



# Waste Water Discharge Authorisation

## Application Form

<b>EPA Ref. N<sup>o</sup>:</b> <i>(Office use only)</i>	<input type="text"/>
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### **Environmental Protection Agency**

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## ABOUT THIS APPLICATION FORM

This Application Form is for the purpose of making an application for a Waste Water Discharge Authorisation under the European Union (Waste Water Discharge) Regulations 2007 to 2020, or for the review of an existing Waste Water Discharge authorisation. It should be completed in accordance with the Guidance Document which is available on [www.epa.ie](http://www.epa.ie).

A valid application for a Waste Water Discharge Authorisation must contain the information prescribed in the European Union (Waste Water Discharge) Regulations 2007 to 2020. Regulations 16 and 24 set out the statutory information requirements for a Waste Water Discharge licence (WWDL) and a Certificate of Authorisation (CoA) application respectively.

Neither this Application Form nor the guidance document purport to be and should not be considered a legal interpretation of the provisions and requirements of the European Union (Waste Water Discharge) Regulations 2007 to 2020.

**While every effort has been made to ensure the accuracy of the material contained in this Application Form, the EPA assumes no responsibility and gives no guarantees, undertakings or warranties concerning the accuracy, completeness or up-to-date nature of the information provided herein and does not accept any liability whatsoever arising from any errors or omissions.**

Should there be any contradiction between the information requirements set out in this Application Form and any clarifying explanation contained in the Guidance Note, then the requirements in this Application Form should take precedence. The requirements of the Regulations shall take precedence over any considerations mentioned in this Application Form, the guidance document or on the website.

The Application Form comprises sections A-E as follows:

Section A:	Non-Technical Summary
Section B:	General
Section C:	Discharges & Monitoring
Section D:	Impact Assessment
Section E:	Declaration

## SECTION A: NON-TECHNICAL SUMMARY

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

### A.1 Non-Technical Summary

This part of the Application Form collects a Non-Technical Summary which identifies all environmental impacts of significance associated with the discharge of waste water from the waste water works.

#### A1.1 Supporting documents

Complete the following table and submit the relevant supporting document as Attachment A1 in accordance with the guidance.

**Table 1** - Non-Technical Summary Document Name

Document type	Document name
Non-technical summary	<b>Attachment A.1.1:</b> Non-Technical Summary, May 2023 <b>Attachment A.1.2:</b> Map 1 - Area of Interest

## SECTION B: GENERAL

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

### B.1 Application Details

This part of the form collects contact details, the type of application, and the location and size of the agglomeration.

#### B.1.1 Application Type

This part of the form collects details of the type of application being made.

**Table 2 – Application Type**

		Tick as appropriate (✓)
A	Application for the review of an existing authorisation	✓
B	New application for a licence in respect of which the Agency has previously granted a certificate	
C	New application for a licence for discharges (>500 P.E)	
D	New application for a certificate for discharges (< 500 P.E.)	

If A or B are applicable, provide the following information:

Current EPA Authorisation Register Number(s)	D0034-01
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If A is applicable, provide the following information:

<p>Grounds for review on which the application is being made:</p>
<p>Following an examination of the Greater Dublin Area Agglomeration Waste Water Discharge Licence (WWDL) in June 2021, the EPA concluded that the WWDL does not satisfy the environmental requirements of the Waste Water Discharge Authorisation (WWDA) Regulations 2007, as amended. The reasoning for their conclusion and recommendation for a review of the current WWDL D0034-01 was based on the following:</p> <ol style="list-style-type: none"> <li>1. The licence was granted over 3 years ago.</li> <li>2. There has been a material change in the content or extent of the discharge to which the licence relates, as a result of additional storm water overflows since the grant of the licence.</li> <li>3. Planning permission has been granted for development works associated with the licence.</li> <li>4. The agglomeration is included in Uisce Éireann’s (formerly Irish Water) investment plan.</li> <li>5. Non-compliance with:</li> </ol>

- Upgrade of the waste water treatment plant and ancillary works, as set out in Schedule C: Specified Improvement Programme, by 22/12/2015;  
 - Upgrade of the storm water tank at the waste water treatment plant, as set out in Schedule C: Specified Improvement Programme, by 22/12/2015;  
 - Emission limit values in Schedule A: Discharges and Discharge Monitoring.

In addition, Uisce Éireann has concluded that a review of the current WWDL is required due to the following key changes:

- Changes to the agglomeration boundary.
- Increase of the collected population equivalent (p.e) within the agglomeration since the original WWDL was issued.
- Inclusion of additional overflows.

If C or D are applicable, provide the following information:

Date on which the waste water works became / becomes operational:	Not applicable
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In the case of an application for a licence (review), confirm the agglomeration population equivalent (p.e.):

**Table 3 - Agglomeration p.e. thresholds**

Discharges from agglomerations with a p.e. of	Tick as appropriate (✓)
more than 10,000	✓
2,001 to 10,000	
1,001 to 2,000	
500 to 1,000	

**B.1.2 Applicant’s Details**

Provide the following information:

**Table 4 - Name and Address of Applicant**

Name*:	Uisce Éireann
Address:	Colvill House 24-26 Talbot Street Dublin 1
CRO Number:	530363

Tel:	+353 1 8925000
e-mail:	WastewaterLicensingEasternMidlands@water.ie

*\*This should be the name of the water services authority in whose ownership or control the waste water works is vested.*

Note that only application documentation submitted by the applicant and by the nominated person will be deemed to have come from the applicant.

**Table 5 – Name and Address for Correspondence**

Name*:	Environmental Licensing Specialist
Address:	Colvill House 24-26 Talbot Street Dublin 1
Tel:	01 8925000
e-mail:	WastewaterLicensingEasternMidlands@water.ie

*\*This should be the name of person nominated by the water services authority for the purposes of the application.*

## B.2. Agglomeration Details

This part of the form collects details of the agglomeration, the waste water works and any associated waste water treatment plant, capacity details and waste water inputs.

### B.2.1 Agglomeration name and Geographical Location

**Table 6 - Agglomeration Name and Location**

Name of Agglomeration:	Greater Dublin Area Agglomeration
Name of townland or townlands of the agglomeration served by a waste water works to which the application relates:	Refer to <b>Attachment B.2.4: List of Townlands within Agglomeration</b> for details.
Included on EPA Waste Water Priority List?	Yes
Included on European Commission infringement list?	Yes

## B.2.2 Waste water works and associated Waste Water Treatment Plant(s)

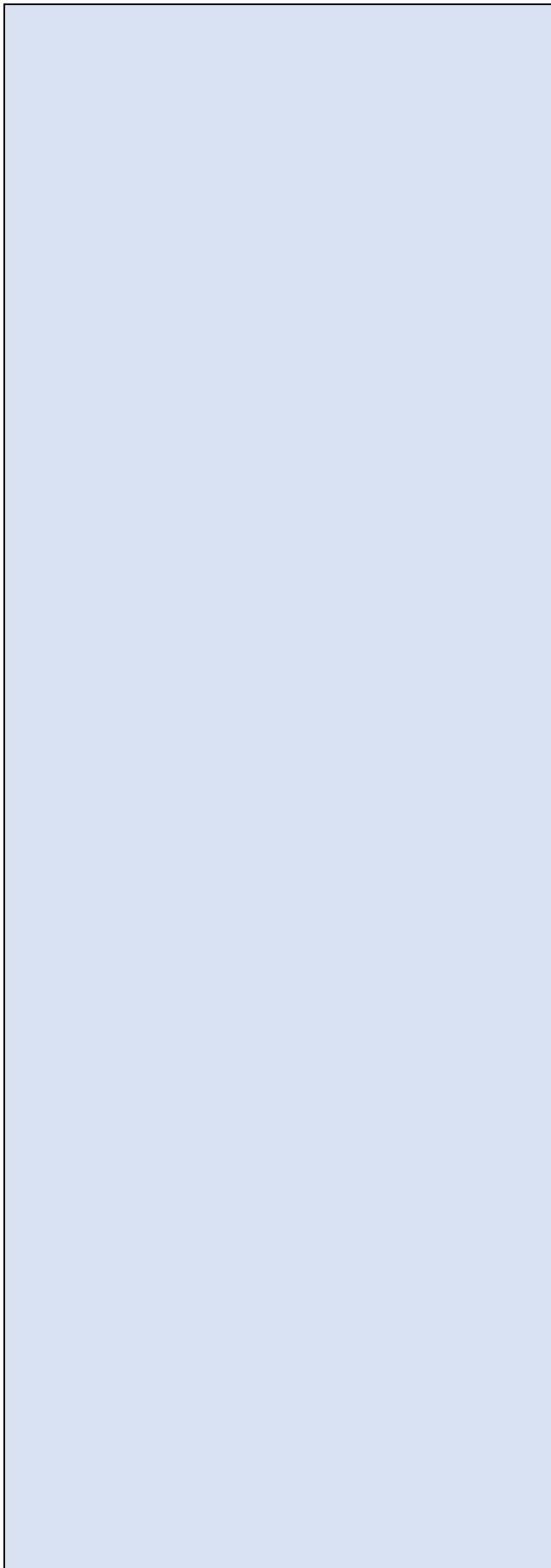
**Table 7 - Waste Water Works**

<p>Description of the existing waste water works (as per D0034-01):</p>	<p>Wastewater from the Greater Dublin Area (which includes Dublin City and County, Kildare and Meath) has been treated in Ringsend Waste Water Treatment Plant (WwTP), located at NGR 320155E, 233586N, since 1906. Built in 2005, the current WwTP is the largest in Ireland and was designed to cater for a population equivalent (p.e) of 1.64 million.</p> <p>The WwTP, which provides over 40% of Ireland’s wastewater treatment capacity, is currently overloaded and is not in compliance with the European Union (EU) Urban Wastewater Treatment Directive (UWWTD). The peak week collected load received at Ringsend WwTP in 2022 was 2,207,592 p.e.</p> <p>Ringsend WwTP discharges treated wastewater to the Lower Liffey Estuary <i>via</i> an outfall located <i>ca.</i> 1km from the facility at NGR 321073E, 233814N. Under the UWWTD, the Lower Liffey Estuary is designated as a (nutrient) sensitive waterbody (Nitrogen (N) and Phosphorus (P) limited).</p> <p>Refer to the original licence application (and Technical Amendment B / Clerical Amendment C) for further details of the Waste Water Treatment Works (WwTW) for the Greater Dublin Area agglomeration as per D0034-01.</p>
<p>Description of proposed development, if any, to which the application relates:</p>	<p>Upgrade works are taking place on a phased basis to increase the capacity of the Ringsend WwTP to 2.4 million p.e. in order to facilitate population growth in the Greater Dublin Area.</p> <p>These upgrades (including the retrofit of Aerobic Granular Sludge (AGS) technology in the WwTP) will improve receiving water quality and achieve Emission Limit Value (ELV) compliance based on the ELVs set out in this license review and in compliance with the Urban Waste Water Treatment Directive (UWWTD) / Water Framework Directive (WFD) requirements. This will address the reasons why the agglomeration is currently included on the EPA Waste Water Priority List and the European Commission infringement list.</p>

