ATTACHMENT B.5:

EIAR SCREENING REPORT
AUGUST 2022

Irish Water Report

Environmental Impact Assessment Screening as part of the Grenagh Water Discharge Licence Application

Contents

1. Introduction

This Environmental Impact Assessment (EIA) Screening Report has been prepared by Nicholas O'Dwyer Ltd., on behalf of Irish Water to form an opinion as to whether or not the operational activities from the Grenagh agglomeration (*i.e*., the operational discharges from the Grenagh agglomeration in so far as they relate to the risk of environmental pollution of the receiving waters, the Martin River (Martin_010) should be subject to Environmental Impact Assessment (EIA) and if so, whether an Environmental Impact Assessment Report (EIAR) should be prepared in respect of it.

Sections 2 to **6** of this Screening Report provide the relevant Schedule 7A information, and **Section 7** of the Report provides the assessment of the criteria set out in Schedule 7.

2. Grenagh Agglomeration Operational Discharges

The Grenagh agglomeration consists largely of a village with a substantial residential element. The agglomeration is located approximately 16 km north of Cork City and west of the N20 Cork-Mallow road and railway line. The effluent from the agglomeration arises mainly from domestic sources.

The WwTP is located at NGR 158817E, 084754N and is currently operated by EPS Ltd. on behalf of Irish Water.

The agglomeration is served by a combined gravity sewer. The plant provides secondary treatment to reduce the biological load to the standards required by the Urban Wastewater Treatment (UWWT) Regulation (S.I. No. 254 of 2001).

The treatment plant consists of the following:

- Mechanical Inlet Screening.
- Gravity overflow to underground storm water storage with pumped return.
- A secondary treatment process based on dual streamed activated sludge.
- Fine bubbled diffused aeration system.
- Dual secondary clarifiers complete with rotating half bridge scrapers systems.
- Single sludge storage tank.
- Block built control building.

Sludge is stored in a sludge holding tank and is removed once a month to various WwTPs and composting farms.

The design capacity of the WwTP is 1,200 p.e. The current p.e. based on 2021 collected loads is 561 p.e. At the time of preparing this EIA Screening Report to inform the determination of the WWDL application, based on existing collected loads (2021), the projected 10-year load is 750 p.e.

Treated effluent from the WwTP discharges *via* gravity to the Martin River (Martin_010) at NGR 158833E, 084980N which is part of the Lee, Cork Harbour and Youghal Bay catchment area (HA 19).

Operational Discharges

Primary Discharge (SW001)

The primary discharge (SW001), which operates 24hrs a day and 365 days a year, discharges to the Martin River (Martin_010) primary discharge outfall pipe at NGR 158833E, 084980N. There is no flowmeter on this outfall.

The proposed effluent standards for the WwTP are tabled below.

Table 1.0 Treated Effluent Standards

Parameter	ELV	Units
BOD, 5 days with Inhibition (Carbonaceous BOD)	25	mg/l
COD-Cr	125	mg/l
Suspended Solids	35	mg/l
Ammonia-Total (as N)	3	mg/l
Ortho-Phosphate (as P)	1.65	mg/l
pH	6-9	pH Unit

Secondary Discharges

There were no secondary discharge points associated with the waste water works.

Dual Function Overflow (SW002):

There is one Dual Function Overflow (SW002) at the WwTP i.e., overflow which can act as a Storm Water Overflow or as an Emergency Overflow depending on the event.

The Storm Water Overflow at the WwTP is located after the grit trap and before the inlet screen. Stormwater passes through a mesh screen with an approximate spacing of 20-25mm. Wastewater overflows *via* a 300mm weir channel at a depth of 150mm and is diverted to a Storm Water Overflow tank (*ca*. 115.1m^3). There are two pumps within the storage tank which return stormwater to the inlet chamber. Return pumped flows are operated by a level sensor. Should the capacity of the storage tank be exceeded a high-level Storm Water Overflow from the storm tank discharges to the primary outfall and combines with the treated effluent before being discharged to the Martin River.

This SWO operates in compliance with the definition of '*Storm Water Overflow'* as per Regulation 3 of the Waste Water Discharge (Authorisation) Regulations, 2007, as amended and the criteria as set out in the DoEHLG '*Procedures and Criteria in Relation to Storm Water Overflows*', 1995.

In the unlikely event of an emergency (i.e., power failure or a failure of the submersible storm tank pumps), wastewater will discharge to the Martin River *via* the primary discharge outfall pipe.

