Attachment Table of Contents

A. Non-Technical Summary

The entrance to the Gortnahoe waste water treatment plant is located on County Road L2101, approximately 650m east of junction with R689-12.

The sewer network is generally a combined system. The sewage from the village flows by gravity to the treatment plant. The agglomeration currently served by the plant is detailed in Drawing No. 1 attached.

The Gortnahoe WWTP was built in the early 1980's to provide secondary treatment and has the capacity to treat up to 400 population equivalent. The site plan is detailed in Drawing No. 2 attached. The effluent from the plant (SW1) discharges to the River Drish. There are no storm water overflows at the plant and none have been identified on the network. Discharge locations are detailed in Drawing No. 7 attached.

A recent estimate carried out in house indicates a current population equivalent of 237 pe. The current average daily flow at the plant is estimated to be 43m^3/day and monitoring carried out by the Council's laboratory estimate the median influent BOD to be 484mg/l. Using these figures the loading to the plant was determined to be 20.81kg/day, which equates to a population equivalent of 347pe and is greater than the recent population equivalent estimate of 237pe but is still below to the design population equivalent of 400pe.

As part of the in house assessment carried out, pending developments were also examined. To determine the extent of planning, a search of South Tipperary online planning revealed the number of planning permissions that had been submitted or approved. It was anticipated that the population would increase by approximately 176pe within the next 5 years. Therefore the predicted population of Gortnahoe equates to 413 people by end of 2014, which is just above the design capacity of 400pe. In view of the current economic climate, however, the predicted population equivalent increase at the rate indicated above is not expected to occur, therefore no upgrades are planned at this time. The situation will be continually monitored.

The monitoring programme carried out by the Council laboratory is set out in detail in section E.2. The treatment process is monitored by the Water Services Section to maximise the efficiency of the plant in removing pollutants. The operator also visits the plant three times per week.

South Tipperary County Council monitors the plant on a quarterly basis and these results are provided in Tabular format in Section F, table 7. Gortnahoe WWTP on occasion exceeds the design specification for the plant and the numeric values applicable to plants above 2000 P.E.

STCC monitor the river upstream and downstream of the plant as part of the wastewater monitoring programme and assessment of impacts of wastewater discharges and these results are provided in Section F, table 8 and would indicate that the plant is having a minor impact on the river due to good effluent quality and available assimilative capacity. Investigative monitoring conducted by STCC has established that diffuse pollution mainly from agricultural sources to the river upstream of the WWTP are the principal pressures giving rise to the poor water quality classification.

The Environmental Protection Agency Kilkenny Inspectorate undertakes the Water Framework Directive (WFD) monitoring programme on behalf of STCC, which commenced in 2007. The WFD Monitoring Programme does not incorporate a monitoring location upstream of Gortnahoe WWTP as the first station on the River Drish 16D020068 is located approximately two kilometres downstream of the Gortnahoe discharge.

Median Values determined for the years 2008 and 2009 at Station 16DO20068 is provided in Section F, Table 10. This data indicates further that that the total discharges including outfall and storm overflows from the plant are having a minor impact on the receiving water. The elevated ammonia values are due to extensive peat soil in the catchment.

The River Drish, a Tributary of the River Suir, Water Body Code IE_SE_16_3521 has a water quality status rating of 'Poor' and the Draft South East River Basin District has set the Water Quality Objective as

'Restore to Good Status' by 2021. The risk classification code is "1A" or "At Risk".

Continued operation of the wastewater treatment plant to the standard demonstrated in this application will continue to ensure that discharges from the waste water works are not posing an environmental risk to the receiving water habitat.

B. General

B.1 Applicant Details

Drawing No. 1 – Agglomeration served by the wastewater works

B.2 Location of Associated Waste Water Treatment Plant

Drawing No. 2 – Site Plan

B3. Location of Primary Discharge Point

Drawing No. 3 – Primary Discharge Point

B.5 Location of Storm Water Overflow Point (s)

There are no storm water overflows at the plant and none have been identified on the network.

B.6 Planning Authority

The wastewater treatment plant was constructed in the early 1980's. Planning permission was not required.