	<p>This WWDL review relates to the completed WwTW which will be able to treat wastewater for up to 2.4 million p.e (with a Peak Daily Design capacity in the order of 3.3 to 3.4 million p.e) while meeting the ELVs proposed in this licence review based on the ability of the receiving water to receive the primary discharge.</p> <p>Planning permission was granted for upgrade works in 2012 (An Bord Pleanála - 29N.YA0010, as amended) and 2019 (An Bord Pleanála - PA29S.301798). The upgrade is being progressed in stages to ensure that the plant continues to treat the wastewater to the current treatment levels throughout the delivery of the upgrade. The project comprises four key elements and underpinning these is a substantial programme of ancillary works:</p> <ol style="list-style-type: none"><li>1. Provision of additional secondary treatment capacity with nutrient reduction (400,000 p.e), including;<ol style="list-style-type: none"><li>a) Provision of an additional Expansion Lift Pumping Station (ELPS).</li><li>b) Modifications to the existing Intermediate Lift Pumping Station (ILPS) to control and distribute flows.</li></ol></li><li>2. Upgrade of the 24 existing secondary treatment tanks to provide additional capacity and nutrient (including Nitrogen) reduction <i>via</i> AGS Technology, by converting 8 upper deck tanks to AGS and converting 16 tanks to Hybrid AGS units, which is essential to protect the nutrient-sensitive Dublin Bay area;</li><li>3. Provision of a new Phosphorous recovery process within the confines of the existing WwTP to extract phosphorus from the sludge liquors;</li><li>4. Expansion of the WwTP's sludge treatment facilities to match the increase in wastewater treatment capacity;<ol style="list-style-type: none"><li>a) Additional sludge thickening and dewatering facilities.</li></ol></li></ol>
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	<ul style="list-style-type: none"><li>b) Upgrading of one of the thermal hydrolysis streams to provide additional thermal treatment capacity.</li><li>c) A new anaerobic plug flow sludge digestion process to ensure the digestion of all additional sludge.</li><li>d) Integration of the thermal dryer such that 3 units can be operated together.</li></ul> <p>Ancillary modifications will include the following elements:</p> <ul style="list-style-type: none"><li>1. Installation of an additional screw pump in existing inlet pump structure.</li><li>2. Upgrade of the UV system to increase disinfection capacity during the bathing season, to match the increased hydraulic throughput.</li><li>3. An electrical upgrade which consists of installation of an additional combined heat and power (CHP) engine which will generate electricity from the biogas generated on site. Load shedding will also be implemented which will manage the peak power use on the site and ensure that the maximum import capacity from the ESB is not exceeded.</li><li>4. The use on a permanent basis of a vehicular entrance off Pigeon House Road, and associated landscaping.</li><li>5. New bypass connection from final effluent culvert to existing connection to storm tanks. This is to facilitate maintenance of the main treated effluent culvert.</li><li>6. The various elements of the project, as listed above, will include:<ul style="list-style-type: none"><li>a. Interconnecting pipework, pumps and valves and associated chambers.</li><li>b. Provision for upgrades of electrical, instrumentation and control systems (including SCADA).</li><li>c. General equipment upgrades.</li></ul></li></ul>
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- d. Reconfiguration, where relevant, of internal site roads and underground utilities.

All flows arriving at the upgraded WwTP will receive secondary treatment with Nitrogen and Phosphorus removal.

All flows arriving at the WwTP are monitored continuously and recorded by the electromagnetic flowmeters.

The upgraded WwTP will be capable of treating a biological loading of 2.4 million p.e (Peak Daily Design of 4,350,000 p.e) and will be capable of catering for a peak hydraulic load of 13.8 m<sup>3</sup>/s.

The upgraded WwTP has been designed to meet the ELVs, as provided below. The water quality model prepared for the 2018 planning application illustrated that based on the proposed standards, as presented below, the primary discharge would not prevent the receiving waterbody meeting the statutory requirements.

Parameter	Proposed ELVs/Standards
BOD	25 mg/l
COD	125 mg/l
Suspended Solids	35 mg/l
Total Phosphorus	1 mg/l
Total Nitrogen	10 mg/l
Toxicity	5 TU
<i>Escherichia coli</i> <sup>1</sup>	100,000 MPN/100ml
pH	6.0 - 9.0

**Note 1:** ELV for E. Coli proposed to only apply during the Bathing Season (1<sup>st</sup> June to 15<sup>th</sup> September).

The water quality model prepared for the 2018 planning application is currently being updated to account for the latest available data and to include additional modelling scenarios (i.e. mass emissions limits and upper tier limits scenarios).

The updated modelling and impact assessment reports will provide scientific evidence to support the proposed Mass Emission Limits and condition 2 upper tier limits. Upon

	<p>completion, the results of the water quality modelling and updated impact assessment reports will be forwarded to the Agency, at which time Uisce Éireann will confirm the proposed mass emissions ELVs and condition 2 upper tier limits. Note: The proposed concentration ELVs are as per table above.</p> <p><b><u>Future Changes to the Agglomeration Boundary</u></b>  <b>Attachment B.2.5</b> details the proposed future changes to the Greater Dublin Area Agglomeration.</p>
<p>Number and type of waste water discharges from the waste water works including proposed waste water discharges:</p>	<p>Uisce Éireann has a number of programmes, (e.g., Infrastructure Projects and Programmes, Drainage Area Plan (DAP) Programme, Storm Water Overflow (SWO) Assessment &amp; Monitoring Programme) to assess SWOs. Under these programmes, Uisce Éireann has verified the grid reference locations of SWOs and Emergency Overflows (EO). The verified grid reference locations are detailed in this licence review application.</p> <p><b><u>Discharge Scenario as per D0034-01</u></b></p> <p>Please refer to the original licence application (and Technical Amendment B / Clerical Amendment C) for details of the existing discharges permitted under D0034-01.</p> <p><b><u>Discharges as per Subject Matter of Licence Review</u></b></p> <p><i><u>Primary Discharge (SW001):</u></i>  The primary discharge from the WwTP will remain at the existing primary discharge location at NGR 321073E, 233814N.</p> <p><i><u>Secondary Discharges:</u></i>  There will be no secondary discharge point associated with the waste water works. It should be noted that the existing S4 Fingal secondary discharge at Doldrum Bay is to be decommissioned and repurposed as a SWO, with EO in the event of pump failure. These works are due to be completed by the end of 2024.</p> <p><i><u>Proposed Overflows:</u></i>  There will be 385 no. overflows associated with the Greater Dublin Area agglomeration. Refer to <b>Attachment C.1: Discharges and Monitoring</b></p>

	for details of all overflows associated with this licence review.
Is the network assessment complete?	No
If the answer above is no, in what year is the assessment expected to be complete?	DAPs are underway within relevant functional areas, with completion timeframes ranging from 2023 to 2026.  Refer to <b>Attachment B.8:</b> Improvement Programme for further details.

**Table 8** - Waste water treatment plant associated with the waste water works

Site contact Name*:	Regional Wastewater Compliance Specialist – Eastern Midlands Region
Address of waste water treatment plant (including Eircode):	Ringsend WwTP, Pigeon House Road Dublin 4 Co. Dublin D04 X2X7
Telephone Number:	01 8925000
e-mail:	WastewaterLicensingEasternMidlands@water.ie
Grid ref (6E, 6N)	320155E, 233586N
Description of the treatment process	Secondary with N & P removal and UV disinfection during bathing season
Primary discharge point reference ID:	SW001

*\*This should be the name of the person responsible for the supervision of the waste water treatment plant.*

### B.2.3 Supporting documents

Complete the following table and submit the relevant supporting documents in accordance with the Guidance Document:

**Table 9** - Supporting Document Names

Document type	Document name
B.2.1 Agglomeration map	<b>Attachment B.2.1:</b> Map 2 – Agglomeration Plan
B.2.2 Site map including discharge and monitoring points.	<b>Attachment B.2.2:</b> Map 3 – WwTP Site Location Plan & Layout <b>Attachment B.2.2:</b> Map 4 – Location of Primary Discharge Point & Sampling Point <b>Attachment B.2.2:</b> Map 5 (1-32B) – Location of Overflows and associated Series Index <b>Attachment B.2.2:</b> Map 6 – Location of Ambient Monitoring Points
B.2.3 Waste water process flow	<b>Attachment B.2.3:</b> Waste Water Process Flow Diagram
B.2.4 List of Townlands	<b>Attachment B.2.4:</b> List of Townlands within Agglomeration
B.2.5 Future Changes to the Agglomeration Boundary	<b>Attachment B.2.5:</b> Future Changes to the Agglomeration Boundary

	<b>Attachment B.2.5</b> Map 7 - Indicative area to be transferred to GDD
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### B.2.4 Capacity of the waste water works

**Table 10 - Capacity of the Waste water Works**

Population Equivalent of the agglomeration to which the application relates:	2,400,000 p.e (Design) (Peak Daily Design 4,350,000 p.e)
Maximum average weekly population equivalent of the agglomeration:	2,207,592 p.e (2022)
Existing Organic Capacity of the waste water treatment plant - As Constructed or nominal design (p.e.)	1,640,000 p.e (as constructed)
Proposed Organic Capacity of the waste water treatment plant - As per planning permission or design (p.e.)	2,400,000 p.e (WwTP Design – 10-year design)
Current Collected Load (p.e.):	2,207,592 p.e (2022)
Remaining Organic Capacity (p.e.):	Current scenario: 0 p.e
Is the plant overloaded – organic loading?	Current scenario: Yes
Current Peak Hydraulic Capacity of the waste water works–As Constructed or nominal design (m <sup>3</sup> /day):	959,040 m <sup>3</sup> /day (as constructed)
Proposed Peak Hydraulic Capacity of the waste water works–As per planning permission or nominal design (m <sup>3</sup> /day):	13.8 m <sup>3</sup> /second (as per planning permission granted in 2019 - ABP PA29S.301798)
Current and proposed dry weather flow (DWF) to the treatment plant (m <sup>3</sup> /day):	DWF - Current loading(2023): 345,950 m <sup>3</sup> /day Proposed: Design DWF: 369,160m <sup>3</sup> /day
Current average hydraulic loading to the treatment plant (m <sup>3</sup> /day):	435,489 m <sup>3</sup> /day (2022)
Remaining Hydraulic Capacity (m <sup>3</sup> /day):	Current Remaining: 523,551 m <sup>3</sup> /day (2022)
Is the plant hydraulically overloaded?	No

### B.2.5 Waste Water Inputs

**Table 11 - Waste Water Inputs to Waste Water Works**

Inputs	P.E.	% of total PE
Domestic waste water load	1,658,841	69%
Industrial waste water load	720,428	30%
Leachate	20,731	1%
Waste water to be conveyed and discharged only ( <i>i.e.</i> , by pass the WWTP)	0	0
Total	2,400,000	100%

- The Domestic waste water load of 1,658,841 p.e includes licensed and unlicensed commercial and institutional loads and commuter loads which are domestic in nature.
- 720,428 p.e. includes industrial load from facilities within the updated agglomeration boundary.
- The industrial waste water load of 720,428 p.e is based on 60% of the Max Daily Licensed loads of relevant S16 and EPA licensed facilities.
- Uisce Éireann are satisfied that 720,428 p.e caters for expected growth in industrial wastewater load (insofar as can be predicted, noting inherent variability of industrial development) over future wastewater treatment infrastructure planning horizons in the Greater Dublin Area.
- When including actual measured loads from industrial facilities, as is the agreed process in the Interim Load Methodology (ILM) for assigning p.e loadings to agglomerations, the ILM Industrial p.e loading for Greater Dublin Area Agglomeration is *ca.* 50% of 720,428 p.e.

Where industrial waste water is relevant to this application, provide the following information:

**Table 12 - Industrial waste water pre-treatment**

A	Is the requirement for pre-treatment (Article 9 of the urban waste water treatment regulations 2001 as amended) met?	Yes
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If 'No' was answered to A, provide details of the measures to be taken to comply:

Not applicable

## B.3 Planning documentation

### B.3.1 Planning information

This part of the application form collects planning information relating to development or proposed development relevant to which the application relates.

**Table 13 - Planning Status**

	Planning Authority name:	An Bord Pleanála
A	Is planning permission required for development or proposed development to which the application relates?	Yes
B	If 'Yes', has planning permission been granted?	Yes (for the WwTP upgrade works).  Planning permission was granted for the Doldrum Bay wastewater network upgrades on the 30 <sup>th</sup> January 2023 by Fingal County Council (F22A/0659). An appeal was subsequently lodged on 23 <sup>rd</sup> February 2023 and is under consideration by An Bord Pleanála at the time of submission of this WWDL review application (ref: ABP-315902-23).
C	If planning permission is not required at A above, is the proposed development, if any, to which the application relates exempted development?	Not applicable

If 'Yes' was answered to A and B, above, the following 'Planning Granted' table should be completed.