3. Key Measures to Avoid/Prevent Significant Adverse Effects

The Waste Water Treatment Works at Grenagh incorporates the following key measures to prevent unintended discharges to the Martin River (Martin_010):

- SWO (SW002) have been designed in compliance with the definition of 'Storm Water Overflow' as per Regulation 3 of the Waste Water Discharge (Authorisation) Regulations, 2007, as amended and the criteria as set out in the DoEHLG '*Procedures and Criteria in Relation to Storm Water Overflows'*, 1995.
- Provision of 115.1m^3 of storm storage provided at the WwTP
- The plant is inspected at a minimum of once a week.
- Pumps at WwTP are switched over and checked at a minimum of once a week to keep operating hours consistent across all pumps.
- Blowers have maintenance carried out on them every three months.
- An Emergency Response Plan and Procedures and Operation and Maintenance Procedures for all equipment are in place and implemented by the appointed plant operator, as required. The Emergency Response Plan is reviewed every 12 months.
- All operators are fully familiar with all emergency and operational plans and procedures pertaining to the plant.

4. Compliance with EU & National Legisation

The effluent discharge standards proposed will ensure that there is no environmental risk posed to the receiving water environment as a result of the operational discharges from the agglomeration.

The discharge activities from the agglomeration are not considered to be a significant pressure on the Martin_010 and are not causing a deterioration in the chemical status of the receiving waterbody.

The Grenagh WwTW operates to ensure that the emissions from the agglomeration will comply with, and will not result in the contravention of, EU and National legislation. Please refer to **Attachment B.6** *Compliance with EU Directives / National Regulations* of the WWDA application, for further confirmation of same.

5. Description of the Receiving Water Environment

Grenagh WwTP discharges to the Martin River (Martin_010). Martin_010 is within the Lee, Cork Harbour and Youghal Bay Catchment (Hydrometric Area 19). The Martin River flows southward joining the Shournagh River and then southeast joining the Lee River entering Cork Harbour.

The Lee, Cork Harbour and Youghal Bay Catchment includes the area drained by the River Lee and all streams entering tidal water in Cork Harbour and Youghal Bay and between Knockaverry and Templebreedy Battery, Co. Cork, draining a total area of 2,153km^2.

The draft 3rd Cycle Catchment Report (2021) for this Hydrometric Area (HA), determined that for river waterbodies excess nutrients remain the most prevalent issue, along with morphology, organic pollution, and hydrology. Pressures identified affecting the greatest number of waterbodies within HA 19 include hydromorphology, followed by agriculture, urban run-off, urban wastewater, domestic waste water, forestry, mines and quarries and industry. Grenagh WwTP is not listed as a significant pressure in At Risk waterbodies in the draft 3rd cycle catchment assessment. The Martin_010 is listed as an area for action under the 3rd cycle (and the 2nd cycle). The WFD status of the Martin_010 is Poor and At Risk of not achieving Good water quality status during 2022-2027. Significant pressures for the Martin_010 have been determined, within the draft 3rd cycle Catchment Report, as Hydromorphology (embankments) and Other (illegal dumping), both of which are outside of the control of Irish Water.

The Martin River is not a Designated Salmonid Water under S.I. No. 293/1988. The WwTP is hydrologically connected to the Lee [Cork] Salmonid River *ca*. 23.5km downstream of the operational discharge point.

There are no nutrient sensitive waters, designated shellfish area, drinking water abstraction points or freshwater pearl mussel designated habitats in proximity to the Grenagh agglomeration.

The Lee [Cork] Salmonid River is located *ca.* 19km downstream of the primary discharge.

The Lee Estuary / Lough Mahon Nutrient Sensitive Area is located *ca.* 23.5 km downstream of the primary discharge.

The nearest drinking water abstraction point is located at the Lee Road Waterworks in Cork City, *ca.* 22 km downstream.

The Cork Great Island North Channel Shellfish Area is located *ca*. 40 km downstream of the primary discharge.

The nearest European site to the agglomeration is the Blackwater River (Cork/Waterford) SAC, located *ca*. 5 km north of the agglomeration. However, there is no hydrological connectivity between the Blackwater River SAC and the Grenagh agglomeration.

Cork Harbour SPA and Great Channel Island SAC are distantly hydrologically connected to the Martin River and are over 30km downstream of the Grenagh WWTP operational discharges.