B.8 (i) Population Equivalent of Agglomeration

The population equivalent of the Gortnahoe plant is 237 as determined during an assessment carried out in house by South Tipperary County Council in 2008. The following outlines the methodology used to determine the population equivalent.

The existing residential and residential/commercial units were counted using the An Post Geodirectory. The following was determined:

Table 1 – Methodology to determine population equivalent

Existing Population Assessment	Source	No. of people	BOD (g/day/person)	Organic load kg/day
Residential Houses	House count 79	237	60	14.22
Total				**14.22**
Population Equivalent				**237**

Using a house count of 79 and an average household size of 3 the existing residential population in 2008 within the local area boundary of Gortnahoe was 237 p.e. The EPA Act, 1992 (Urban Waste Water Treatment Regulations, 1994) define one population equivalent (p.e.) as 60g BOD per day. Using 60g/day/person, the organic loading was determined to be 14.22 kg/day.

The current average daily flow at the plant is estimated to be 43m^3/day and monitoring carried out by the Council's laboratory estimate the median influent BOD to be 484mg/l. Using these figures the loading to the plant was determined to be 20.81kg/day, which equates to a population equivalent of 347pe and is greater than the recent population equivalent estimate of 237pe but is still below to the design population equivalent of 400pe.

An examination of the Section 16 industrial discharge licences in Gortnahoe was also carried out in conjunction with the Environment Section of South Tipperary County Council. It was found that there were no Section 16 licences in Gortnahoe.

Leachate is not accepted at the wastewater treatment plant at Gortnahoe and no other wastewater or sludges are currently accepted for treatment.

Section B.8(ii) below addresses likely expansions or increases in the population equivalent of the agglomeration in the foreseeable future.

B.8 (ii) Pending Developments

As part of the in house assessment carried out, pending developments were also examined. To determine the extent of planning, a search of South Tipperary online planning revealed the number of planning permissions that had been submitted or approved. It was anticipated that the population would increase by approximately 176pe within the next 5 years. Table 2 outlines details of the assessment carried out. Therefore the predicted population of Gortnahoe equates to 413 people by end of 2014 as show in the following table:

Table 2- Population Predicted for 2014

	Population
Current Population based on Geodirectory (Residential and Commercial/Institutional	237
Assumed planning applications constructed by end 2014	176
Total	413

Potential development land within the village boundary was also determined to be 2.28 acres at one site within the village boundary. It was estimated that 18 houses could potentially be built on these sites, which equates to a population equivalent of 63pe.

In view of the current economic climate, however, the predicted population equivalent increase at the rate indicated above is not expected to occur.

B.9 Capital Investment Programme

As outlined in Section 8 above, the current population equivalent is 237pe and the design capacity for the plant is 400pe. It is anticipated that the population would increase by approximately 176pe within the next 5 years. Therefore the predicted population of Gortnahoe equates to 413 people by end of 2014, which is up to the design capacity of 400pe.

As stated, in view of the current economic climate, however, the predicted population equivalent increase at the rate indicated above is not expected to occur, therefore no upgrades are planned at this time. The situation will be continually monitored.

C. Infrastructure & Operations

C.1 Operational Information Requirements

Introduction

The village wastewater flows via a gravity network to the existing treatment system. The entrance to the site is located on County Road L2101, approximately 650m east of junction with R689-12.

The Gortnahoe WWTP was built in the early 1980's to provide secondary treatment and has the capacity to treat up to 400 population equivalent. The effluent from the plant discharges to the River Drish, a tributary of the River Suir.

Storm Water Overflows

The sewer on the network is a combined sewer system. There are no storm water overflows.

Inlet works

The sewage generally flows by gravity to the treatment plant. The raw effluent is screened before entering the aeration tank.

Storm Treatment

There is no storm treatment on site

Activated Sludge

There is an aeration tank with a circular surface aerator in the centre of the tank, which is operated on a timed basis to generally come on every 15 minutes for 15 minutes. Dissolved oxygen levels range from 1 –2 mg/l. The sewage from the inlet works enters the aeration tank and is combined with the sludge return flows from the clarifier stage. This process involves active aeration of the sewage in the tank which results in the growth of appropriate bacteria which break down the organic matter.

