario – SW01 Schull

The applicant submitted modelling for a discharge at the current location. The modelling indicates poor dispersion characteristics in the inner harbour. The impact of the current discharge on the shellfish waters cannot be established from this modelling. However, as discussed in Section 3.1 above, there is no microbiological shellfish flesh contamination in the general bay area.

## Proposed WWTP – SW01p Schull

The proposed outfall in the open water at Schull Point (see appendix) was selected to avoid the unsatisfactory dispersion characteristics found in Schull Harbour. On the ebb (outward) tide, and in calm conditions, the plume is carried way from the harbour and the shellfish water boundary and effectively dispersed. On the spring flood tide the plume moves in a north easterly direction into the mouth of the harbour rather than in an easterly direction towards the shellfish water boundary. The modelling suggests, therefore, that in calm conditions, there would be no appreciable levels of bacteria at the boundary of the Shellfish Waters. The modelling indicates some bacteriological impact of the lobster holding area in the harbour. However, there are no regulations governing the quality of lobster production waters, and this impact is not considered as a cause for concern.

The modelling further indicates that reducing the discharge concentration to  $1 \times 10^5$  fc/100mls drastically reduces the plume's size, and suggests that, on the flood tide, bacterial concentrations would be negligible at the Shellfish Water boundary. The Characterisation Report for Roaringwater Bay states that none of the WWTP's in the WFD catchment is affecting the Shellfish Waters. This is reflected in the Roaringwater Bay PRP, which does not require any further measures for WWTP's. However, these reports do not take into account any proposed discharges. Therefore, Condition 4.17 of the RL requires the WSA to further assess the proposed discharge's impacts on the Shellfish Waters.

### Dissolved Inorganic Nitrogen

As the WSA have not decided on the final design parameters of the proposed WWTP, it is not yet known what the predicted discharge concentrations will be for the major constituent parameters of DIN (i.e. Ammonia and Nitrate). However, a 35 mg/l total for DIN is achievable with basic secondary treatment. Modelling calculations submitted with the application, based on the design maximum discharge rate of 48 litres/second, suggest the effluent will be diluted 80 to 450 times simply from rising from the sea bed to the surface. Therefore, given worse case dilution factor of 80, the DIN concentration (including the background level of 0.02 mg/l N) at the water surface directly above the primary discharge diffuser would be 0.46 mg/l N. The modelling further indicates that dye patches dilute at least tenfold within 200 metres of the discharge point, suggesting that within short distances, the concentration will fall well below the Surface Water Regulation's high status limit (for full seawater) of 0.17 mg/l N.

It should be noted that a well performing nitrifying WWTP should have Ammonia discharge concentrations of less than 5 mg/l as N. (A nitrifying plant is preferable as it reduces the Ammonia component of DIN by converting it to Nitrate. Un-ionised Ammonia, which accounts for about 2% of Total Ammonia in seawater, is toxic to fish.) An Ammonia ELV of 10 mg/l as N has been set to allow for some flexibility in WWTP nitrification performance, along with a Nitrate ELV of 35 mg/l as N. However, the total DIN shall also be limited by a DIN ELV of 35 mg/l as N.

### Biological Oxygen Demand (BOD)

It is worth noting that the foreshore licence issued for the proposed outfall, limits the BOD<sub>5</sub> load to 15 kg O<sub>2</sub>/day. Calculations show that extrapolating from the current peak summertime PE (1680) to the maximum PE allowable under this licence (2000), the peak summertime discharge (BOD<sub>5</sub> limit of 25 mg/l) would equate to a BOD<sub>5</sub> load of 16.25 kg O<sub>2</sub>/day. Furthermore, at a worst-case dilution factor of 80, the BOD<sub>5</sub> concentration at the water surface, immediately above the discharge pipe will be 0.31 mg O<sub>2</sub>/l. It can be safely assumed that BOD<sub>5</sub> will be trace within a short distance of the discharge. In any event, there is no BOD<sub>5</sub> limit for coastal waters set in the Surface Water Regulations 2009. Therefore, the recommended licence, which supersedes any environmental conditions from the foreshore licence, shall not impose any daily BOD<sub>5</sub> load limit.

In line with the UWWT Regulations, as outlined above, *Schedule A.1* does not set Emission Limit Values (ELVs) for the existing Primary Waste Water Discharge and *Schedule B.1* does not require monitoring for the existing Primary Waste Water Discharge. However Condition 3.1 and 3.3 of the RL specifies that the WSA shall take measures as are necessary to ensure



that no deterioration in the quality of the receiving waters shall occur as a result of the discharge. These conditions are considered appropriate to ensure, that prior to the completion of the proposed WWTP (with its discharge to open coastal waters), the current septic tank is properly maintained and providing basic primary treatment, thereby reducing the BOD load in the confined, low tidal movement waters of the harbour.