There are 8 pNHAs and 1 NHA within 15 km of the WwTP, the closest of which is Ardamadane Wood pNHA. Ardamadane Wood pNHA is located *ca.* 8 km downstream of the discharge point along the banks of Martin River and comprises of mainly dry deciduous woodland of Sessile Oak and Downey Birch with some scrub woodland and improved agricultural grassland. The Blarney Castle Woods pNHA is located *ca.* 11 km downstream of the discharge point and comprises Sessile Oak, Ash, Sycamore and Beech. None of the habitats that each of the sites are designated for are highly sensitive to changes in water quality.

The EPA undertake biological monitoring of the Martin River at various locations. Upstream of the WwTP at RS19M010100 (*ca.* 1.6 km upstream), the 2020 monitoring reported a Q value of 3-4 (Moderate). Downstream of the WwTP at RS19M010200 and RS19M010300 (*ca*. 1.3 km and 4.3 km downstream, respectively) the 2020 monitoring reported a Q value of 4 (Good). Further downstream at RS19M010400 (*ca.* 7.1 km downstream of the WwTP), the 2020 monitoring reported a Q value of 4-5 (High).

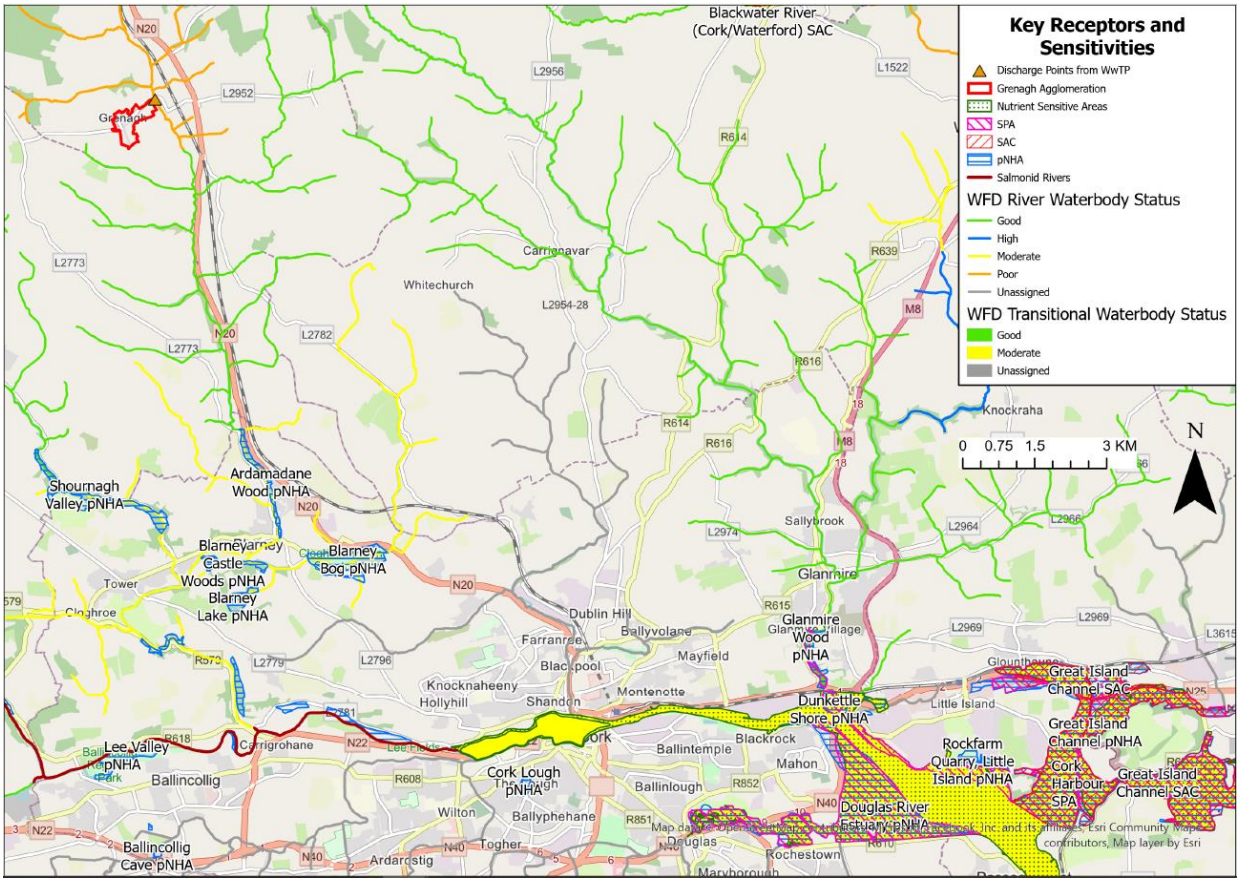

Figure 1.1. Key Receptors and Sensitivities in relation to the Grenagh Agglomeration & Associated Operational Discharges