Clarification

The clarifier and sludge holding tank are contained in a single tank separated by a 200mm wide wall. The displaced liquid from the aeration stage enters

the secondary settlement tank (final clarifier). Separation occurs and dense sludge particles settle to the bottom of the conical shaped tank base and the clarified effluent is decanted over v-notch weir system and flows by gravity to the receiving water. A sludge return pump returns settled sludge from the base of the clarifier to the aeration tank to maintain the biomass within the activated sludge process. A time switch is used to regulate the operation of the sludge return system with the sludge generally being returned to the aeration tank every 45 minutes for 15 minutes. The sludge return system is also arranged and constructed to allow the manual wasting of sludge by pumping to the sludge holding tank, as required.

Sludge Handling/Thickening

Surplus Activated Sludge from the clarifier is transferred to the sludge holding tank where heavy sludge is separated from the liquid and thickens via gravity at the base of the tank. Sludge from the tank is removed for additional treatment at Cashel or Fethard WWTP approximately once every three weeks.

Control

The surface rotor is controlled by a timer to generally come on every 15 minutes for 15 minutes. The sludge return system is also controlled by a timer to generally come on for 15 minutes every 45 minutes. Wasting of sludge is carried out manually. The plant is inspected by the caretaker three times per week during which tests such as DO, cone tests, etc. are carried out.

Flow

There is a flow meter in place on the line between the screen and the aeration tank. Flow readings are recorded by the caretaker.

Drawing No. 4 – Location of Activities
Drawing No. 5 – Process Flow Diagram

C2: Outfall Design and Construction

Primary Discharge Point

At the time of writing there was no information available in relation to the design or construction of the primary discharge point SW1 for the Gortnahoe treatment works.

Secondary Discharge Point

There are no secondary discharges associated with the works.

Storm Water Overflows

There are no storm water overflows at the plant and none have been identified on the network.

D. Discharges to the Aquatic Environment

D.1 Discharges to Surface Waters/Groundwater

Tables included in Annex 1 of the application form detail the discharge information for the primary discharge point.

There are no secondary discharge points

Tables included in Annex 1 of the application form details the discharge information for the Storm Water Overflows

Influent and effluent monitoring results for the years 2008 and 2009 are included in Section E

D.1(iii)Private Waste Water Treatment Plants

There are no independently owned/operated private waste water treatment plants operating within the Gortnahoe agglomeration of which South Tipperary County Council are aware. There are no Section 4 discharge licences issued under the Water Pollution Acts 1977 to 1990, as amended.

D.2 Discharges to Surface Waters

Table D.2 - Tabular Data on Discharge Points is included in Annex 1 of the application form.

Drawing No. 6 – Discharge Points

E. Environmental Considerations

E.1 Waste Water Discharge Frequency and Quantities

Table E.1 (i) included in annex 1 of the application form provides an estimation of the frequency and quantity of wastewater likely to be emitted in relation to the primary discharge point.

Table E.1 (ii) included in Annex 1 of the application form provides an estimation of the frequency and quantity of wastewater likely to be emitted in relation to all storm water overflows within the agglomeration and whether they comply with the definition of Storm Water Overflow.

E.2 Monitoring and Sampling Points

Gortnahoe wastewater treatment plant is operated by South Tipperary Count Council and monitoring is carried out by the Council's Environment Laboratory in accordance with a pre scheduled Monitoring Programme.

The treatment process is monitored by the Water Services Section to maximise the efficiency of the plant in removing pollutants. The operator also visits the plant three times per week.

Table 3 - Monitoring

Monitoring carried out by	Purpose
South Tipperary County Council	Process control & compliance with UWWD

Influent, Effluent and Process Monitoring

Monitoring carried out to date include grab samples of influent and effluent. The following table sets out the monitoring carried out by the Council's laboratory

Table 4 – Influent and effluent process monitoring

Sampled by	Sample type	Parameter	Frequency	Accreditation
South Tipperary County Council	Influent to plant (grab sample)	BOD COD Suspended Solids pH Total Nitrogen Total Phosphorus Ammonia Nitrogen	Quarterly	None
	Effluent from plant (grab sample)	BOD COD Suspended Solids pH Total Nitrogen Total Phosphorus Ammonia Nitrogen	Quarterly	None