**Table 14 - Planning granted**

Planning File Reference Number:	29N.YA0010
Planning Appeal Reference Number (if relevant):	Not applicable
Planning Authority Name / An Bord Pleanála:	An Bord Pleanála
Date of Planning Decision (Final Grant):	09/11/2012
Brief description:	An extension to Ringsend WwTP to expand the existing plant at Pigeon House Road, Ringsend, Dublin to a capacity of 2.4 million p.e. The extension included the following elements of works: <ul style="list-style-type: none"> <li>• Additional secondary wastewater treatment capacity at the wastewater treatment works site</li> </ul>



	<p>(ca. 400,000 p.e) including associated solids handling and ancillary works.</p> <ul style="list-style-type: none"> <li>• Various WwTP process improvement works, known as ‘surgical works’.</li> <li>• A 9km Long Sea Outfall Tunnel (LSOT), commencing at an onshore inlet shaft ca. 350m east of the wastewater treatment works and terminating in an underwater outlet riser/diffuser in Dublin Bay.</li> <li>• Road network and access improvements in the vicinity of the site.</li> </ul>
EIAR required with Planning Application?	Yes
NIS required with Planning Application	Yes
Confirm that the supporting documentation is provided:	<p>Yes – Refer to:</p> <ul style="list-style-type: none"> <li>• <b>Attachment B.3.1:</b> Ringsend WwTP Expansion – An Bord Pleanála Planning Approval, November 2012</li> <li>• <b>Attachment B.3.2:</b> Ringsend WwTP Expansion – An Bord Pleanála Inspector’s Report, October 2012</li> </ul>

Planning File Reference Number:	29N.YM0002
Planning Appeal Reference Number (if relevant):	Not applicable
Planning Authority Name / An Bord Pleanála:	An Bord Pleanála
Date of Planning Decision (Final Grant):	24/06/2016
Brief description:	Amendment of 2012 Approval (29N.YA0010). Provision of a temporary access to the WwTP site on the north boundary of the site along Pigeon House Road, temporary removal of two areas of landscaping bunds located on the eastern perimeter and the provision of an internal circulation road and adjustment of the site boundary fence in the south east corner of the site.
EIAR required with Planning Application?	No - Amendment of 2012 Approval (29N.YA0010).
NIS required with Planning Application	No
Confirm that the supporting documentation is provided:	<p>Yes – Refer to:</p> <ul style="list-style-type: none"> <li>• <b>Attachment B.3.3:</b> Amendment of 2012 Approval - Planning Approval, June 2016</li> </ul>

	<ul style="list-style-type: none"> <li>• <b>Attachment B.3.4:</b> Amendment of 2012 Approval - Inspector’s Report, June 2016</li> </ul>
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Planning File Reference Number:	29N.YM0004
Planning Appeal Reference Number (if relevant):	Not applicable
Planning Authority Name / An Bord Pleanála:	An Bord Pleanála
Date of Planning Decision (Final Grant):	12/01/2018
Brief description:	Amendment of 2012 Approval (29N.YA0010). Omission of three previously approved construction site compounds and provision of three new temporary construction site compounds.
EIAR required with Planning Application?	No - Amendment of 2012 Approval (29N.YA0010).
NIS required with Planning Application	No
Confirm that the supporting documentation is provided:	<p>Yes – Refer to:</p> <ul style="list-style-type: none"> <li>• <b>Attachment B.3.5:</b> Amendment of 2012 Approval - Planning Approval, January 2018</li> <li>• <b>Attachment B.3.6:</b> Amendment of 2012 Approval - Inspector’s Reports, August 2017 &amp; November 2017</li> </ul>

Planning File Reference Number:	PA29S.301798
Planning Appeal Reference Number (if relevant):	Not applicable
Planning Authority Name / An Bord Pleanála:	An Bord Pleanála
Date of Planning Decision (Final Grant):	24/04/2019
Brief description:	The revisions and alterations to the Ringsend WwTP broadly comprise the omission of the previously approved 9km long sea outfall tunnel (LSOT) and the associated relocation of the existing effluent discharge point. Instead, it incorporates Aerobic Granular Sludge (AGS) technology into the secondary treatment process together with associated Nitrogen (N) and Phosphorous (P) removal which it is stated would significantly improve the standard of effluent treatment at the existing wastewater treatment plant. Consequently, treated

	<p>effluent will continue to discharge through the existing outfall at the Liffey Estuary.</p> <p>The Regional Biosolids Storage Facility (RBSF) will be developed and used to store biosolids arising out of the treatment of sludge generated at the Ringsend WwTP prior to their re-use on agricultural lands.</p>
<p>EIAR required with Planning Application?</p>	<p><b>Yes</b>, an EIAR was prepared in June 2018 for the revisions and alterations to the existing and permitted development of the Ringsend WwTP and for the new RBSF at Newtown, Dublin 11. Refer to <b>Attachment B.5</b> for a copy of the 2018 EIAR.</p>
<p>NIS required with Planning Application</p>	<p><b>Yes</b>, a NIS was prepared in June 2018 for the revisions and alterations to the existing and permitted development of the Ringsend WwTP and for a new RBSF at Newtown, Dublin 11. Refer to <b>Attachment D.2.2</b> for a copy of the 2018 NIS.</p>
<p>Confirm that the supporting documentation is provided:</p>	<p>Yes – Refer to:</p> <ul style="list-style-type: none"> <li>• <b>Attachment B.3.7:</b> Revision and Alterations to 2012 Approval - Planning Approval, April 2019</li> <li>• <b>Attachment B.3.8:</b> Revision and Alterations to 2012 Approval - Inspector’s Report, February 2019</li> <li>• <b>Attachment B.5:</b> EIAR, June 2018</li> <li>• <b>Attachment D.2.2:</b> Ringsend Wastewater Treatment Plant Upgrade NIS, May 2018</li> </ul>

If ‘Yes’ was answered to A and ‘No’ was answered to B, above, the following Planning under Consideration table should be completed.

**Table 15 - Planning under Consideration**

Planning File Reference Number:	F22A/0659
Planning Appeal Reference Number (if relevant):	ABP-315902-23
Planning Authority Name / An Bord Pleanála:	Fingal County Council / An Bord Pleanála
Date of application:	25 <sup>th</sup> November 2022
Brief description:	<p>2 no. pumping stations (PS01 and PS02) and associated infrastructure at Carrickbane Road, Sutton South and Ceanchor Road, Censure, Howth. Untreated sewage is currently discharged into Dublin Bay at Doldrum Bay. The key aim of the network upgrade is to divert sewage discharge to the public sewer main to Ringsend WwTP. The existing outfall pipe will remain in situ but will be converted to a SWO, with EO in the event of pump failure.</p> <p>The planning approval granted by Fingal County Council is currently subject to a planning appeal and a decision is due by ABP by the 28<sup>th</sup> June 2023.</p>
EIAR required with Planning Application?	No
NIS required with Planning Application	No
Confirm that the supporting documentation is provided:	<ul style="list-style-type: none"> <li>• <b>Attachment B.3.9:</b> Fingal County Council Planning Approval, January 2023</li> <li>• <b>Attachment B.3.10:</b> Fingal County Council Planning Officer’s Report, January 2023</li> </ul>

If ‘No’ was answered to A and ‘Yes’ was answered to C, the following Exempted Development table should be completed.

**Table 16 - Exempted Development**

Reason for exemption:	Not applicable
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B.3.2 Supporting documents

The document names for all supporting documentation should be provided in the following table.

**Table 17 - Supporting Documents**

	Document type	Document name
Planning granted	- planners letter confirming EIA is not required (if relevant)	Not applicable
	- a copy of relevant grant of planning permission AND planners report	<ul style="list-style-type: none"> <li>• <b>Attachment B.3.1:</b> Ringsend WwTP Expansion – An Bord Pleanála Planning Approval, November 2012</li> <li>• <b>Attachment B.3.2:</b> Ringsend WwTP Expansion – An Bord Pleanála Inspector’s Report, October 2012</li> <li>• <b>Attachment B.3.3:</b> Amendment of 2012 Approval - Planning Approval, June 2016</li> <li>• <b>Attachment B.3.4:</b> Amendment of 2012 Approval - Inspector’s Report, June 2016</li> <li>• <b>Attachment B.3.5:</b> Amendment of 2012 Approval - Planning Approval, January 2018</li> <li>• <b>Attachment B.3.6:</b> Amendment of 2012 Approval - Inspector’s Reports, August 2017 &amp; November 2017</li> <li>• <b>Attachment B.3.7:</b> Revision and Alterations to 2012 Approval - Planning Approval, April 2019</li> <li>• <b>Attachment B.3.8:</b> Revision and Alterations to 2012 Approval - Inspector’s Report, February 2019</li> <li>• <b>Attachment B.3.9:</b> Fingal County Council Planning Approval, January 2023</li> <li>• <b>Attachment B.3.10:</b> Fingal County Council Planning Officer’s Report, January 2023</li> </ul>
Planning under consideration	- confirmation from a planning authority or An Bord Pleanála (as applicable) that an application for permission comprising or for the purposes of the waste water discharge	Not applicable

	<p>to which the application relates, is currently under consideration by the planning authority concerned or An Bord Pleanála</p>	
	<p>- Planners letter confirming EIA not required (if relevant)</p>	<p>Not applicable</p>
<p>Exempted development</p>	<p>- Planners letter confirming development is exempted or reference to the specific legislation for exemption</p>	<p>Not applicable</p>

## B.4 Notices and Advertisements

This part of the form collects evidence of stakeholder engagement prior to making this application. The location of the site notice should be provided in the following table.

**Table 18** - Site notice location

Grid co-ordinates (6E, 6N) Existing entrance to WwTP from Pigeon House Road:	320164E	233689N
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### B.4.1 Supporting documents

The document names for all supporting documentation should be provided in the following table:

**Table 19** - Names of Supporting Document(s) on Notices and Advertisements

Document type	Document name
Newspaper notice:	<b>Attachment B.4.1:</b> Newspaper Notice
Site notice:	<b>Attachment B.4.2:</b> Site Notice
Map of site notice location:	<b>Attachment B.4.3:</b> Map 8 – Site Notice Location
Water Services Authority notice:	<b>Attachment B.4.4:</b> Fingal County Council Notice; Dublin City Council Notice; Dublin County Council Notice; Dun Laoghaire Rathdown County Council Notice; Kildare County Council Notice; Meath County Council Notice
EIA Portal Confirmation notice:	<b>Attachment B.4.5:</b> EIA Portal Confirmation Notice

## B.5 Preliminary examination/EIA Screening/EIAR

This part of the application form collects information in relation to EIA and the development /proposed development comprising or for the purposes of the waste water discharge.

**Table 20** - EIA related information.

A	Having regard to B.3, is this application accompanied by an EIAR?	<p>Yes, an EIAR was prepared in June 2018 for the revisions and alterations to the existing and permitted development of the Ringsend WwTP and for a new RBSF at Newtown, Dublin 11. Refer to <b>Attachment B.5</b> for a copy of the 2018 EIAR.</p> <p>Based on the revised water quality modelling which is currently being undertaken based on the latest available data, an addendum to the 2018 EIAR will be completed and forwarded to the Agency.</p>
B	Is the application in respect of the waste water discharge from a waste water treatment plant with a capacity of greater than 10,000 population equivalents as defined in Article 2, point (6), of the Urban Water Treatment Directive	Yes
C	Are there other competent authorities conducting EIA for the development or proposed development to which this application relates?	No
D	If 'Yes' to C, provide the name of the competent authority and consent reference	Not applicable

If the answer to either A or B is 'Yes', the EIAR must accompany the application.

### B.5.1 Supporting documents

The names assigned to the documents should be provided in the following table:

**Table 21** - Names of Supporting Document(s) on EIA

Document type	Document name
EIAR (2018 Planning for the for the revisions and alterations to the existing and permitted development of the Ringsend WwTP and for a new RBSF)	<b>Attachment B.5:</b> EIAR, June 2018
Preliminary examination / EIA screening report	Not applicable



## B.6. Compliance with EU Directives & National Regulations

This part of the application form collects details on compliance with relevant EU Directives and national Regulations.

### B.6.1 Supporting document

The EPA template provided should be completed. The name assigned to the document should be provided in the following table:

**Table 22** - Names of Supporting Document on Compliance with EU Directives and National Regulations

Document type	Document name
Compliance with EU Directives & National Regulations	<b>Attachment B.6:</b> Compliance with EU Directives & National Regulations

## B.7 Foreshore Act Licences

This part of the application form collects information relating to Foreshore Act Licences where relevant.