Irish Water have conducted ambient monitoring sampling in 2022 *ca.* 1.6km d/s of RS19M010100 and directly u/s of the WwTP discharges and *ca.* 4km u/s of RS19M010300 and *ca*. 260m d/s of WwTP discharges. Details of the 2022 monitoring results are tabled below.

Table 2.0. 2022 Ambient Monitoring – *ca*. 1.6km d/s of RS19M010100 and directly u/s of WwTP discharges (Data Source: IW/CCC)

	BOD (mg/l)	Ortho-P (mg/l)	Total Ammonia (mg/l)	DO (% sat)	Suspended Solids (mg/l)	Temp (°C)
Number of Samples	2	2	2	2	2	2
Average result	1.9	0.024	0.048	99.75	8	9.15
Mean EQS – Good Status *	**≤1.5**	**≤0.035**	**≤0.065**			
95%ile EQS – Good status *	**≤2.6**	**≤0.075**	**≤0.14**			

* EQSs under S.I. No. 77/2019

Table 3.0. 2022 Ambient Monitoring – *ca.* 4km u/s of RS19M010300 and *ca.* 260m d/s of WwTP discharges (Data Source: IW/CCC)

	BOD (mg/l)	Ortho-P (mg/l)	Total Ammonia (mg/l)	DO (% sat)	Suspended Solids (mg/l)	Temp (°C)
Number of Samples	2	2	2	2	2	2
Average result	1.5	0.023	0.056	97.5	6.625	9.3
Mean EQS – Good Status *	**≤1.5**	**≤0.035**	**≤0.065**			
95%ile EQS – Good status *	**≤2.6**	**≤0.075**	**≤0.14**			

* EQSs under S.I. No. 77/2019

Based on grab sampling results obtained in 2022, the concentration for Ammonia and Ortho-P are within the required EQSs for Good status (mean and 95%ile). In relation to BOD, the mean upstream concentration was 1.9m/l, indicating that the mean EQS for Good status is not met upstream of the WwTP. However, the 95%ile Good status EQS is met. The downstream mean BOD, Ortho-P and Ammonia concentrations are below the EQS for Good status (both mean and 95%ile). As noted above, the significant pressures for the Martin_010 have been cited within the draft 3rd cycle Catchment Report as Hydromorphology (embankments) and Other (illegal dumping), both of which are outside of the control of IW. Grenagh WwTP is not listed as a significant pressure on this At Risk Martin _010 waterbody.

A Small Stream Risk Score (SSRS) Report was completed in 2018. The report concluded that there was no apparent impact to the macroinvertebrate community of the Martin River downstream of the WwTP due to the WwTP operational discharge.

Based on the above it is considered that there is no environmental risk posed to the receiving water environment as a result of the discharges from the agglomeration.

6. Waste Assimilative Capacity

Waste Assimilative Capacity

Waste Assimilative Capacity (WAC) calculations have been completed to inform this WWDL application process and to show the impact of the primary discharge from the WwTP on the receiving waterbody, the Martin River (Martin_010).

The calculations were based on the 95%ile and mean river flow in the river, 0.06m^3/s and 0.72m^3/s (as determined by IW, see **Attachment D.2.6** *Hydrological Estimation*), the projected normal waste water loading of 135 m^3/d (750 p.e x 180/p.e/day) and the proposed operational standards/ELVs. Due to limited background data, and the fact that the current WFD status of the Martin_010 is Poor, and that the significant pressures for the Martin_010 have been cited as Hydromorphology (embankments) and Other (illegal dumping), both of which are outside of the control of IW, the EPA's "*notionally clean river*" concentrations were applied in the WAC calculations. Refer to **Table 4.0** and **Table 5.0** below.