#### Conclusion

With the increased level of wastewater treatment and more beneficial discharge location, the proposed discharge is very likely to improve the quality of Schull harbour water and further improve protection of the Shellfish Waters and any WFD objectives for Roaringwater Bay.

### **4. Monitoring**

An improved level of monitoring may be beneficial for the harbour for the remainder of the current WWTP's lifetime, as well as for the proposed WWTP and discharge. This may not only be helpful in ensuring the WFD objective of 'no deterioration, but also helpful in protecting the current good quality of the Shellfish Waters. Monitoring data from the WFD or Shellfish Directive Programmes may be sufficient for this purpose. The WSA shall assess the requirement for additional monitoring, as provided for in *Schedule B: Monitoring and Condition 4.17* of the Recommended Licence.

*Schedule B.1 Monitoring of the Primary Waste Water Discharge* requires monthly monitoring for several parameters in the first year of the operation of the new WWTP and, providing the first year's results are compliant, a reduction to quarterly sampling in subsequent years. Parameters, at all monitoring frequencies, will include cBOD, COD and Suspended Solids (SS). Flow, pH and Visual Inspection are also included. *Schedule A.1* sets ELVs for pH, cBOD, COD, SS, TON, Ammonia and DIN that reflect what is currently achievable with secondary treatment.

### **5. Combined Approach**

The Waste Water Discharge Authorisation Regulations, 2007 (S.I. No. 684 of 2007) specify that a 'combined approach' in relation to licensing of waste water works must be taken, whereby the emission limits for the discharge are established on the basis of the stricter of either or both, the limits and controls required under the Urban Waste Water Treatment Regulations (S.I. No. 254 of 2001) and the limits determined under statute or Directive for the purpose of achieving the environmental objectives established for surface waters, groundwater or protected areas for the water body into which the discharge is made. The RL as drafted gives effect to the principle of the Combined Approach as defined in S.I. No. 684 of 2007.

## 6. Programme of Improvements

A proposed and approved wastewater treatment plant (WWTP) is to be constructed under a design, build and operate (DBO) contract. The new WWTP will provide preliminary and secondary treatment or their equivalent, to achieve a final effluent in compliance with Urban Waste Water Treatment Regulations, 2001. (S.I. No. 254/2001). Tenders for the DBO contract have been assessed by the WSA and the selected proposal is currently with the Department of the Environment, Heritage and Local Government for approval. The proposed construction completion date is set for June 2011. Upon consultation with DoEHLG Inspector, the Recommended Licence specifies that the WWTP and ancillary works (including the cessation of Secondary Discharge SW02) shall be complete by 31<sup>st</sup> March 2012.

## 7. Compliance with EU Directives and Related Directives

In considering the application, the requirements of Regulation 6(2) of the Waste Water (Discharge) Authorisation, Regulations, 2007 (S.I. No. 684 of 2007) were regarded, notably:

### Drinking Water Abstraction Regulations [S.I. 294 of 1989]

Schull agglomeration discharges to coastal waters. Therefore, there are no water abstraction points and the above regulations do not apply.

### Sensitive Waters

Schull Harbour is not designated as a Sensitive Water under the UWWT Regulations (Amendment) 2004. Therefore, the UWWT Regulations, 2001 limits for Total Phosphorous and Total Nitrogen limits do not apply.

### Water Framework Directive [2000/60/EC]

The RL, as drafted, transposes the requirements of the Water Framework Directive. In particular, *Condition 3. Discharges*, provides conditions regulating discharges to water, while *Schedule A: Discharges*, specifies limit values for those substances contained within the wastewater discharge. Those limits specified in the RL are determined with the aim of protecting the good water quality status.

### Urban Waste Water Treatment Directive [91/271/EEC]

The proposed WWTP, as required by Annex 1.D of the Urban Waste Water Treatment Directive, is required to provide appropriate treatment for the agglomeration. Schull complies with the requirements of the Urban Waste Water Treatment Directive, in terms of the level of treatment provided. The RL, as drafted, has regard to the requirements of the Urban Waste Water Treatment Directive. In particular, *Condition 3 Discharges* provides conditions regulating the discharges to waters, and *Schedule A: Discharges*, specifies the limit values for those substances contained within the wastewater discharge.

### Bathing Water Directive [2006/7/EC]

Neither Schull Harbour nor the Long Island Channel is designated as a Bathing Water, although there is some bathing activity in the vicinity of the existing and proposed discharges. However, no further measures are required to comply with the above directive.

### EC Freshwater Fish Directive [2006/44/EC]

Schull agglomeration discharges to coastal waters. Therefore, the above regulations do not apply.