Is Foreshore Act Licence required for development or proposed development the subject of this application?	Uisce Éireann do not have access to Foreshore Licence for the Primary Outfall.
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If yes, and the Foreshore Act Licence is relevant to this application, provide the following information:

**Table 23** -Foreshore Act Licence

	Foreshore Act Licence Competent Authority name:	See <b>Section B.7</b> above
A	Has a Foreshore Act Licence being granted?	See <b>Section B.7</b> above
B	If no to A, is a Foreshore Act Licence application under consideration by the relevant competent authority?	See <b>Section B.7</b> above
C	Was EIA carried out or will be carried out by the Foreshore Act Licence competent authority?	See <b>Section B.7</b> above
D	If 'Yes' to C, confirm that the same EIAR was submitted to Foreshore competent authority as accompanied this WWDA application:	See <b>Section B.7</b> above
E	If 'Yes' to A, provide: <ul style="list-style-type: none"> <li>- Licence Reference Number; and</li> <li>- date of grant of consent:</li> </ul>	See <b>Section B.7</b> above
G	If 'Yes' to B, provide application reference number	See <b>Section B.7</b> above

### B.7.1 Supporting documents

The name(s) assigned to all supporting documentation should be provided in the following table:

**Table B22** - Supporting documents

	Document type	Document name
<b>If 'Yes' to A</b>	Foreshore Act Licence:	Not applicable
<b>If 'Yes' to C</b>	Foreshore Act Licence report:	Not applicable

## B.8 Programme of Improvements

For licence review applications, provide information on current licence requirements with respect to specified improvement works (B.8.1) and Condition 5 improvement programme (B.8.2).

For all applications, provide information on planned improvements (B.8.3). Supporting information can be uploaded / attached to this part of the application form.

### B.8.1 Specified Improvement Programme

In the case of a licence review are there specified improvement works in Schedule A and C of current licence?	Yes – Refer to <b>Attachment B.8</b> for details on improvement works.
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If 'Yes', the following table should be completed for each specified improvement works.

**Table 23 - Schedule A & C Improvement Programme**

Specified Improvement Programmes: (under Schedule A and C of WWDL)	<ul style="list-style-type: none"> <li>a) Upgrade waste water treatment plant and ancillary works</li> <li>b) Upgrade storm water storage tank at WwTP, as necessary</li> <li>c) Any other works notified in writing by the Agency</li> </ul>
Date for completion of Improvement Programme in the licence:	22 <sup>nd</sup> December 2015
Has the date for completion expired? (Enter N, N/A or Y)	Yes
Status of works: <i>e.g. (i) Not Started; (ii) At planning stage; (iii) Work ongoing on-site; (iv) Commissioning phase; (v) Completed; (vi) Delayed</i>	(iii) Work ongoing on-site
Irish Water's expected timeframe for completing the work	Q4 2025
<p>Comments:</p> <p>The Greater Dublin Area Agglomeration WWDL D0034-01 was issued by the EPA on 27th July 2010 with specified improvements programmes (SIP) to be completed by 31/12/2015. Given the size and complexities of the upgrade project for the Ringsend wastewater treatment works the time allowed in the WWDL was insufficient for Uisce Éireann (UÉ) to undertake an updated feasibility study, water quality modelling, detailed design, planning, procurement and construction.</p> <p>An Bord Pleanála granted planning permission for the further upgrade of the plant on 24th April 2019, consenting for the works required to facilitate the use of the aerobic granular sludge(AGS) technology in the existing treatment tanks and to omit construction of the Long Sea Outfall Tunnel. Works on the first of four contracts to retrofit the existing secondary treatment tanks with Aerobic Granular Sludge (AGS) technology and upgraded sludge capacity treatment commenced in November 2020. The second contract was awarded in Q3 2021. The third contract was awarded in Q4 2021, and fourth contract is scheduled to commence in Q1 2024. All 4 contracts will bring the plant capacity to 2.4m PE in 2025.</p>	

**B.8.2 Condition 5 Improvement programme**

Provide details of the Condition 5 improvement programme by completing the following table:

**Table 24 - Condition 5 Improvement Programme**

Improvement identifier:	D0034-SIP-01. Refer to <b>Attachment B.8</b> for details on improvement works.
Improvement description:	<ul style="list-style-type: none"> <li>Discharge S4 Fingal to the Irish Sea to be discontinued</li> </ul>
Improvement source: (e.g. WWTP assessment, Sewer assessments, Secondary discharges assessment SWO assessment, Drinking Water Abstraction Risk Assessment, Shellfish Impact Risk Assessment, Pearl Mussel Impact Assessment, Improved Operational Control, Incident Reduction, Elimination/Reduction of Priority Substances, Process Optimisation)	<ul style="list-style-type: none"> <li>SWO Assessment</li> <li>Schedule A.3 and C.3</li> </ul>
Status of works:	Works ongoing
Expected Completion date:	2024 (subject to successful completion of relevant statutory processes)
Comments: Refer to <b>Attachment B.8</b> for details on improvement works.	

**B.8.3 Planned programme of improvements**

Provide information on planned programme of improvements by completing the following table:

**Table 25 -Planned Programme of Improvements**

Waste water discharge reference code:	SW001
Type: (primary discharge / secondary discharge/ storm water overflow)	Primary discharge, secondary discharge and storm water overflow
Improvement works description:	<ul style="list-style-type: none"> <li>a) Upgrade WwTP to a capacity of 2.4 million p.e</li> <li>b) Improvements to collection network and overflows</li> </ul>
Expected completion date:	<ul style="list-style-type: none"> <li>a) Q4 2025</li> <li>b) Refer to Attachment B.8 for timeframes and details on improvement works for network.</li> </ul>
Planning status: (grant of permission / exempted development)	Grant of permission (where applicable)

Prioritised for funding:	Yes
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### B.8.4 Supporting documents

Attachment B8 should be submitted in accordance with the Guidance Document as supporting information and the name assigned to it provided in the following table:

Regurgitate

**Table 26** - Supporting documents

Document type	Document name
Improvement programme	<b>Attachment B.8: Improvement Programme</b>

### B.9 Fees

State the appropriate fee as per Columns 2 or 3 of the Third Schedule of the European Union (Waste Water Discharge) Regulations 2007 to 2020.

**Table 27** - Fee

Class of Waste Water Discharge		Fee accompanying application / review application (in €)
Discharges from agglomerations with a population equivalent of:	(tick [✓] one as appropriate)	
- more than 10,000	✓	€22,500
- 2,001 to 10,000		
- 1,001 to 2,000		
- 500 to 1,000		
- less than 500		

## SECTION C: DISCHARGES & MONITORING

### C.1. Discharges & Monitoring

The Discharges & Monitoring template should be downloaded from the EPA website ([www.epa.ie](http://www.epa.ie)), completed and submitted in accordance with the Guidance Document.

#### C.1.1 Supporting document

Attachment C.1 should be submitted in accordance with the Guidance Document as supporting information and the name assigned to it provided in the following table:

**Table 28** - Discharges & Monitoring

Document type	Document name
Discharges & Monitoring	<b>Attachment C.1: Discharges and Monitoring</b>

### C.2. Measures to Prevent Unintended Discharges

Existing and proposed measures should be identified in the table below. Additional measures may be added to this table as required.

**Table 29** -Prevention Measures & Monitoring

Measures to prevent unintended discharges	Existing (Y/N)	Proposed (Y/N)	Applicability	Surveillance measure
Accident prevention procedure:	Y	Y	WwTP	Document review procedure.
Emergency Response Plan and Procedures:	Y	Y	WwTP Network – Applicable to Eden Quay Siphon project only	Document review procedure.
<b>Waste water treatment plant</b>				
Measures to prevent unintended discharges	Existing (Y/N)	Proposed (Y/N)	Applicability	Surveillance measure
Alarms / telemetry on waste water treatment plant:	Y	Y	WwTP	SCADA / PLC monitoring.
Standby pumps at waste water treatment plant:	Y	Y	WwTP	SCADA / PLC monitoring.
Standby equipment or provisions in the event of interruption of the power	Y	Y	WwTP	SCADA / PLC monitoring.

supply such as a portable generator or equipment with automatic switchover:				
Storage capacity at intake to the waste water treatment plant (SWO tank):	Y	Y	WwTP	SCADA / PLC monitoring.
Groundwater monitoring:	N	N	Not applicable	Not applicable
<b>Network</b>				
Measures to prevent unintended discharges	Existing (Y/N)	Proposed (Y/N)	Applicability	Surveillance measure
Alarms / telemetry on pumping stations:	Y	Y	The majority of Ringsend Pumping Stations have either local telemetry (not via UÉ system) or full connection to Uisce Éireann telemetry system.	Site Operators, Telemetry and Alarms.
Alarms / telemetry on emergency overflows:	Y	Y	The majority of Ringsend Pumping Stations have either local telemetry (not via UÉ system) or full connection to Uisce Éireann telemetry system.	Site Operators, Telemetry and Alarms.
Standby pumps at pumping stations:	Y	Y	All sites.	All sites at minimum have duty standby pump sets.
Standby equipment or provisions in the event of interruption of the power supply:	Y	Y	Terminal Pumping Stations (Forward Feed to WwTP) such as Ringsend Main Lift Pumping Station (MLPS), Sutton PS and West Pier PS have standby generator facilities.	Automatic switch over.  Site Operators, Telemetry and Alarms.
Storage capacity at pump stations:	Y	Y	Storage allocation is variable across the catchment.	Telemetry / alarms.
Monitoring telemetry on SWOs:	Y	Y	Existing monitoring for certain SWOs only.	INTS telemetry, text alerts & 24 hr monitoring.

Additional measures:	Not applicable	Not applicable	Not applicable	Not applicable
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### C.2.1 Supporting documents

Attachment C2 should be submitted (in accordance with the Guidance Document) as supporting information and the name assigned to it provided in the following table:

**Table 30** - Supporting documents

Document type	Document name
Measures to prevent unintended discharges	<b>Attachment C.2: Measures to Prevent Unintended Discharges</b>



## SECTION D: IMPACT ASSESSMENT

### D.1. Receiving Waters

Complete the tables, below, as appropriate, for primary discharge, secondary discharge and storm water overflow(s) (SWO).

**Table 31** - Receiving waters of Primary Discharge

Type (river, lake, groundwater, coastal, transitional):	<p><b>Transitional:</b> Liffey Estuary Lower (initial receiving waterbody of primary discharge) Liffey Estuary Upper Tolka Estuary</p> <p><b>Coastal:</b> Dublin Bay</p> <p><b>Designated bathing waters:</b> Dollymount Strand Sandymount Strand</p>
Name and WFD reference:	<p>Liffey Estuary Lower (IE_EA_090_0300) Liffey Estuary Upper (IE_EA_090_0400) Tolka Estuary (IE_EA_090_0200) Dublin Bay (IE_EA_090_0000) Dollymount Strand (IEEABWC090_0000_0400 – Bathing Water ID) Sandymount Strand (IEEABWC090_0000_0300 – Bathing Water ID)</p>
WFD Risk:	<p>Liffey Estuary Lower – At Risk Liffey Estuary Upper - Review Tolka Estuary – At risk Dublin Bay – Not at risk Dollymount Strand – Not applicable Sandymount Strand – Not applicable</p>
WFD Status & year:	<p>Liffey Estuary Lower - Moderate (2016-2021) Liffey Estuary Upper - Good (2016-2021) Tolka Estuary – Poor (2016-2021) Dublin Bay – Good (2016-2021) Dollymount Strand – Not applicable (Good water quality based on 2021 data) Sandymount Strand – Not applicable (Sufficient water quality based on 2021 data)</p>
WFD Objective & timeframe for achievement:	<p>Liffey Estuary Lower - Good status by 2027 Liffey Estuary Upper – Maintain Good status by 2027 Tolka Estuary – Good status by 2027 Dublin Bay – Maintain Good status by 2027 Dollymount Strand – Not applicable Sandymount Strand – Not applicable</p>