Table 4.0 WAC for 750 PE (based on Notionally Clean River), 95%ile River Flow

Parameter	Upstream River Conc Note 1	Proposed ELV	Contribution from Primary Discharge (mg/l)	Predicted D/S Conc (mg/l)	Relevant Standard (mg/l)
BOD	0.26	25	0.63	0.888	<2.6 Note 2
Total Ammonia	0.008	3	0.08	0.084	<0.14 Note 2
Ortho-Phosphate (MRP)	0.005	1.65	0.04	0.047	<0.075 Note 2

Note 1: Based on notionally clean river approach.
Note 2: European Union Environmental Objectives (Surface Waters) (Amendment). Regulations 2019 (S.I. No. 77 of 2019) – Good Status 95%ile EQS

Table 4.0 WAC for 750 PE (based on Notionally Clean River), Mean River Flow

Parameter	Upstream River Conc Note 1	Proposed ELV	Contribution from Primary Discharge (mg/l)	Predicted D/S Conc (mg/l)	Relevant Standard (mg/l)
BOD	0.26	25	0.054	0.314	<1.5 Note 2
Total Ammonia	0.008	3	0.006	0.014	<0.065 Note 2

Parameter	Upstream River Conc Note 1	Proposed ELV	Contribution from Primary Discharge (mg/l)	Predicted D/S Conc (mg/l)	Relevant Standard (mg/l)
Ortho-Phosphate (MRP)	0.005	1.65	0.004	0.009	<0.035 Note 2

Note 1: Based on notionally clean river approach.
Note 2: European Union Environmental Objectives (Surface Waters) (Amendment). Regulations 2019 (S.I. No. 77 of 2019) – Good Status Mean EQS

As shown above, the resultant downstream concentrations for BOD, Total Ammonia and Ortho-P comply with the relevant Good status EQSs for each parameter for both the 95%ile and mean river flows.

Refer to **Attachment D.2.3** of the WWDA application for further details on the WAC.

7. EIA Screening Criteria Assessment

This section of the EIA Screening Report considers the proposed development (*i.e.,* operational discharges from the Grenagh agglomeration) against the Schedule 7 criteria. Schedule 7 specifies '*Criteria for determining whether a development would or would not be likely to have significant effects on the environment'* under these three headings.

1. Characteristics of proposed development
2. Location of proposed development
3. Characteristics of potential impacts

Schedule 7A of the Planning and Development Regulations sets out *'Information to be provided by the Applicant or Developer for the Purposes of Screening Sub-threshold Development for Environmental Impact Assessmen*t'. This information includes:

1. A description of the proposed development
2. A description of the aspects of the environment likely to be significantly affected by the proposed development.
3. A description of any likely significant effects, to the extent of the information available on such effects, of the proposed development on the environment
4. The compilation of the information at paragraphs 1 to 3 shall take into account, where relevant, the criteria set out in Schedule 7

This Screening Report includes the relevant Schedule 7A information. This is contained in **Sections 2** to **6** above, and in the Schedule 7 criteria commentary provided in the tables below.

7.1	**Characteristic of the Proposed Development**
a. The size and design of the whole of the proposed development	The design capacity of the WwTP is 1,200 p.e. The current population equivalent (p.e.) however based on 2021 collected loads is 561 p.e. At the time of submitting the WWDA application, based on existing loads (2021), the projected 10-year load is 750 p.e. which is significantly below the 10,000 p.e mandatory threshold for EIA. The current effluent discharge from the Grenagh WwTP is not having an observable impact on the downstream Martin River and it is considered that there is no environmental risk posed to the receiving water environment as a result of the discharge from the new WwTP (Refer **Appendix D.2.1** *Impact Assessment Report* of the WWDA application). The Storm Water Overflow (SW002) operates in compliance with the definition of '*Storm Water Overflow'* as per Regulation 3 of the Waste Water Discharge (Authorisation) Regulations, 2007, as amended and the criteria as set out in the DoEHLG '*Procedures and Criteria in Relation to Storm Water Overflows'*, 1995.