Note on South Tipperary County Council laboratory

- Laboratory is on the EPA register of quality approved laboratory for the tests covered by the Urban Waste Water Regulations, i.e. ammonia, total nitrogen, total phosphorus, BOD, COD, SS.
- There is a quality manual and quality control system in place, including control charts, LOD, etc.
- All lab equipment is calibrated on a yearly basis, calibration certificates are available on request

Non Routine Monitoring

Table 5 – Non routine monitoring

Sample type	Sample purpose	Parameters	Timeframe
Sediment samples (up and downstream of WWTP)	Determine the impact, if any, of the wastewater discharge	Priority substances	Q 2008 Dependent on water levels as safe access to river is required

Drawing No. 7– Monitoring and sampling points

E.3 Tabular Data on Monitoring and Sampling Points

Table E.3 included in Annex 1 of the application form provides tabular data on monitoring and sampling points

E.4 Sampling Data

Impact Monitoring

The WFD Monitoring Programme has been designed to assess the impact of wastewater treatment plant discharges. Article 10 (1) (b) of the UWW Regulations requires that ambient monitoring be carried out where the discharge significantly impacts the surface water. Routine monitoring carried out for South Tipperary County Council demonstrates that the discharge from the Gortnahoe wastewater treatment plant is having a minor impact on the receiving waters (see section F1). Therefore it is considered that the WFD monitoring programme will sufficiently monitor the impacts of the wastewater treatment plant discharge.

Sampling Data for 2008 and 2009 is detailed in table 6 below. Sampling is carried out at least quarterly

The monitoring data details clearly the compliance (or lack of) with the relevant Urban Waste Water treatment standards. Exceedances, if any, are highlighted in yellow

Table 6-Monitoring Data 2008 and 2009

	Influent						Effluent					
	BOD	COD	SS	pH	TN	TP	BOD	COD	SS	pH	TN	TP
Date	mg/l O2	mg/l O2	mg/l	7.28	mg/l	mg/l	mg/l O2	mg/l O2	mg/l	7.28	mg/l	mg/l
24/01/2008	344	570	102	7.32	57.5	9.4	28	69	6	7.38	7.5	2.67
12/03/2008	947	1017	132	7.3	80.5	20.51	29	70	21	7.49	10.5	1.7
29/05/2008	526	806	240	7.25	68.5	12.71	29	131	32	7.66	15.5	5.41
24/07/2008	1670	4625	2764	6.98	138	37.82	17.76	79	21	7.64	16.5	7
10/12/2008	365	1021	216	8.8	95	15.07	16.47	89	20	7.67	28.5	3.71
28/01/2009	627.5	1240	672	7.59	140	20.86	7.8	40	4	7.31	12	2.12
26/03/2009	499.8	1038	238	7.59	110	8.8	30.4	78	28	7.41	31	6.05
14/05/2009	468	1428.2	672	7.25	95	18.6	20.51	68.3	24	7.48	9	5.16
07/07/2009	459.2	795	81	6.81	87	9	1.7	46	10	7.58	10	3.35
30/09/2009	440.6	818	222	7.18	84	QR	11.01	33	4	7.55	1	19.5

F. Existing Environment & Impacts of the Discharge(s)

F.1 Assessment of impact on Receiving Water or Ground Water

The environmental quality standards applicable to the receiving water are set out in European Communities Environmental Objectives (Surface Waters) Regulations 2009. Gortnahoe WWTP discharges to the River Drish, a tributary of the River Suir, at location Grid Reference E227515, N158461.

The Gortnahoe plant has a population equivalent less than 500 and is not discharging to a protected area or a river stretch designated as sensitive by the Urban Wastewater Treatment Regulations; therefore the numeric standards set out in those Regulations does not apply. As the PE is below the threshold required for submission of monitoring data to the EPA no data is returned to the Agency on an annual basis.

South Tipperary County Council however monitors the plant on a quarterly basis and these results are provided in Tabular format in table 7.