<p>Is the agglomeration identified as a significant pressure?</p>	<p>SWOs from the Greater Dublin Area agglomeration are identified as a significant pressure for the following waterbodies in Hydrometric Areas (HA) 08 (Nanny-Delvin) and 09 (Liffey &amp; Dublin Bay):</p> <ul style="list-style-type: none"> <li>• Broadmeadow_010</li> <li>• Broadmeadow_020</li> <li>• Ward_020</li> <li>• Ward_030</li> <li>• Tolka Estuary</li> <li>• Camac_040</li> <li>• Dodder_050</li> <li>• Liffey_180</li> <li>• Liffey_190</li> <li>• Santry_010</li> <li>• Santry_020</li> <li>• Tolka_050</li> <li>• Tolka_060</li> <li>• Grand Canal Basin (Liffey and Dublin Bay)</li> </ul> <p>However, it is noted in the 3<sup>rd</sup> Cycle Draft Catchment Reports for HA 08 and HA 09, that the Greater Dublin Area agglomeration is scheduled to be upgraded on Uisce Éireann’s Capital Investment Programme.</p>
<p>Has the discharges contributed to a deterioration in the quality of the water body?</p>	<p>The Ringsend WwTP was non-compliant with the ELVs set in the WWDL in 2022 and does have an observable negative impact on the water quality in the near field of the discharge and in the Liffey and Tolka Estuaries.</p> <p>The primary discharge from the WwTP does not have an observable negative impact on the Water Framework Directive status in the Liffey Estuary and Dublin Bay (Source: TRaC Data, 2022).</p> <p>It should be noted that other potential causes of deterioration in water quality relevant to this area are upstream riverine pollutants, combined sewer overflows, exfiltration from sewers and misconnections to surface water sewers in the large urban agglomeration.</p>
<p>Protected areas in the vicinity of the discharges:</p>	<p>There are two bathing waters in Dublin Bay designated under EU Directive 2006/7/EC and Bathing Water Quality Regulations, S.I. No. 79 of 2008 which are in the vicinity of the primary discharge. These are Dollymount Strand and Sandymount Strand. Dollymount Bathing Water Area is located <i>ca.</i> 1.8km north east of the primary discharge. Sandymount Bathing Water Area is located <i>ca.</i> 1.5km south west of the primary discharge.</p> <p>The primary discharge enters directly into the Liffey Estuary Nutrient Sensitive Area (N and P limited). The Tolka Estuary Nutrient Sensitive Area (N limited in summer and P limited in winter) is located <i>ca.</i> 1km north of the primary discharge location.</p>

	<p>There are no designated Salmonid Waters upstream or downstream of the primary discharge location.</p> <p>There are no designated shellfish areas within Dublin Bay. The closest designated shellfish area is Malahide Shellfish Area, which is located <i>ca.</i> 10.5km north east of the primary discharge point. The water quality model prepared for the 2018 planning application predicts that the plume will disperse away from the discharge point and dilution will occur within short distances of the outfall. The reduction in nutrient levels is too low to impact on shellfish species in the area outside the North and South Walls.</p> <p>The water quality model prepared for the 2018 planning application is currently being updated to account for the latest available data and to include additional modelling scenarios (i.e. mass emissions limits and upper tier limits scenarios).The reports were being updated at the time of this Review Application and will be forwarded to the Agency upon completion.</p> <p>There are a number of European sites within the primary outfalls zone of influence or within 10km of the WwTP. All of these sites are located wholly or partially within Dublin Bay, they include:</p> <ul style="list-style-type: none"> <li>• South Dublin Bay and River Tolka Estuary SPA (site code 004024) (<i>ca.</i> 0.2km East)</li> <li>• South Dublin Bay SAC (000210) (<i>ca.</i> 0.2km East)</li> <li>• North Bull Island SPA (004006) (<i>ca.</i> 1.8km North East)</li> <li>• North Dublin Bay SAC (000206) (<i>ca.</i> 1.8km North East)</li> <li>• Howth Head Coast SPA (004113) (<i>ca.</i> 9.1km North East)</li> <li>• Howth Head SAC (000202) (<i>ca.</i> 6.6km North East)</li> <li>• Dalkey Islands SPA (004172) (<i>ca.</i> 9km South East)</li> <li>• Rockabill to Dalkey Island SAC (003000) (<i>ca.</i> 6.2km East)</li> </ul> <p>The pNHAs and NHAs within the surrounding environment include:</p> <ul style="list-style-type: none"> <li>• South Dublin Bay pNHA (000210) (<i>ca.</i> 0.2km East)</li> <li>• Dolphins, Dublin Docks pNHA (000201) (<i>ca.</i> 0.6km West)</li> <li>• North Dublin Bay pNHA (000206) (<i>ca.</i> 1.1km North East)</li> <li>• Howth Head pNHA (000202) (<i>ca.</i> 6.6km North East)</li> <li>• Grand Canal pNHA (002104) (<i>ca.</i> 3.2km West)</li> <li>• Royal Canal pNHA (002103) (<i>ca.</i> 3.8km West)</li> </ul> <p>Ramsar sites within the surrounding environment include:</p> <ul style="list-style-type: none"> <li>• North Bull Island (<i>ca.</i> 4km North East)</li> <li>• Sandymount Strand/Tolka Estuary (<i>ca.</i> 1.2km South)</li> <li>• Baldoyle Bay (<i>ca.</i> 8.4km North East)</li> <li>• Broadmeadow Estuary (Malahide) (<i>ca.</i> 13.6km North)</li> </ul>
<p>Are there drinking water abstraction points downstream</p>	<p>There no designated drinking water rivers or lakes within the vicinity of the primary discharge location. Dublin Bay waters are not utilised as a resource for human consumption.</p>

of waste water discharge points?															
European sites hydrologically connected:	<p>There are a number of European sites within the primary outfalls zone of influence, all of these European sites are located wholly or partially within Dublin Bay, they include:</p> <ul style="list-style-type: none"> <li>• South Dublin Bay and River Tolka Estuary SPA (site code 004024) (ca. 0.2km East)</li> <li>• South Dublin Bay SAC (000210) (ca. 0.2km East)</li> <li>• North Bull Island SPA (004006) (ca. 1.8km North East)</li> <li>• North Dublin Bay SAC (000206) (ca. 1.8km North East)</li> <li>• Howth Head SAC (000202) (ca. 6.6km North East)</li> <li>• Howth Head Coast SPA (004113) (ca. 9.1km North East)</li> <li>• Dalkey Islands SPA (004172) (ca. 9km South East)</li> <li>• Rockabill to Dalkey Island SAC (003000) (ca. 6.2km East)</li> </ul> <p>Refer to <b>Attachment D.2.2</b> for further details.</p>														
Trophic status of transitional / coastal waters:	<p>Liffey Estuary Upper - Potentially Eutrophic (2018 – 2020)  Liffey Estuary Lower – Intermediate (2018 – 2020)  Tolka Estuary – Eutrophic (2018 – 2020)  Dublin Bay – Unpolluted (2018 – 2020)</p>														
Is there a groundwater protection scheme in place or to be provided in the vicinity of such discharge?	Not applicable														
Status of adjacent waterbodies: (e.g. upstream and downstream of the receiving waterbody)	<p><b>Upstream:</b>  Liffey_190 River waterbody (IE_EA_09L012360) - Poor</p> <p><b>Downstream:</b>  Liffey Estuary Lower (IE_EA_090_0300) - Moderate  Liffey Estuary Upper (IE_EA_090_0400) - Good  Tolka Estuary (IE_EA_090_0200) - Poor  Dublin Bay (IE_EA_090_0000) - Good</p> <p>Dollymount Strand (IEEABWC090_0000_0400 – Bathing Water ID) – Good (2021)  Sandymount Strand (IEEABWC090_0000_0300 – Bathing Water ID) – Sufficient (2021)</p>														
95%ile River Flow upstream of primary discharge point: (if applicable)	Not applicable														
Receiving water monitoring stations: (code and distance from primary discharge point)	<p>Refer to <b>Attachment B.2.2</b>: Map 6 for the location of the ambient monitoring points.</p> <p><b><u>Marine Monitoring Locations</u></b></p> <p><b><u>Upstream Monitoring Station</u></b></p> <table border="1" data-bbox="619 1912 1430 2038"> <thead> <tr> <th data-bbox="619 1912 743 2038">Licence Code (D0034-01)</th> <th data-bbox="743 1912 852 2038">EPA Code</th> <th data-bbox="852 1912 1037 2038">National Water Monitoring Station ID</th> <th data-bbox="1037 1912 1260 2038">Description</th> <th data-bbox="1260 1912 1430 2038">Distance from SW001</th> </tr> </thead> <tbody> <tr> <td> </td> <td> </td> <td> </td> <td> </td> <td> </td> </tr> </tbody> </table>					Licence Code (D0034-01)	EPA Code	National Water Monitoring Station ID	Description	Distance from SW001					
Licence Code (D0034-01)	EPA Code	National Water Monitoring Station ID	Description	Distance from SW001											

	ASW6	DB000	RS09L012500	Liffey – D/S Island Bridge Weir	8.4km
<b>Downstream Monitoring Stations</b>					
	<b>Licence Code (D0034-01)</b>	<b>EPA Code</b>	<b>National Water Monitoring Station ID</b>	<b>Description</b>	<b>Distance from SW001</b>
	ASW2	N/A	TW07001014DB2006	25M north of Poolbeg Wall	0.47km
	ASW3	N/A	TW07001014DB2007	50M north of Poolbeg Wall	0.51km
	ASW4	N/A	TW07001014DB2008	75M north of Poolbeg Wall	0.54km
	ASW5	N/A	TW07001014DB2009	100M north of Poolbeg Wall	0.55km
	ASW7	DB010	TW07001015DB1001	Heuston Station	7.5km
	ASW8	N/A	RS09L012900	Winetavern Street Bridge	6.0km
	ASW10	DB310	TW07001013DB3001	Downstream Annesley Bridge	5.2km
	N/A	DB 020	TW07001015DB1002	Matt Talbot Bridge	4.6km
	N/A	DB 120	TW07001014DB2001	Dodder / Grand Canal Basin	3.3km
	ASW9	DB 210	TW07001014DB2002	East Link Toll Bridge	2.9km
	N/A	DB 220	TW07001014DB2003	RO RO Ramp No.5 (Old Treatment Works Outfall)	0.9km
	N/A	DB 410	TW07001014DB2004	Ringsend Cascade	0.6km
	N/A	DB 420	TW07001014DB2005	Poolbeg Lighthouse	2.3km
	N/A	DB 300	TW07001013DB3006	Downstream of Drumcondra Bridge	6.2km
	N/A	DB 320	TW07001013DB3002	East Point Business Park Bridge	4.4km
	N/A	DB 330	TW07001013DB3003	Castle Avenue	3.3km
	N/A	DB 340	TW07001013DB3004	Clontarf Boat Club	1.6km

	N/A	DB 350	TW07001013DB3005	South Lagoon at Bull Wall Wooden Bridge	2.0km
	N/A	DB 610	CW09001009DB5001	Off Bailey Lighthouse, Howth	9.3km
	N/A	DB 430	CW10001011DB4001	1 km. NE Poolbeg Lighthouse	3.2km
	N/A	DB 450	CW10001011DB4002	South Bull Buoy, 1 km. SE Poolbeg Lighthouse	3.1km
	N/A	DB 510	CW10001011DB4003	2.5 km. ENE Poolbeg Lighthouse	4.9km
	N/A	DB 540	CW10001011DB4004	2.5 km. SSE Poolbeg Lighthouse	4.5km
	N/A	DB 550	CW10001011DB4005	No.4 Buoy, 2.5 km. E of S Poolbeg Lighthouse	3.9km
	N/A	DB 560	CW10001011DB4006	Drumleck Point, Howth, 5 km. ENE Poolbeg Lighthouse	7.2km
	N/A	DB 570	CW10001011DB4008	5 km. ESE Poolbeg Lighthouse	7.0km
	N/A	DB 580	CW10001011DB4007	Dun Laoghaire, 5 km. E of S Poolbeg Lighthouse	6.2km

**Shore Sampling Locations**

<b>Licence Code (D0034-01)</b>	<b>Description</b>
ASW11	Dollymount North
ASW12	Dollymount Bathing Zone
ASW13	Dollymount South
ASW14	Bull Wall Wood Causeway
ASW15	Poolbeg Outfall Main
ASW16	Half Moon Club - Southside
ASW17	Sandymount Strand
ASW18	Merrion Strand

Refer to **Attachment D.1: Map 9** which displays the receiving water designations in proximity to the discharges from the WwTP.