7.1 Characteristic of the Proposed Development	
	The source of the wastewater in the agglomeration is largely domestic in nature. There are no significant IPC or waste licensed activities discharging to the agglomeration or to the Martin River upstream or downstream of the agglomeration. Refer to **Sections 2** and **3** of the EIA Screening Report for further details.
b. cumulation with other existing and/or approved projects	There are no significant IPC or waste licensed activities discharging to the Martin River upstream or downstream of the agglomeration. There are no other existing waste water discharges in the vicinity of the WwTW operational discharges. Cork County Council planning portal was reviewed to identify any planning applications which have been submitted and/or granted within the last 5 years (from July 2022). The majority of applications are domestic dwellings. This review did not identify any other projects, either existing or approved, which have the potential to interact with the Grenagh agglomeration's operational discharges, and result in significant cumulative impacts.
c. the use of natural resources, in particular land, soil, water and biodiversity;	The Grenagh works incorporates key measures to avoid and prevent significant effects on the receiving Martin River (refer to **Section 3** of this Report). The effluent discharge standards and the design of the overflows will ensure that there is no environmental risk posed to the receiving water environment or its associated biodiversity as a result of the discharges from the agglomeration. As such, the use of these resources is not considered significant.
d. the production of waste;	Not applicable for operational discharges.
e. pollution and nuisances;	The WwTW operational discharges have been designed and incorporate key measures to avoid and prevent significant effects on the receiving Martin River (refer to **Section 3** of this Report). Refer to **Section 6** of this Report and **Attachment D.2.3** of the WWDA application for details on the WAC of the Martin River. An assessment of the potential for impacts on receiving waters from priority substances in the primary discharge has been carried out to inform this WWDA application. It concluded that with dilution none of the substances listed in the Specific Pollutants, Priority and Priority Hazardous Substances as outlined in the Surface Water Regulations, are likely to be present in the effluent discharge to the Martin River, at concentrations above the specified standards as per European Communities Environmental Objectives (Surface Waters) Regulations 2009, as amended (now S.I No. 77 of 2019) (Refer to **Attachment D.2.4** of the WWDA application for a copy the Priority Substances Assessment Report). There are no other nuisances that would cause unusual, significant, or adverse effects of a type that would, in themselves require an EIA.

7.1 Characteristic of the Proposed Development	
f. the risk of major accidents and/or disasters which are relevant to the project concerned, including those caused by climate change, in accordance with scientific knowledge;	The Waste Water Treatment Works incorporates a number of key measures to prevent unintended discharges to the Martin River. Refer to **Attachment C.2** of the WWDA application and **Section 3** of this EIA Screening Report for further details. It is considered that there is minimal potential for major accidents, and/or disasters which are relevant to operational discharges on the basis of best scientific knowledge.
g. the risks to human health (for example due to water contamination or air pollution).	There are no downstream drinking water abstraction points on the Martin River. The nearest drinking water abstraction point is located at the Lee Road Waterworks in Cork City, *ca*. 22 km downstream. There are no risks to human health from the operational discharges that would cause unusual, significant, or adverse effects of a type that would, in themselves require an EIA.

7.2 Location of Proposed Development	
The environmental sensitivity of geographical areas likely to be affected by projects must be considered, with particular regard to:	
(a) the existing and approved land use;	Not applicable.
(b) the relative abundance, availability, quality, and regenerative capacity of natural resources (including soil, land, water, and biodiversity) in the area and its underground;	Grenagh WwTP discharges to the Martin River (Martin_010). Martin_010 is within the Lee, Cork Harbour and Youghal Bay Catchment (Hydrometric Area 19). The Martin River flows southward joining the Shournagh River and then southeast joining the Lee River entering Cork Harbour. The Lee, Cork Harbour and Youghal Bay Catchment includes the area drained by the River Lee and all streams entering tidal water in Cork Harbour and Youghal Bay and between Knockaverry and Templebreedy Battery, Co. Cork, draining a total area of 2,153km$^{2.}$ The significant pressures for the Martin_010 have been cited within the draft 3rd cycle Catchment Report as Hydromorphology (embankments) and Other (illegal dumping), both of which are outside of the control of IW. Grenagh WwTP is not listed as a significant pressure on this At Risk Martin _010 waterbody. The WFD status of the Martin_010 is Poor and At Risk of not achieving Good water quality status during 2022-2027. Further downstream the Martin_010 flows to the Martin_020 (Good Status) and then to the Martin_030 (Good Status) and the Martin_040 (Moderate Status). Approximately 13 km downstream, the Martin River flows into the Shournagh_030 (Moderate Status). The Shournagh River flows into the River Lee just north of Carrigrohane. The EPA undertake biological monitoring of the Martin River at various locations. Upstream of the WwTP at RS19M010100 (*ca.* 1.6 km upstream), the 2020 monitoring reported a Q value of 3-4 (Moderate). Downstream of the WwTP at RS19M010200