Table 7 -Effluent discharge monitoring data

Location	SampleDate	BOD	Chemical Oxygen Demand	pH	Suspended Solids	Total Nitrogen	Total Phosphorus
		mg/l O2	mg/l O2		mg/l	mg/l as N	mg/l as P
Discharge	24/01/2008	28	69	7.38	6	7.5	2.67
Discharge	12/03/2008	29	70	7.49	21	10.5	1.7
Discharge	29/05/2008	29	131	7.66	32	15.5	5.41
Discharge	24/07/2008	17.76	79	7.64	21	16.5	7
Discharge	10/12/2008	16.47	89	7.67	20	28.5	3.71
Discharge	28/01/2009	7.8	40	7.31	4	12	2.12
Discharge	26/03/2009	30.4	78	7.41	28	31	6.05
Discharge	14/05/2009	20.51	68.3	7.48	24	9	5.16
Discharge	07/07/2009	1.7	46	7.58	10	10	3.35
Discharge	30/09/2009	11.01	33	7.55	4	1	19.5
Discharge	18/11/2009	4.12	45	7.41	4	7.6	1.3
Discharge	09/03/2010	7.5	59	7.49	8	15	5.6
Discharge	27/05/2010	3.72	62	7.7	6	NT	0.55

The treatment plant on occasion, exceeds the design specification for the plant and the numeric values applicable to plants above 2000 P.E.

The receiving water values for the parameters tested on samples collected upstream and downstream of the outfall are provided in Table No 8 and would indicate that the plant is having a minor impact on the river due to good effluent quality and available assimilative capacity. Investigative monitoring conducted by STCC has established that diffuse pollution mainly from agricultural sources to the river upstream of the WWTP are the principal pressures giving rise to the poor water quality classification.

Table 8 Council monitoring upstream and downstream of discharge 2008, 2009, 2010

Receiving Water (Drish)	SampleDate	BOD	Suspended Solids	Dissolved Oxygen (Measurement)	Ortho-phosphate	Ammonia(N)
		mg/l O2	mg/l	mg/l O2	mg/l P	mg/l as N
Upstream WWTP	29/05/2008	3.5	11	NT		NT
Upstream WWTP	28/01/2009	0.26	12	11.71	0.01	0.0165
Upstream WWTP	07/07/2009	0.42	5	9.35	0.0296	0.0383
Upstream WWTP	27/05/2010	2.33	6	10.48		0.0512
Downstream WWTP	29/05/2008	2	11	NT	NT	NT
Downstream WWTP	28/01/2009	0.33	13	11.59	0.0147	0.0163
Downstream WWTP	07/07/2009	0.59	5	9.5	0.0512	0.0417
Downstream WWTP	27/05/2010	1.19	0	10.81	NT	0.0056

Pollution investigative work undertaken by STCC on the receiving waterbody includes Small Stream Risk Score Assessment (SSRS) at locations upstream and downstream of the Gortnahoe outfall and the findings of this are provided in tabular format below. The SSRS is a rapid assessment technique based solely on macrinvertebrates and their well understood response to pollution to indicate whether a stream is at risk of failing to meet water quality requirements of the Water Framework Directive. A high score is indicative of good quality. Based on this investigative work the receiving water at Gortnahoe WWTP is considered to be at risk both upstream and downstream.

SSRS Scores are as follows:

>8 = probably not at risk

6.5-8 = probably at risk

<6.5 = at risk

Table 9 – SSRS Assessment

Location	Risk Score	Comments
Gortnahoe WWTP	4	Approximately 25m upstream of WWTP outlet. Sandy riverbed with mud.
Gortnahoe WWTP	4	Approximately 50m downstream of outlet. Difficult to kick sample due to muddy bottom.

EU Water Framework Directive (2000/60/EC)

The Environmental Protection Agency Kilkenny Inspectorate undertakes the Water Framework Directive (WFD) monitoring programme on behalf of STCC, which commenced in 2007.

The WFD Monitoring Programme does not incorporate a monitoring location upstream of Gortnahoe WWTP as the first station on the River Drish 16D020068 is located approximately two kilometres downstream of the Gortnahoe discharge.

Median Values determined for the years 2008 and 2009 at Station 16DO20068 is provided in Table 8 below. This data indicates further that that the total discharges including outfall and storm overflows from the plant are having a minor impact on the receiving water. The elevated ammonia values are due to extensive peat soil in the catchment.