**Table 32 - Receiving waters of secondary discharges <sup>1</sup>**

Type (freshwater, lake etc.)	Coastal
Name and WFD Ref.	Dublin Bay (IE_EA_090_0000)
WFD Risk	Not at risk
WFD Status (year)	Good
WFD Objective (year)	Maintain Good status by 2027
Is the agglomeration identified as a significant pressure?	No
Have the discharges contributed to a deterioration in the quality of the water body?	Unknown. However, the WFD status of the Dublin Bay waterbody has been maintained at Good status during the 2010 – 2015, 2013 – 2018 and 2016 – 2021 cycles. This indicates that the discharge has not resulted in a significant deterioration in water quality.
Protected areas downstream	<p>There are two bathing waters in Dublin Bay designated under EU Directive 2006/7/EC and Bathing Water Quality Regulations, S.I. No. 79 of 2008 which are in the vicinity of the secondary discharge. These are Dollymount Strand and Sandymount Strand. Dollymount Bathing Water Area is located <i>ca.</i> 5km west of the secondary discharge. Sandymount Bathing Water Area is located <i>ca.</i> 9.4km south west of the secondary discharge.</p> <p>Malahide Shellfish Area is located <i>ca.</i> 6.7km north of the secondary discharge point.</p> <p>There are a number of European sites in the vicinity of the secondary discharge point:</p> <ul style="list-style-type: none"> <li>• Howth Head SAC (000202) (<i>secondary discharge point discharges directly into this SAC</i>)</li> <li>• Rockabill to Dalkey Island SAC (003000) (<i>ca.</i> 0.04km South East)</li> <li>• North Dublin Bay SAC (000206) (<i>ca.</i> 2.2km West)</li> <li>• Ireland’s Eye SAC (002193) (<i>ca.</i> 4.2km North)</li> <li>• Baldoyle Bay SAC (000199) (<i>ca.</i> 2.9km North)</li> <li>• South Dublin Bay SAC (000210) (<i>ca.</i> 7km South West)</li> </ul>

<sup>1</sup> It should be noted that the existing S4 Fingal secondary discharge at Doldrum Bay is to be decommissioned and repurposed as a SWO, with EO in the event of pump failure. To be completed by end of 2024 but subject to change.

	<ul style="list-style-type: none"> <li>• Howth Head Coast SPA (004113) (ca. 1.2km East)</li> <li>• North Bull Island SPA (004006) (ca. 0.9km West)</li> <li>• Ireland’s Eye SPA (004117) (ca. 3.7km North)</li> <li>• Baldoyle Bay SPA (000199) (ca. 4.4km North West)</li> <li>• South Dublin Bay and River Tolka Estuary SPA (004024) (ca. 5.9km South West)</li> </ul> <p>The pNHAs and NHAs within the surrounding environment include:</p> <ul style="list-style-type: none"> <li>• Howth Head pNHA (000202) (<i>secondary discharge point discharges directly into this pNHA</i>)</li> <li>• North Dublin Bay pNHA (000206) (ca. 2.3km West)</li> <li>• Ireland's Eye pNHA (000203) (ca. 4.1km North)</li> <li>• Baldoyle Bay pNHA (000199) (ca. 3km North)</li> <li>• South Dublin Bay pNHA (000210) (ca. 7.1km South West)</li> </ul> <p>Ramsar sites within the surrounding environment include:</p> <ul style="list-style-type: none"> <li>• North Bull Island (ca. 5.1km West)</li> <li>• Sandymount Strand/Tolka Estuary (ca. 8.2km South West)</li> <li>• Baldoyle Bay (ca. 6.4km North West)</li> <li>• Broadmeadow Estuary (Malahide) (ca. 13km North West)</li> </ul>
<p>Are there drinking water abstraction points downstream of waste water discharge points?</p>	<p>Not applicable</p>
<p>European sites hydrologically connected</p>	<p>There are a number of European sites in the vicinity of the secondary discharge point:</p> <ul style="list-style-type: none"> <li>• Howth Head SAC (000202) (<i>secondary discharge point discharges directly into this SAC</i>)</li> <li>• Rockabill to Dalkey Island SAC (003000) (ca. 0.04km South East)</li> <li>• North Dublin Bay SAC (000206) (ca. 2.2km West)</li> <li>• Ireland’s Eye SAC (002193) (ca. 4.2km North)</li> <li>• Baldoyle Bay SAC (000199) (ca. 2.9km North)</li> <li>• South Dublin Bay SAC (000210) (ca. 7km South West)</li> <li>• Howth Head Coast SPA (004113) (ca. 1.2km East)</li> <li>• North Bull Island SPA (004006) (ca. 0.9km West)</li> <li>• Ireland’s Eye SPA (004117) (ca. 3.7km North)</li> <li>• Baldoyle Bay SPA (000199) (ca. 4.4km North West)</li> <li>• South Dublin Bay and River Tolka Estuary SPA (004024) (ca. 5.9km South West)</li> </ul>
<p>Trophic status of transitional / coastal waters</p>	<p>Unpolluted (2018 – 2020)</p>
<p>Is there a groundwater protection scheme in place</p>	<p>Not applicable</p>



or to be provided in the vicinity of such discharge?																
Status of adjacent waterbodies (e.g. upstream and downstream of the receiving waterbody)	Not applicable															
95%ile River Flow upstream of secondary discharge point (if applicable)	Not applicable															
Receiving water monitoring stations upstream and downstream (code and distance from secondary discharge point)	<p>Refer to <b>Attachment B.2.2: Map 6</b> for the location of the ambient monitoring points.</p> <p>The key relevant marine monitoring locations for the secondary discharge are as follows:</p> <table border="1"> <thead> <tr> <th>Licence Code (D0034-01)</th> <th>EPA Code</th> <th>National Water Monitoring Station ID</th> <th>Description</th> <th>Distance from secondary discharge point</th> </tr> </thead> <tbody> <tr> <td>N/A</td> <td>DB 560</td> <td>CW10001011DB4006</td> <td>Drumleck Point, Howth, 5 km. ENE Poolbeg Lighthouse</td> <td>0.9km</td> </tr> <tr> <td>N/A</td> <td>DB 610</td> <td>CW09001009DB5001</td> <td>Off Bailey Lighthouse, Howth</td> <td>1.8km</td> </tr> </tbody> </table>	Licence Code (D0034-01)	EPA Code	National Water Monitoring Station ID	Description	Distance from secondary discharge point	N/A	DB 560	CW10001011DB4006	Drumleck Point, Howth, 5 km. ENE Poolbeg Lighthouse	0.9km	N/A	DB 610	CW09001009DB5001	Off Bailey Lighthouse, Howth	1.8km
Licence Code (D0034-01)	EPA Code	National Water Monitoring Station ID	Description	Distance from secondary discharge point												
N/A	DB 560	CW10001011DB4006	Drumleck Point, Howth, 5 km. ENE Poolbeg Lighthouse	0.9km												
N/A	DB 610	CW09001009DB5001	Off Bailey Lighthouse, Howth	1.8km												

**Table 33-** Receiving waters of discharges from SWOs

Receiving Waters name and code	WFD status	No. of compliant SWOs <sup>1</sup>	No. of SWOs under assessment or remediation	Is the SWOs identified as a significant pressure?	WFD objective and date
Brewery Stream_010 IE_EA_09B130400	Poor	0	10	No	Good Status by 2027
Broadmeadow_010 IE_EA_08B020400	Poor	0	2	Yes	Good Status by 2027
Broadmeadow_020 IE_EA_08B020600	Poor	0	2	Yes	Good Status by 2027
Camac_030 IE_EA_09C020310	Poor	0	2	No	Good Status by 2027
Camac_040 IE_EA_09C020500	Poor	7	8	Yes	Good Status by 2027
Dodder_040 IE_EA_09D010620	Moderate	0	4	No	Good Status by 2027
Dodder_050 IE_EA_09D010900	Moderate	1	33	Yes	Good Status by 2027
Dublin Bay IE_EA_090_0000	Good	4	37	No	Maintain Good Status by 2027
Grand Canal Basin (Liffey and Dublin Bay) IE_09_AWB_GCB	Good	0	16	Yes	Maintain Good Status by 2027
Kill of the Grange stream_010 IE_EA_10K020200	Poor	0	1	No	Good Status by 2027
Liffey Estuary Lower IE_EA_090_0300	Moderate	0	1	No	Good Status by 2027
Liffey Estuary Upper IE_EA_090_0400	Good	22	17	No	Maintain Good Status by 2027
Liffey_170 IE_EA_09L012100	Poor	0	10	No	Good Status by 2027
Liffey_180 IE_EA_09L012350	Poor	5	3	Yes	Good Status by 2027
Liffey_190 IE_EA_09L012360	Poor	5	1	Yes	Good Status by 2027
Mayne_010 IE_EA_09M030500	Poor	0	2	No	Good Status by 2027
Owenadoher_010 IE_EA_09O011700	Moderate	0	1	No	Good Status by 2027
Poddle_010 IE_EA_09P030800	Poor	0	7	No	Good Status by 2027
Powerstown (Dublin)_010 IE_EA_09P210700	Poor	0	1	No	Good Status by 2027
Royal Canal Main Line (Liffey and	Good	0	1	No	Maintain Good Status by 2027

Receiving Waters name and code	WFD status	No. of compliant SWOs <sup>1</sup>	No. of SWOs under assessment or remediation	Is the SWOs identified as a significant pressure?	WFD objective and date
Dublin Bay) IE_09_AWB_RCMLE					
Santry_010 IE_EA_09S010300	Poor	0	2	Yes	Good Status by 2027
Santry_020 IE_EA_09S011100	Poor	0	9	Yes	Good Status by 2027
Sluice_010 IE_EA_09S071100	Poor	0	3	No	Good Status by 2027
Tolka Estuary IE_EA_090_0200	Poor	5	50	Yes	Good Status by 2027
Tolka_040 IE_EA_09T011000	Poor	1	2	No	Good Status by 2027
Tolka_050 IE_EA_09T011100	Poor	0	12	Yes	Good Status by 2027
Tolka_060 IE_EA_09T011150	Poor	1	15	Yes	Good Status by 2027
Ward_010 IE_EA_08W010050	Poor	0	1	No	Good Status by 2027
Ward_030 IE_EA_08W010300	Moderate	0	3	Yes	Good Status by 2027
Unnamed waterbodies (assorted)	Not applicable	0	9	Not applicable	Not applicable

<sup>1</sup> Compliant with DoECLG criteria set out in 'Procedures and Criteria in Relation to Storm Water Overflows'.

**Table 34** - Ambient monitoring – upstream monitoring point – refer to **Attachment B.2.2: Map 6** for the location of the ambient monitoring points.

EDEN Code (where applicable):	RS09L012500	
Licence Code:	ASW6	
Monitoring Location:	312819	234311
Point Type:	Transitional	
Name of Receiving Water	Liffey Estuary Upper	

**Table 35** - Ambient Monitoring – upstream monitoring results for RS09L012500 (Liffey - d/s Islandbridge Weir – surface samples (Data Source: EPA TraC Data April 2022 – September 2022). This monitoring station was chosen as representative of the upstream ambient water quality. Refer to **Attachment D.2.3** – 2022 Ambient Monitoring Summary for ambient monitoring compliance results and interpretation of same.

Parameter	Ammonia (µg/l as N)	BOD Saline (mg/l)	Chlorophyll (mg/m3)	DIN (µg/l)	DO (%)	Pheophytin (mg/m3)	Phosphorus (React) ( µg/l SRP)	Salinity (PSU)	Silica (µg/l as SiO2)	Temperature (°C)	TON (µg/l as N)
Number of Samples	6	6	6	6	6	6	6	6	6	6	6
Max result	96	2	7.1	3081	108	3	46	0.37	4878	19.6	3054
Min result	7	1	1.6	960	90	1.3	7	0.3	264	11.5	908
Mean Result	<b>41</b>	<b>1</b>	<b>3.8</b>	<b>1959</b>	<b>93</b>	<b>2.5</b>	<b>21</b>	<b>0.31</b>	<b>2393</b>	<b>16.1</b>	<b>1920</b>
Median Result	<b>35.5</b>	<b>1</b>	<b>3.6</b>	<b>1686</b>	<b>90</b>	<b>2.7</b>	<b>19</b>	<b>0.30</b>	<b>1978</b>	<b>16.4</b>	<b>1642</b>
<i>Median EQS as per S.I. No. 77/2019 Good Status *</i>	-	-	2.5 (high-good) - 5.0 (good mode rate)	-	-	-	≤60 (0-17 PSU)	-	-	-	-
<i>95%ile EQS as per S.I. No. 77/2019 Good Status *</i>	-	≤4	-	-	>70 – <130 % (0-17% PSU)	-	-	-	-	-	-
<i>Overall compliance with relevant Median EQS Good Status *</i>	-	-	<b>Yes</b>	-	-	-	<b>Yes</b>	-	-	-	-
<i>Overall compliance with relevant 95%ile EQS Good Status *</i>	-	<b>Yes</b>	-	-	<b>Yes</b>	-	-	-	-	-	-

\* EQSs under S.I. No. 288/2022 – transitional water body criteria  
 Note: Where data was reported as less than the limit of detection, LOD/sqrt(2) was applied

**Table 36** - Ambient monitoring – downstream monitoring point – refer to **Attachment B.2.2: Map 6** for the location of the ambient monitoring points.