7.2 Location of Proposed Development	
	and RS19M010300 (*ca.* 1.3 km and 4.3 km downstream, respectively) the 2020 monitoring reported a Q value of 4 (Good). Further downstream at RS19M010400 (*ca*. 7.1 km downstream of the WwTP), the 2020 monitoring reported a Q value of 4-5 (High). Based on the proposed operational standards/ELVs, along with design of the overflow, and the measures in place to prevent unintended discharges, it is considered that operational discharges will continue not to have a significant effect on the abundance, quality, or regenerative capacity of the Martin River. Refer to **Sections 2** to **6** of this Report for further details.
(c) the absorption capacity of the natural environment, paying particular attention to the following areas:	(i) wetlands, riparian areas, river mouths; The operational discharges will not give rise to significant effects on the absorption capacity of the natural environment of the Martin River and its riparian areas. Refer **Point (b)** above. (ii) coastal zones and the marine environment The operational discharges have no potential to impact on these features of the natural environment due to the location of the discharges. (iii) mountain and forest areas The operational discharges have no potential to impact on these features of the natural environment due to the location of the discharges. (iv) nature reserves and parks The operational discharges have no potential to impact on these features of the natural environment due to the location of the discharges. (v) areas classified or protected under national legislation; Natura 2000 areas designated by Member States pursuant to Directive 92/43/EEC and Directive 2009/147/EC; There are no designated shellfish waters, designated bathing waters, nutrient sensitive waters, within the region of the operational discharges or within their zone of influence. There are no European sites immediately downstream of the operational discharges. The nearest European site to the agglomeration is the Blackwater River (Cork/Waterford) SAC, located *ca*. 5 km north of the agglomeration. However, there is no hydrological connectivity between the Blackwater River SAC and the Grenagh agglomeration. Cork Harbour SPA and Great Channel Island SAC are distantly hydrologically connected to the Martin River and are over 30km downstream of the Grenagh WWTP operational discharges. An Appropriate Assessment (AA) Screening Report has

7.2 Location of Proposed Development	
	been produced separate to this EIA Screening Report, to assess the likelihood of significant effects on European sites. The AA Screening concluded that there were no likely significant effects on any European sites arising from the operational discharges, either alone or in-combination with other plans or projects. A Stage 2 '*Appropriate Assessment*' under Article 6(3) of the Habitats Directive 92/43/EEC is not required. Refer to **Attachment D.2.2** of the WWDA application for a copy the AA Screening Report. There are 8 pNHAs and 1 NHA within 15 km of the WwTP, the closest of which is Ardamadane Wood pNHA. Ardamadane Wood pNHA is located *ca*. 8 km downstream of the discharge point along the banks of Martin River and comprises of mainly dry deciduous woodland of Sessile Oak and Downey Birch with some scrub woodland and improved agricultural grassland. The Blarney Castle Woods pNHA is located *ca.* 11 km downstream of the discharge point and comprises Sessile Oak, Ash, Sycamore and Beech. None of the habitats that each of the sites are designated for are highly sensitive to changes in water quality. It is considered that the proposed effluent standards, and the design and operation of the Storm Water Overflow in compliance with the definition of '*Storm Water Overflow'* as per Regulation 3 of the Waste Water Discharge (Authorisation) Regulations, 2007, as amended and the criteria as set out in the DoEHLG '*Procedures and Criteria in Relation to Storm Water Overflows',* 1995, that no indirect impacts, *via* water quality impacts, on aquatic ecology or environmental sensitivities are anticipated from the Grenagh agglomeration operational discharges. (vi) areas in which there has already been a failure to meet the environmental quality standards, laid down in Union legislation and relevant to the project, or in which it is considered that there is such a failure There are no areas which the environmental quality standards of the EU have already been exceeded. (vii) densely populated areas Not applicable. (viii) landscapes and sites of historical, cultural, or archaeological significance Not applicable.

7.3 Type and characteristics of the potential impact	
The likely significant effects of projects on the environment must be considered in relation to criteria set out in points 1 and 2 of this Annex, with regard to the impact of the project on the factors specified in Article 3(1), taking into account:	
(a) the magnitude and spatial extent of the impact (for example geographical area	River Martin (Martin_010), and downstream waterbodies.