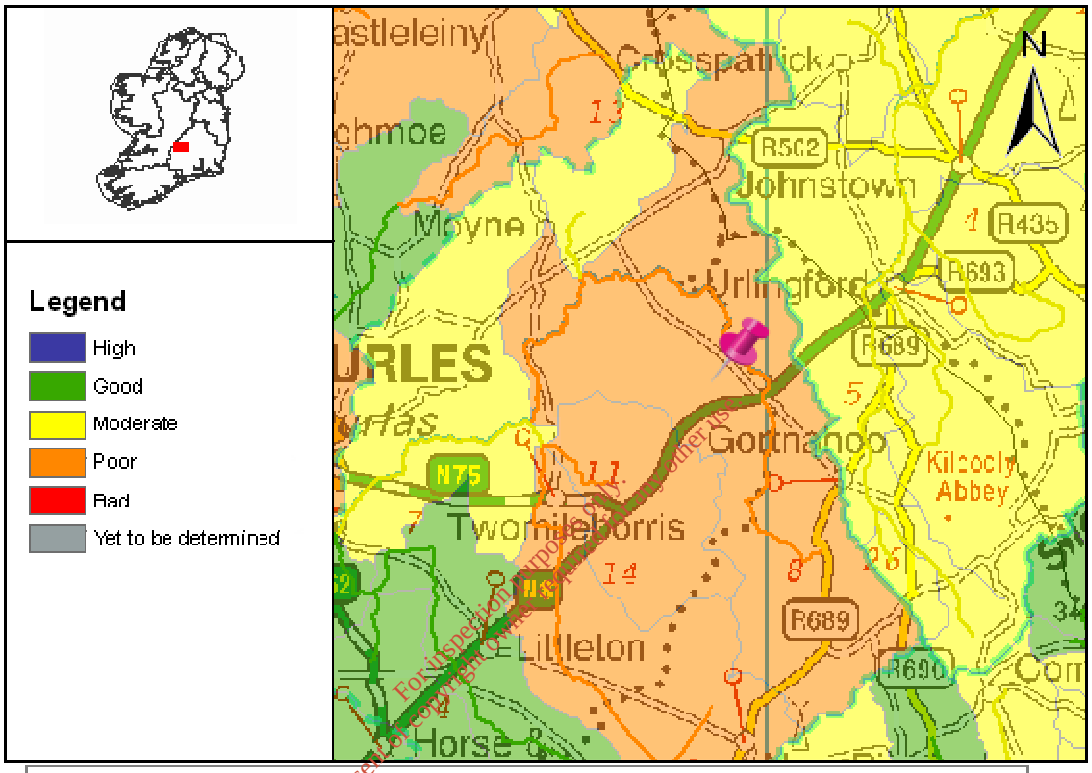
Table 10 –WFD Monitoring Median values for the year 2008 for the River Drish at Station 16D02068

Parameter	Upstream
Value	Median
Grid Ref:	s 219 635
River	River Drish
Station	16D02
Station Name	0068 (U\S Minorco Mine)
D O %Sat	80
DO mg/l O2	8.85
B O D mg/l O2	1.9
Colour Hazen	100
PH	7.8
Cond Salinity |jS/cm o/oo	597
o-Phos mg/l P	0.02
Ammonia mg/l N	0.16
Un-Ion-Amm mg/l NH3	0.0018
Nitrite mg/l N	0.021
Nitrate mg/l N	1.9
Chloride mg/l Cl	16

The River Drish, a Tributary of the River Suir, Water Body Code IE_SE_16_3521 has a water quality status rating of 'Poor' and the Draft South East River Basin District has set the Water Quality Objective as 'Restore to Good Status' by 2021. The risk classification code is "1A" or "At Risk".

Table 11 – Summary Information for River Drish

Full Report for Waterbody Drish, Trib of SuirDrish



Summary Information:

WaterBody Category:	Subbasin Waterbody
WaterBody Name:	Drish, Trib of SuirDrish
WaterBody Code:	IE_SE_16_3521
Overall Status:	Poor
Overall Objective:	Restore
Overall Risk:	1a At Risk
Applicable Supplementary Measures:	Unsewered; Urban & Industrial; Morphology; Forestry; Report data based upon Draft RBMP, 22/12/2008.