EDEN Code (where applicable):	TW07001014DB2006	
Licence Code:	ASW2	
Monitoring Location:	321532	233948
Point Type:	Transitional	
Name of Receiving Water	Liffey Estuary Lower	

EDEN Code (where applicable):	TW07001014DB2007	
Licence Code:	ASW3	
Monitoring Location:	321545	234027
Point Type:	Transitional	
Name of Receiving Water	Liffey Estuary Lower	

EDEN Code (where applicable):	TW07001014DB2008	
Licence Code:	ASW4	
Monitoring Location:	321519	234125
Point Type:	Transitional	
Name of Receiving Water	Liffey Estuary Lower	

EDEN Code (where applicable):	TW07001014DB2009	
Licence Code:	ASW5	
Monitoring Location:	321303	234313
Point Type:	Transitional	
Name of Receiving Water	Liffey Estuary Lower	

EDEN Code (where applicable):	TW07001015DB1001	
Licence Code:	ASW7	
Monitoring Location:	313763	234363
Point Type:	Transitional	
Name of Receiving Water	Liffey Estuary Upper	

EDEN Code (where applicable):	RS09L012900	
Licence Code:	ASW8	
Monitoring Location:	315126	234151
Point Type:	Transitional	
Name of Receiving Water	Liffey Estuary Upper	

EDEN Code (where applicable):	TW07001013DB3001	
Licence Code:	ASW10	
Monitoring Location:	317308	235929

Point Type:	Transitional	
Name of Receiving Water	Tolka Estuary	

EDEN Code (where applicable):	TW07001015DB1002	
Licence Code:	n/a	
Monitoring Location:	316413	234487
Point Type:	Transitional	
Name of Receiving Water	Liffey Estuary Upper	

EDEN Code (where applicable):	TW07001014DB2001	
Licence Code:	n/a	
Monitoring Location:	317892	234109
Point Type:	Transitional	
Name of Receiving Water	Liffey Estuary Lower	

EDEN Code (where applicable):	TW07001014DB2002	
Licence Code:	ASW9	
Monitoring Location:	318204	234275
Point Type:	Transitional	
Name of Receiving Water	Liffey Estuary Lower	

EDEN Code (where applicable):	TW07001014DB2003	
Licence Code:	n/a	
Monitoring Location:	320193	234136
Point Type:	Transitional	
Name of Receiving Water	Liffey Estuary Lower	

EDEN Code (where applicable):	TW07001014DB2004	
Licence Code:	n/a	
Monitoring Location:	321589	234089
Point Type:	Transitional	
Name of Receiving Water	Liffey Estuary Lower	

EDEN Code (where applicable):	TW07001014DB2005	
Licence Code:	n/a	
Monitoring Location:	323264	234124
Point Type:	Transitional	
Name of Receiving Water	Liffey Estuary Lower	

EDEN Code (where applicable):	TW07001013DB3006	
Licence Code:	n/a	
Monitoring Location:	316639	236407



Point Type:	Transitional	
Name of Receiving Water	Tolka Estuary	

EDEN Code (where applicable):	TW07001013DB3002	
Licence Code:	n/a	
Monitoring Location:	317897	235754
Point Type:	Transitional	
Name of Receiving Water	Tolka Estuary	

EDEN Code (where applicable):	TW07001013DB3003	
Licence Code:	n/a	
Monitoring Location:	319134	235625
Point Type:	Transitional	
Name of Receiving Water	Tolka Estuary	

EDEN Code (where applicable):	TW07001013DB3004	
Licence Code:	n/a	
Monitoring Location:	320434	235224
Point Type:	Transitional	
Name of Receiving Water	Tolka Estuary	

EDEN Code (where applicable):	TW07001013DB3005	
Licence Code:	n/a	
Monitoring Location:	321174	235898
Point Type:	Transitional	
Name of Receiving Water	Tolka Estuary	

EDEN Code (where applicable):	CW09001009DB5001	
Licence Code:	n/a	
Monitoring Location:	330095	235833
Point Type:	Coastal	
Name of Receiving Water	Dublin Bay	

EDEN Code (where applicable):	CW10001011DB4001	
Licence Code:	n/a	
Monitoring Location:	324064	234926
Point Type:	Coastal	
Name of Receiving Water	Dublin Bay	

EDEN Code (where applicable):	CW10001011DB4002	
Licence Code:	n/a	
Monitoring Location:	324092	233067
Point Type:	Coastal	

Name of Receiving Water	Dublin Bay
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EDEN Code (where applicable):	CW10001011DB4003	
Licence Code:	n/a	
Monitoring Location:	325780	235161
Point Type:	Coastal	
Name of Receiving Water	Dublin Bay	

EDEN Code (where applicable):	CW10001011DB4004	
Licence Code:	n/a	
Monitoring Location:	325481	232924
Point Type:	Coastal	
Name of Receiving Water	Dublin Bay	

EDEN Code (where applicable):	CW10001011DB4005	
Licence Code:	n/a	
Monitoring Location:	324022	231417
Point Type:	Coastal	
Name of Receiving Water	Dublin Bay	

EDEN Code (where applicable):	CW10001011DB4006	
Licence Code:	n/a	

Monitoring Location:	328039	235755
Point Type:	Coastal	
Name of Receiving Water	Dublin Bay	

EDEN Code (where applicable):	CW10001011DB4008	
Licence Code:	n/a	
Monitoring Location:	327875	232227
Point Type:	Coastal	
Name of Receiving Water	Dublin Bay	

EDEN Code (where applicable):	CW10001011DB4007	
Licence Code:	n/a	
Monitoring Location:	325631	229768
Point Type:	Coastal	
Name of Receiving Water	Dublin Bay	

EDEN Code (where applicable):	Not applicable	
Licence Code:	ASW11	
Monitoring Location:	Not applicable	Not applicable
Point Type:	Bathing Water	
Name of Receiving Water	Dollymount North	

EDEN Code (where applicable):	Not applicable	
Licence Code:	ASW12	
Monitoring Location:	Not applicable	Not applicable
Point Type:	Bathing Water	
Name of Receiving Water	Dollymount Bathing Zone	

EDEN Code (where applicable):	Not applicable	
Licence Code:	ASW13	
Monitoring Location:	Not applicable	Not applicable
Point Type:	Bathing Water	
Name of Receiving Water	Dollymount South	

EDEN Code (where applicable):	Not applicable	
Licence Code:	ASW14	
Monitoring Location:	Not applicable	Not applicable
Point Type:	Bathing Water	
Name of Receiving Water	Bull Wall Wood Causeway	

EDEN Code (where applicable):	Not applicable	
Licence Code:	ASW15	
Monitoring Location:	Not applicable	Not applicable
Point Type:	Bathing Water	

Name of Receiving Water	Poolbeg Outfall (Main)
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EDEN Code (where applicable):	Not applicable	
Licence Code:	ASW16	
Monitoring Location:	Not applicable	Not applicable
Point Type:	Bathing Water	
Name of Receiving Water	Half Moon Club (Southside)	

EDEN Code (where applicable):	Not applicable	
Licence Code:	ASW17	
Monitoring Location:	Not applicable	Not applicable
Point Type:	Bathing Water	
Name of Receiving Water	Sandymount Strand	

EDEN Code (where applicable):	Not applicable	
Licence Code:	ASW18	
Monitoring Location:	Not applicable	Not applicable
Point Type:	Bathing Water	
Name of Receiving Water	Sandymount Strand	

Ambient monitoring results are presented below for TW07001014DB2004 (Liffey Estuary Lower, Ringsend Cascade – surface and depth samples) and TW07001014DB2005 (Liffey Estuary Lower, Poolbeg Lighthouse - Composite sample). These two monitoring stations were chosen as representative of the ambient water quality in the vicinity of the mixing zone. Refer to **Attachment D.2.3 – 2022 Ambient Monitoring Summary** for ambient monitoring compliance results and interpretation of same.

**Table 37** - Ambient Monitoring – downstream monitoring results for Ringsend TW07001014DB2004 Liffey Estuary Lower, Ringsend Cascade - Surface Sample (Data Source: EPA TraC Data April 2022 – September 2022)

Parameter	Ammonia (µg/l as N)	BOD Saline (mg/l)	Chlorophyll (mg/m <sup>3</sup> )	DIN (µg/l)	DO (%)	Pheophytin (mg/m <sup>3</sup> )	Phosphorus (React) ( µg/l SRP)	Salinity (PSU)	Silica (µg/l as SiO <sub>2</sub> )	Temperature (°C)	TON (µg/l as N)
Number of Samples	6	6	6	6	6	6	6	6	6	6	6
Max result	1194	4	7.9	2055	102	1.8	527	34.27	1387	18.7	861
Min result	7	1	0.8	76	98	0.3	10	33.17	142	12.9	28
Mean Result	<b>442</b>	<b>2</b>	<b>3.2</b>	<b>660</b>	<b>100</b>	<b>1.1</b>	<b>127</b>	<b>33.65</b>	<b>596</b>	<b>15.5</b>	<b>223</b>
Median Result	<b>132.5</b>	<b>1</b>	<b>2.6</b>	<b>200</b>	<b>99.5</b>	<b>1.05</b>	<b>37.5</b>	<b>33.54</b>	<b>362.5</b>	<b>15.6</b>	<b>106</b>
Median EQS as per S.I. No. 77/2019 Good Status *	-	-	2.5 (high-good) - 5.0 (good moderate)	-	-	-	≤40 (>17 - 35 PSU)	-	-	-	-
95%ile EQS as per S.I. No. 77/2019 Good Status *	-	≤4	-	-	>70 – <130 % (0-17% PSU)	-	-	-	-	-	-
Overall compliance with relevant Median EQS Good Status *	-	-	<b>Yes</b>	-	-	-	<b>Yes</b>	-	-	-	-
Overall compliance with relevant 95%ile EQS Good Status *	-	<b>Yes</b>	-	-	<b>Yes</b>	-	-	-	-	-	-

\* EQSs under S.I. No. 288/2022 – transitional water body criteria

Note: Where data was reported as less than the limit of detection, LOD/sqrt(2) was applied

**Table 38 - Ambient Monitoring – downstream monitoring results for Ringsend TW07001014DB2004 Liffey Estuary Lower, Ringsend Cascade - Depth Sample (Data Source: EPA TraC Data April 2022 – September 2022)**

Parameter	Ammonia (µg/l as N)	BOD Saline (mg/l)	Chlorophyll (mg/m3)	DIN (µg/l)	DO (%)	Pheophytin (mg/m3)	Phosphorus (React) ( µg/l SRP)	Salinity (PSU)	Silica (µg/l as SiO2)	Temperature (°C)	TON (µg/l as N)
Number of Samples	6	6	6	6	6	6	6	6	6	6	6
Max result	183	2	6	279	98	2	61	35	882	17	96
Min result	7	1	1	18	93	0	7	34	35	12	28
Mean Result	94	1	3.1	122	95	1	35	35	253	14	42
Median Result	89	0.7	3.2	89	94	0.7	35	35	123	15	28
Median EQS as per S.I. No. 77/2019 Good Status *	-	-	2.5 (high-good) - 5.0 (good moderate)	-	-	-	≤40 (>17 - 35 PSU)	-	-	-	-
95%ile EQS as per S.I. No. 77/2019 Good Status *	-	≤4	-	-	>70 – <130 % (0-17% PSU)	-	-	-	-	-	-
Overall compliance with relevant Median EQS Good Status *	-	-	Yes	-	-	-	Yes	-	-	-	-
Overall compliance with relevant 95%ile EQS Good Status *	-	Yes	-	-	Yes	-	-	-	-	-	-