### Shellfish Waters Directive [2006/113/EC]

Although neither Schull Harbour nor the Long Island Channel, are within designated Shellfish Waters, the nearest designated area is approximately two kilometres away from both existing and proposed discharges. The Roaringwater Bay Characterisation Report and PRP state that

the WWTP in the area are not impacting on the designated waters, and that no WWTP measures to protect these waters are required. However, the Condition 4.17 of the RL requires further assessment of the waters with regard to the Shellfish Regulations.

Dangerous Substances Directive [2006/11/EC]

The applicant has provided sampling results for the 19 dangerous substances in the primary and decommissioned secondary discharge for the purposes of the licence application. The measured concentrations are not considered significant. The agglomeration is effectively domestic in nature with a limited contribution from some commercial activities. The initial screen for the application is therefore considered sufficient and the agglomeration is compliant with the Dangerous Substances Directive.

Birds Directive [79/409/EEC] & Habitats Directive [92/43/EEC]

The Schull agglomeration directly discharges into an SAC site designated under the E.U. Habitats Directive. As part of the Part Planning Approval Process for the Schull Sewerage Scheme the WSA carried out an appropriate assessment, taking into account the requirements of Article 6 of the Habitats Directive. This assessment states that the reduced load from the proposed secondary treatment plant discharging to open coastal waters with improved dispersion characteristics will further protect the unpolluted status of Roaringwater Bay.

Environmental Liabilities Directive [2004/35/EC]

Condition 7.2 of the RD satisfies the requirements of the Environmental Liabilities Directive, in particular, those requirements outlined in Article 3(1) and Annex III of said directive.

## **Cross-office Liaison**

As previously referred to in Section 3.1 above, I consulted with Shane O'Boyle of the EPA's Office of Assessment in relation to the quality of the receiving waters. Advice and guidance issued by the Technical Working Group (TWG) was followed in my assessment of this application. Advice and guidance issued by the TWG is prepared through a detailed cross-office co-operative process, with the concerns of all sides taken into account. The Board of the Agency has endorsed the advice and guidance issued by the TWG for use by licensing Inspectors in the assessment of wastewater discharge licence applications.

## **Submissions**

No submissions were received in relation to this application.

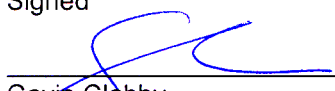
## **Charges**

The RL sets an annual charge for the agglomeration at € 2,316 and is reflective of the monitoring and enforcement regime being proposed for the agglomeration.

## **Recommendation**

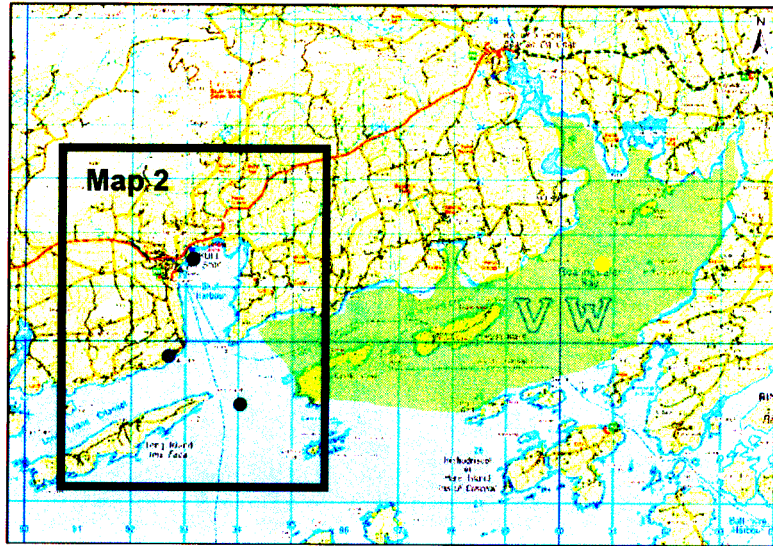
I recommend that a Final Licence be issued subject to the conditions and for the reasons as set out in the attached Recommended Licence.

Signed

  
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Gayin Clabby  
Office of Climate, Licensing and Resource Use

# Appendix

## Map 1: Schull Harbour and Roaringwater Bay



- Schull primary discharge and SWO (SW01 and SW03) ●
- Proposed Schull primary discharge (SW01p) ●
- Current WSA Monitoring Point (aSW-1d) ●
- Shellfish Regulations Monitoring Point ●
- EPA Monitoring Point RW040 ●
- Agglomeration Boundary ———
- Site of Waste Water Treatment Plant (Existing and Proposed) ○
- Shellfish Water ■
- Ebb Tide (South Westerly, Strong) ←
- Flood Tide (North Easterly, Weak) →

## Map 2: Schull Harbour Detail