EC (Quality of Surface Water for the Abstraction of Drinking Water) Regulations 1989

There are no drinking water abstraction point's either private or public downstream of the discharge from the Gortnahoe WWTP.

EU Habitats Directive (94/43/EEC) 8& Bird's Directive
The River Drish is not designated as a candidate Special Area of Conservation (cSAC) under the habitats Directive (94/43/EEC)

Bird's Directive
The River Drish is not designated as a Special Protection Area (SPA) under the Bird's Directive

Waste Assimilative Capacity

The assimilative capacity of the receiving waters has been calculated based on the 95%ile flow for the River Drish at the outfall location and the discharge flow rates and organic load. The predicted (calculated) concentration of BOD, Orthophosphorous, and Ammonia resulting from the Gortnahoe Discharge is detailed in table 12.

Table 12 – Waste Assimilative Capacity

	Discharge:	Gortnahoe	
	Receiving Water:	Tributary of River Drish	
Receiving water	**Flow rate**	**m^3/s**	**m^3/d**
	DWF	0.01	*864*
	Flow rate	0.02	*1728*
	50%ile River Flow Rate	0.1	*8640*
	Water quality	**mg/l**	**kg/d**
	Median BOD of receiving water	0.42	*0.72576*
	Median Ortho P of receiving water	0.02	*0.03456*
	Median NH_3 of receiving water	0.03	*0.05184*
Proposed Effluent	**Flow rate**	**l\s**	**m^3/d**
	Discharge volume of effluent	*0.574074*	49.6
	Effluent quality	**mg/l**	**kg/d**
	Proposed BOD	25	*1.24*
	Proposed Ortho P ~~(Total P)~~	5	*0.248*
	Proposed NH_3	5	*0.248*
AC @ 95%tile flow	No. of dilutions available	***35***	
	Assimilative Capacity for BOD	***1.87***	kg/d
	Assimilative Capacity for Ortho-P	***0.03***	kg/d
	Assimilative Capacity for NH_3-N	***0.06***	kg/d
Impact	**Resulting Concentration downstream**		
	BOD	***1.11***	mg/l
	Ortho-P	***0.16***	mg/l
	NH_3-N	***0.17***	mg/l

F.2 Tabular Data on Drinking Water Abstraction Points

There are no drinking water abstractions either public or private from the River Drish downstream of the wastewater treatment plant.

G. Programme of Improvements

G.1 Compliance with Council Directives

Currently, no specific works have been identified for the purpose of compliance with the following council directives. The level of treatment at Gortnahoe, combined with the continued operation of the wastewater treatment plant to the high standard demonstrated in this application and strict adherence to the Urban Waste Water Treatment Regulations standards will continue to ensure that the plant does not have any significant environmental impacts on the receiving water.

Dangerous substances Directive 2006/11/EC
Water Framework Directive 2000/50/EC
Birds Directive 79/409/EEC
Groundwater Directives 80/778/EC
Drinking Water Directives 80/778/EEC
Urban Waste Water Treatment Directive 91/271/EEC
Habitats Directive 92/43/EEC
Shellfish Directive 79/923/EEC
Bathing Water Directive 76/160/EEC

Environmental Liability Directive

The Environmental Liability Directive is about preventing and remedying environmental damage. It aims to hold operators whose activities have caused environmental damage financially liable for remedying this damage, and it aims to hold those whose activities have caused an imminent threat of environmental damage liable for taking preventive actions. There is no evidence of environmental damage caused by this WWTP. Should such evidence arise South Tipperary County Council understands that they will be held responsible for remediation actions, should any damages to the environmental media occur.

G.2 Compliance with Water Quality Standards for Phosphorus Regulations (S.I. No. 258 of 1998)

There are currently no specific works identified for the purpose of or compliance with Water Quality Standards for Phosphorus Regulations.

G.3 Impact Mitigation

As detailed in Section B.9 no further upgrades are required.

Continued operation of the wastewater treatment plant to the standard demonstrated in this application will continue to ensure that discharges for the waste water works are not posing an environmental risk to the receiving water habitat.

G.4 Storm Water Overflows

There are no storm water overflows at the plant and none have been identified on the network.