7.3	Type and characteristics of the potential impact	
	and size of the population likely to be affected);	
(b)	the nature of the impact;	Grenagh WwTP is not listed as a significant pressure on this At Risk Martin _010 waterbody. Based on the proposed ELVs, along with design of the overflow and the measures in place to prevent unintended discharges, it is considered that operational discharges will continue not to have no real likelihood of significant effects on the environment, alone or in combination with other plans and projects.
(c)	the transboundary nature of the impact;	The operational discharges will not result in transboundary impacts.
(d)	the intensity and complexity of the impact;	The intensity and complexity of impacts associated with the operational discharges are not considered significant within the meaning of the EIA Directive.
(e)	the probability of the impact;	The proposed effluent discharge standards and the operational design of the overflow from the WwTP will ensure that the discharges from the agglomeration will ensure that there is no environmental risk posed to the receiving water environment as a result of the discharges from the agglomeration. This impact however is not likely to be significant, within the meaning of the EIA Directive.
(f)	the expected onset, duration, frequency, and reversibility of the impact	It is considered that the proposed effluent standards, and the design and operation of the Storm Water Overflow in compliance with the definition of 'S*torm Water Overflow'* as per Regulation 3 of the Waste Water Discharge (Authorisation) Regulations, 2007, as amended and the criteria as set out in the DoEHLG '*Procedures and Criteria in Relation to Storm Water Overflows'*, 1995, that no indirect impacts, *via* water quality impacts, on the environmental sensitivities are anticipated from the Grenagh agglomeration operational discharges.
(g)	the cumulation of the impact with the impact of other existing and/or approved projects	As noted earlier there are no significant IPC or waste licensed activities discharging to the agglomeration or to the Martin upstream or downstream of the agglomeration. There are also no other existing waste water discharges within the vicinity of the operational discharges. There are a number of other permitted and proposed projects in the locality however none of these have potential to contribute to significant effects within the meaning of the Directive when considered in-combination with the effects of the operational discharges from the WwTW.
(h)	the possibility of effectively reducing the impact	The Grenagh WwTW incorporates a number of key measures to avoid and prevent adverse effects on the receiving aquatic environment. Refer to **Section 3** of this Report.

Based on the review against the Schedule 7 criteria as detailed above, the environmental impacts associated with the operational discharges are not likely to be significant within the meaning of the Directive.

8. EIA Screening Conclusion

Based on the information as contained in this EIA Screening Report, there is no significant and realistic doubt in regard to the likelihood of significant effects on the environment arising from the proposed development (*i.e.,* the operational discharges from the Grenagh agglomeration in so far as they relate to the risk of environmental pollution of the receiving waters, the Martin River) and it is considered that an EIA is not required for the authorisation to which this application relates by virtue of its nature, size and location. The main reasons and considerations on which this conclusion is based are as follows:

1. The loads generated in agglomeration will not exceed 1,000 p.e for the duration of the licence.
2. The source of the wastewater in the agglomeration is largely domestic in nature which is readily biodegradable.
3. There are no significant IPC or waste licensed activities discharging to the agglomeration or to the Martin River upstream or downstream of the agglomeration.
4. There are no other existing waste water discharges within the vicinity of the proposed waste water discharge.
5. The Grenagh WwTW operates in a manner to ensure that emissions from the plant will not result in the contravention of EU Directives and National Regulations.
6. Cumulative effects with other existing and planned discharges are not likely to give rise to significant effects.
7. The status of the receiving water downstream of the operational discharges.
8. Downstream of the WwTP at RS19M010200 and RS19M010300 the 2020 monitoring reported a Q value of 4 (Good). Further downstream at RS19M010400 the 2020 monitoring reported a Q value of 4-5 (High).
9. The Grenagh WwTP and its primary effluent discharge (SW001) have been proposed to meet the standards to satisfy all relevant regulatory requirements including the Surface Water Regulations (S.I. No. 77 of 2019) and the Urban Wastewater Treatment Regulations (S.I. No. 254 of 2001).
10. The design of the Storm Water Overflow (SW002) at the WwTP in compliance with the definition of '*Storm Water Overflow'* as per Regulation 3 of the Waste Water Discharge (Authorisation) Regulations, 2007, as amended and the criteria as set out in the DoEHLG '*Procedures and Criteria in Relation to Storm Water Overflows'*, 1995.

It is therefore concluded that there is no requirement for the EPA to conduct an EIA in respect of this application, and there is no requirement on Irish Water to either prepare or submit an EIA Report.