\* EQSs under S.I. No. 288/2022 – transitional water body criteria

Note: Where data was reported as less than the limit of detection, LOD/sqrt(2) was applied



**Table 39** - Ambient Monitoring – downstream monitoring results for Ringsend TW07001014DB2005 Liffey Estuary Lower, Poolbeg Lighthouse - Composite Sample (Data Source: EPA TraC Data April 2022 – September 2022)

Parameter	Ammonia (µg/l as N)	BOD Saline (mg/l)	Chlorophyll (mg/m <sup>3</sup> )	DIN (µg/l)	DO (%)	Pheophytin (mg/m <sup>3</sup> )	Phosphorus (React) ( µg/l SRP)	Salinity (PSU)	Silica (µg/l as SiO <sub>2</sub> )	Temperature (°C)	TON (µg/l as N)
Number of Samples	6	6	6	6	6	6	6	6	6	6	6
Max result	214	2	5	264	102	1	78	35	1196	17	77
Min result	7	1	1	32	101	0	7	35	35	13	28
Mean Result	<b>99</b>	<b>1</b>	<b>2.7</b>	<b>136</b>	<b>101</b>	<b>1</b>	<b>39</b>	<b>35</b>	<b>324</b>	<b>15</b>	<b>47</b>
Median Result	<b>89</b>	<b>0.7</b>	<b>2.7</b>	<b>114.5</b>	<b>101.6</b>	<b>0.65</b>	<b>40</b>	<b>35.12</b>	<b>192</b>	<b>15.85</b>	<b>50</b>
<i>Median EQS as per S.I. No. 77/2019 Good Status *</i>	-	-	2.5 (high-good) - 5.0 (good mode rate)	-	-	-	≤40 (>17 - 35 PSU)	-	-	-	-
<i>95%ile EQS as per S.I. No. 77/2019 Good Status *</i>	-	≤4	-	-	>70 – <130 % (0-17% PSU)	-	-	-	-	-	-
<i>Overall compliance with relevant Median EQS Good Status *</i>	-	-	<b>Yes</b>	-	-	-	<b>Yes</b>	-	-	-	-
<i>Overall compliance with relevant 95%ile EQS Good Status *</i>	-	<b>Yes</b>	-	-	<b>Yes</b>	-	-	-	-	-	-

\* EQSs under S.I. No. 288/2022 – transitional water body criteria

Note: Where data was reported as less than the limit of detection, LOD/sqrt(2) was applied

**Table 40** - Proposed Receiving Water Monitoring

EDEN Code (where applicable)	Licence Code	Monitoring Location	Point Type	Name of Receiving Water
Refer to monitoring programme provided in <b>Table 31</b> .				

**Table 41** - Proposed Monitoring Regime**a) Marine Monitoring**

Parameter	Units	Monitoring Frequency	Analysis method/Technique
Temperature	°C	Ten samples / year	Standard Method
Dissolved Oxygen	%	Ten samples / year	Standard Method
BOD	mg/l	Ten samples / year	Standard Method
Salinity	PSU	Ten samples / year	Standard Method
Dissolved Inorganic Nitrogen	µg/l	Ten samples / year	Standard Method
Total Oxidised Nitrogen	µg/l	Ten samples / year	Standard Method
Molybdate Reactive Phosphate (MRP)	µg/l	Ten samples / year	Standard Method
Ammonia	µg/l	Ten samples / year	Standard Method

**b) Shore Sampling**

Parameter	Units	Monitoring Frequency	Analysis method/Technique
<i>Escherichia coli</i>	MPN/100ml	Monthly during bathing season	Standard Method
Intestinal enterococci	CFU/100ml	Monthly during bathing season	Standard Method

## D.2 Assessment of impact on receiving waters

This part of the application form collects reports on the assessment of the impact of existing and proposed waste water discharges on the environment including any environmental medium other than that into which the discharges take place or are to take place. The impact assessment reports address at least the impact on the quality of receiving waters (surface water or groundwater) and may, as appropriate, address European sites.

Where a Natura Impact Statement (NIS) does not accompany the application, you are required to provide an Appropriate Assessment (AA) screening report.

<p>Is this application accompanied by an NIS?</p>	<p>Yes, a NIS was prepared in June 2018 for the revisions and alterations to the existing and permitted development of the Ringsend WwTP and for a new RBSF at Newtown, Dublin 11. Refer to <b>Attachment D.2.2</b> for a copy of the 2018 NIS.</p> <p>Based on the revised water quality modelling which is currently being undertaken based on the latest available data, upon completion an addendum to the 2018 NIS will be completed and forwarded to the Agency</p>
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### D.2.1 Supporting document

The impact Assessment Report should be submitted (as Attachment D2) in accordance with the guidance and the name assigned to the attachment(s) provided in the table below.

**Table 42** - Assessment Reports.

Document type	Document name
Impact assessment report	<b>Attachment D.2.1:</b> Impact Assessment Report, May 2023
Natura Impact Statement	<b>Attachment D.2.2:</b> Ringsend Wastewater Treatment Plant Upgrade NIS, May 2018
2022 Ambient Monitoring Summary	<b>Attachment D.2.3:</b> 2022 Ambient Monitoring Summary
2022 : Ringsend Influent and Effluent Priority Substances Screening	<b>Attachment D.2.4:</b> Ringsend Influent and Effluent Priority Substances Screening 2022

## D.3 Closing Remarks

This part of the application form is a short statement summarising the environmental outcome of your application and assessment.

State the environmental outcome of your application and assessment and reasons for same:

This WWDL review relates to the completed WwTP which will be able to treat wastewater for up to 2.4 million p.e (with a Peak Daily Design of 4,350,000 p.e) while meeting the ELVs as set out in this licence review proposed based on the ability of the receiving water to receive the primary discharge.

The upgrade works which are being progressed by Uisce Éireann will (i) ensure that there is sufficient capacity at the Ringsend WwTP to facilitate population growth in the Greater Dublin Area (ii) ensure the WwTP treats wastewater to the required standards based on the receiving waterbodies, and (iii) contribute towards achieving / maintaining at least Good status of the applicable receiving waterbodies (*i.e.*, Liffey Estuary Upper, Liffey Estuary Lower, Tolka Estuary and Dublin Bay) by 2027 thereby ensuring compatibility with achievement of the WFD objectives of the receiving waters.

The upgraded Ringsend WwTP has been designed to ensure that emissions from the plant will not result in the contravention of EU Directives and National Regulations.

The ELVs as set out in this licence review for the upgraded Ringsend WwTP are based on the ability of the receiving water to receive the primary discharge and give effect to the principle of the Combined Approach as defined in Waste Water Discharge (Authorisation) Regulations, 2007 to 2020 in that they accommodate the Urban Waste Water Regulations and the status of the receiving waterbodies.

The TP and TN ELVs (*i.e.*, TP 1mg/l and TN 10mg/l) were set by the EPA taking account of the designation of the Liffey Estuary and Tolka Estuary as “*sensitive*” waterbodies in accordance with the Urban Waste Water Treatment (UWWT) Directive 91/271/EEC on Urban Waste Water Treatment and S.I. No. 254 of 2001, S.I. No. 440 of 2004 and S.I. No. 48 of 2010.

Based on the above, and the information as contained in this WWDA application, the operational discharge activities from the upgraded Ringsend WwTP will result in the improvement of water quality in the receiving waterbodies and will not compromise the achievement of the objectives and EQSs established for the European sites, within the primary outfalls zone of influence, water dependant species and natural habitats. There will be no adverse effect on the Malahide Shellfish Area which is located *ca.* 10.5km north east of the primary discharge point or the two bathing water areas in proximity to the outfall, namely Dollymount Strand, which is located *ca.* 1.8km to the north east of the outfall and Sandymount Strand which is located *ca.* 1.5km to the south west.

Uisce Éireann is committed to ensuring that the Ringsend WwTP operates in a manner that supports the achievement of the water body objectives under the Water Framework Directive, and their obligations under the Birds and Habitats Directives and all applicable Directives and National Regulations.

In summary, the increased capacity of the Ringsend WwTP, alongside the improved effluent treatment process and the inclusion of N and P removal (as well as UV disinfection during the bathing season), is expected to have a positive impact in terms of the reduction of levels of nutrients being discharged into the receiving waterbodies.

## SECTION E: DECLARATION

### E.1. Declaration

The Signed Declaration template should be downloaded from the EPA website ([www.epa.ie](http://www.epa.ie)), completed and submitted in accordance with the Guidance Document.

#### E.1.1 Supporting documentation

The name assigned to the Signed Declaration document should be provided in the following table:

**Table 43** - Signed Declaration document name

Document type	Document name
Declaration	<b>Attachment E.1:</b> Signed Declaration

END

## ATTACHMENTS

### SECTION A: NON-TECHNICAL SUMMARY

#### Attachment A.1: **Non-Technical Summary**

Attachment A.1.1: Non-Technical Summary, May 2023

Attachment A.1.2: Map 1 - Area of Interest

### SECTION B: GENERAL

#### Attachment B.2: **Agglomeration Details**

Attachment B.2.1: Map 2 - Agglomeration Plan

Attachment B.2.2: Map 3 - WwTP Site Location Plan & Layout

Attachment B.2.2: Map 4 – Location of Primary Discharge Point & Sampling Point

Attachment B.2.2: Map 5 – Location of Overflows and Series Index

Attachment B.2.2: Map 6 – Location of Ambient Monitoring Points

Attachment B.2.3: Waste Water Process Flow Diagram

Attachment B.2.4: List of Townlands within Agglomeration

Attachment B.2.5: Future Changes to the Agglomeration Boundary

Attachment B.2.5: Map 7 Indicative area to be transferred to GDD

#### Attachment B.3: **Planning Documentation**

Attachment B.3.1: Ringsend WwTP Expansion – An Bord Pleanála Planning Approval, November 2012

Attachment B.3.2: Ringsend WwTP Expansion – An Bord Pleanála Inspector’s Report, October 2012

Attachment B.3.3: Amendment of 2012 Approval - Planning Approval, June 2016

Attachment B.3.4: Amendment of 2012 Approval - Inspector’s Report, June 2016

Attachment B.3.5: Amendment of 2012 Approval - Planning Approval, January 2018

Attachment B.3.6: Amendment of 2012 Approval - Inspector’s Reports, August 2017 & November 2017

Attachment B.3.7: Revision and Alterations to 2012 Approval - Planning Approval, April 2019

Attachment B.3.8: Revision and Alterations to 2012 Approval - Inspector's Report, February 2019

Attachment B.3.9: Fingal County Council Planning Approval, January 2023

Attachment B.3.10 Fingal County Council Planning Officer's Report, January 2023

**Attachment B.4: Notices and Advertisements**

Attachment B.4.1: Newspaper Notice

Attachment B.4.2: Site Notice

Attachment B.4.3: Map 8 - Site Notice Location

Attachment B.4.4: Water Services Authority Notices

Attachment B.4.5: EIA Portal Confirmation Notice

**Attachment B.5: EIAR**

Attachment B.5.1: Environmental Impact Assessment Report, June 2018

**Attachment B.6: Compliance with EU Directives & National Regulations**

Attachment B.6: Compliance with EU Directives & National Regulations

**Attachment B.8: Improvement Programme**

Attachment B.8: Improvement Programme

**SECTION C: DISCHARGES & MONITORING**

**Attachment C.1 Discharges and Monitoring**

Attachment C.1: Discharges and Monitoring

**Attachment C.2 Measures to Prevent Unintended Discharges**

Attachment C.2: Measures to Prevent Unintended Discharges

**SECTION D: IMPACT ASSESSMENT**

**Attachment D.1: Receiving Waters**

Attachment D.1: Map 9 - Receiving Water Designations

**Attachment D.2: Assessment of Impact on Receiving Waters**

Attachment D.2.1: Impact Assessment Report, May 2023

Attachment D.2.2: Ringsend Wastewater Treatment Plant Upgrade Natura  
Impact Statement Report, May 2018

Attachment D.2.3: 2022 Ambient Monitoring Summary

Attachment D.2.4: Ringsend Influent and Effluent Priority Substances  
Screening 2022

**SECTION E: DECLARATION**

**Attachment E.1 Declaration**

Attachment E.1: Signed Declaration